PROGRESS IN INTERNATIONAL READING LITERACY STUDY

Edited by Ann M. Kennedy Ina V.S. Mullis Michael O. Martin Kathleen L. Trong

PIRLS 2006 Encyclopedia

A Guide to Reading Education in the Forty PIRLS 2006 Countries



TIMSS & PIRLS International Study Center Lynch School of Education, Boston College

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Foreword

No area of educational research is more central to the educational endeavor than the study of reading achievement and the factors that foster it, and no organization has been more active in the international study of reading than the International Association for the Evaluation of Educational Achievement (IEA). Beginning with the 1970–71 International Study of Reading Comprehension in 15 countries and continuing with the 1991 International Reading Literacy Study in 32 countries, IEA has pioneered international comparative studies of reading achievement. At the beginning of the new century, IEA re-focused its research program in reading literacy with the establishment of the Progress in International Reading Literacy Study (PIRLS), a regular assessment of 4th grade reading achievement on a 5-year cycle. Conducted in 35 countries, PIRLS 2001 was the first cycle of the PIRLS program, providing a wealth of information about reading achievement and the home, school, and classroom environment for the teaching and learning of reading. PIRLS 2006 was the second study in the PIRLS cycle, collecting data on 4th grade reading achievement and the context for learning reading in 40 countries.

In the *PIRLS 2006 Encyclopedia*, each participating country describes its education system and the reading curriculum as it is intended to be taught, and outlines the polices and practices that guide reading instruction and teacher education. This in-depth, qualitative approach to describing differences among countries in terms of policy, organization, and practice is intended to complement the more quantitative approach adopted by the *PIRLS 2006 International Report*, which summarizes reading achievement in participating countries and presents reports by parents, teachers, and students of literacy activities and educational resources in the home and school, and instructional practices in the classroom.

IEA is indebted to the talented group of professionals at the TIMSS & PIRLS International Study Center, Lynch School of Education, Boston College, who have been charged with the leadership of this project. The publication of the *PIRLS 2006 Encyclopedia* benefited particularly from the expertise, dedication, and hard work of PIRLS Project Coordinator, Dr. Ann Kennedy, and of PIRLS Research Associate, Katie Trong. Debby Berger applied her editorial skills tirelessly, reading and re-reading successive drafts. Sue Farrell was responsible for the design of the volume, and worked with Jen Moher and Ruthanne Ryan to coordinate production. The continued direction and support of the PIRLS Directors, Drs. Ina Mullis and Michael Martin, was essential for the success of the Encyclopedia and IEA is grateful for their outstanding leadership.

The *PIRLS 2006 Encyclopedia* was reviewed on behalf of the IEA Publications and Editorial Committee by Drs. David F. Robitaille (Chair) and Robert A. Garden, who provided many valuable corrections and suggestions.

Projects the size of PIRLS are not possible without considerable financial support and I would like to thank IEA's major funding partners, which include the US National Center for Educational Statistics, the World Bank, and those countries that contributed by way of fees. I am very grateful also to Boston College and to the National Foundation for Educational Research (NFER) for their generous assistance and support.

Also critical to the success of international projects such as PIRLS is the willingness of participating countries to commit to a set of common goals and procedures. Many parents, teachers, students, and policymakers gave willingly of their time in the interests of furthering knowledge of students' reading, and for that we are continually thankful. Finally, the National Research Coordinators whose responsibility it was to manage and conduct the study at the national level and who made this project a success and this volume possible, in particular deserve our thanks.

Dr. Hans Wagemaker Executive Director

Introduction

To help countries make informed decisions about reading education, IEA's Progress in International Reading Literacy Study (PIRLS) provides internationally comparative data about students reading achievement in primary school (the fourth grade in most participating countries). This is an important transition point in children's development as readers, because most of them should have learned to read, and are now reading to learn.

The IEA (International Association for the Evaluation of Educational Achievement) is an independent international co-operative of national research institutions and governmental agencies with a permanent secretariat based in Amsterdam, the Netherlands. For the past 50 years, IEA has been conducting large-scale comparative studies of educational achievement to gain a deeper understanding of the effects of policies and practices within and across systems of education internationally. In IEA's history of collecting information about reading literacy, PIRLS 2001 began a new series of forward-looking reading assessments. PIRLS is conducted on a 5-year cycle, with PIRLS 2006 being the second in the series and preparations currently underway for PIRLS 2011.

The results of high-quality international assessments such as PIRLS 2006 can contribute significantly to debates about how to improve educational quality. Yet, countries are very different from one another in fundamental ways, and education systems, as products of particular cultures, also are very different from one another. Because of these differences, it is very important to interpret the PIRLS 2006 reading achievement results in light of the contexts for reading instruction within the countries.

One of the most important features of IEA studies is the substantial effort expended to address the more substantive and important questions about the meaning of the achievement results. To meet its goal of helping to improve the teaching and learning of reading in primary schools around the world, PIRLS 2006 collected a rich array of information about the contexts for reading instruction in each participating country. Students, as well as their parents, teachers, and school principals, completed questionnaires to provide this information. Countries also completed online questionnaires about their education systems, reading curriculum, and resources for teaching reading. However, even online questionnaires are limiting, and so the *PIRLS 2006 Encyclopedia* is an opportunity for countries to provide an in-depth description of their educational situations. To provide an overview of the context in which reading instruction takes place in each country, each of the PIRLS 2006 countries, except Morocco, prepared a chapter summarizing the primary language(s) spoken, the emphasis on literacy, the structure of the education system, the reading curriculum and instruction in the primary grades, teacher education, and examinations. Together with some introductory data about all of the countries, the intent of the *PIRLS 2006 Encyclopedia* is to provide an important resource for helping to understand the contexts for the teaching and learning of reading around the world, with particular emphasis on schooling through the fourth grade.

The chapters were written primarily by experts from ministries of education, research institutes, or institutions of higher education who had extensive knowledge about the education system in their country. The authors often were the individuals also responsible for implementing PIRLS 2006 in their countries. To provide a common structure from chapter to chapter, a detailed outline was prepared and agreed upon by the participating countries. Therefore, there are similarities across countries in the topics discussed. The most important aspect of the encyclopedia, however, is gaining a sense of the uniqueness of each educational setting. All the countries have the common goal of teaching their children to read, yet the national and regional contexts, and the instructional situations differ dramatically.

The *PIRLS 2006 Encyclopedia* is intended to complement the *PIRLS 2006 International Report* and the *PIRLS 2006 Technical Report*. The *PIRLS 2006 International Report* presents reading achievement results at the fourth grade for the PIRLS 2006 participants, as well as trend results for those who also participated in PIRLS 2001. The *PIRLS 2006 International Report* also summarizes a substantial amount of the questionnaire data. The *PIRLS 2006 Technical Report* describes the methods and procedures used for instrument development, sampling, data collection, and analysis. The full set of PIRLS 2006 reports can be obtained from the TIMSS & PIRLS International Study Center (web: http://isc.bc.edu).

The Importance of Country and School Contexts in Making International Comparisons

A country's education system is the result of a series of decisions and compromises made in response to the specific goals, priorities, politics, resources, and historical traditions of its government representatives and citizens. There is an important distinction between system-level parameters and the school and classroom situations where actual instruction takes place. The decisions about educational organization, structure, resources, facilities, teacher qualifications, and curriculum often are separate from what actually gets taught. In IEA terms, there is a difference between the intended curriculum, as specified in official documents, and the implemented curriculum that actually is taught in schools. The learning goals described in the intended curriculum generally result from economic, political, and social priorities, while what is actually taught can be more closely associated with school and classroom conditions including the background and experiences of teachers and students. The *PIRLS 2006 Encyclopedia* was developed specifically to describe a number of the factors influencing the intended curriculum within each participating country and to present the intended reading curricula through the fourth grade. The culture of the country, including the value placed on education, learning, and literacy, is a powerful influencing factor as is its economic health and the diversity of its citizenry. Within this context, some countries have centralized education systems and others have decentralized decision-making structures. In many countries, the locus of decision making can differ depending on the particular policies. For example, there are often national regulations about the number of years of compulsory schooling, the structure of the education system, and the criteria for students receiving certificates of completion or diplomas. Also, many countries have a nationally recognized curriculum, whereas others have a more decentralized approach to curricular decisions.

Each chapter summarizes the curriculum intended to guide reading instruction through the fourth grade. There is considerable information about the reading skills and strategies that children were expected to have studied and learned prior to the PIRLS 2006 assessment. Textbooks, instructional materials, technological resources, and library facilities are described because they serve and reflect the priorities of the intended curriculum. Assessment and examination systems also are covered because they provide information to identify students needing remediation, suggest instructional programs needing improvement, and further support the expected outcomes of the education system.

Demographics of the PIRLS 2006 Participants

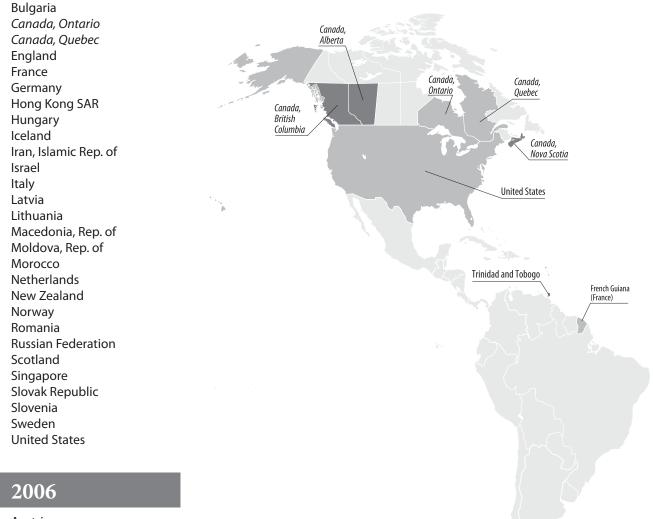
Figure 1 lists the participants in PIRLS 2006, which involved 40 countries. The decision to participate in an IEA study is coordinated through the IEA Secretariat in Amsterdam and made solely by each member country according to its own data needs and resources. Also, during IEA's long history since the 1950's, some countries with distinct education systems have always participated separately in IEA studies, including the two major geographic and cultural regions of Belgium, the French-speaking part and the Dutch-speaking part (Flanders). Canada currently participates in IEA as a country, however, education is primarily a provincial matter and several provinces were early members of IEA. For PIRLS 2006, the Canadian provinces worked with IEA procedurally and financially so that they could be reported separately but not collectively as a country, even though they represent 88% of the student population in Canada. For PIRLS 2006, the reporting convention in most tables is to present the results for the two education systems in Belgium separately as has been the practice in IEA studies. The results for the five Canadian provinces are presented separately, but in italics.

It can be seen from Figure 1 that, of the PIRLS 2006 participants, 26 countries (not including Canada) and 2 provinces also participated in PIRLS 2001 (displayed in lighter shading). This was the inaugural year for PIRLS, and for these participants, the *PIRLS 2006 International Report* includes data about changes in achievement and learning contexts between the two assessments. The PIRLS community also was extremely pleased to welcome



Figure 1 Countries Participating in PIRLS 2006

2006 and 2001



Austria Belgium (Flemish) Belgium (French) Canada, Alberta Canada, British Columbia Canada, Nova Scotia Chinese Taipei Denmark Georgia Indonesia Kuwait Luxembourg Poland Oatar South Africa Spain Trinidad and Tobago





13 new countries (including both educational systems in Belgium) and 3 new provinces to the study (displayed in darker shading). PIRLS is conducted on a 5-year cycle, with preparations currently underway for PIRLS 2011.

Figure 1 shows that geographically the PIRLS 2006 participants span the globe from east to west as well as from north to south. For example, PIRLS 2006 included some countries that have regions in the Arctic Circle (e.g., Norway, the Russian Federation, and the United States), some countries near the equator (e.g., Singapore and Indonesia), and some approaching Antarctica (e.g., New Zealand and South Africa). The map also shows that the participants ranged in size from very small countries to very large countries, and that some of them included geographically separated areas (e.g., France and the United States).

Table 1 contains some basic statistics about the size, population, health, economics, and educational enrollment of the PIRLS 2006 participants. The information illustrates the diversity of the participants, from Singapore with a small area to the Russian Federation with a large area and from densely populated Hong Kong SAR to sparsely populated Iceland. Some of the countries have large populations, and some have smaller populations. In either case, the populations primarily are concentrated in urban areas. However, several countries had the challenge of providing instruction to a substantial rural population.

Most of the participants had a life expectancy of 75 to 81 years and a low infant mortality rate. However, several had a relatively lower life expectancy of about 66 to 69 years and relatively high infant mortality rates, including Georgia, Indonesia, Iran, Moldova, Morocco, and the Russian Federation. South Africa had a life expectancy of 46 years and the highest infant mortality rate. Economically, the PIRLS 2006 countries ranged from Luxembourg and Norway at the high end to Georgia, Indonesia, and Moldova at the low end. Most of the participants had 90% or more of their children enrolled in primary school, and 23 had 99 to 100% enrolled. Kuwait (83%) and Moldova (79%) had the lowest enrollment rates.

Overview of the Education Systems

The chapters contain considerable information about the structure and levels of primary and secondary education in each of the countries and provinces, including the names, grades, and ages at each level. Table 2 summarizes the years of schooling provided in each country, the years of formal schooling (beyond preschool or kindergarten) that are compulsory, and whether preprimary schooling is compulsory. In general, most of the PIRLS 2006 countries provided some form of preprimary education as well as primary and secondary schooling through grade 12 (or even beyond), although there was some variation. There were more differences in the years of compulsory schooling. Compulsory preprimary schooling was relatively rare, occurring in only eight of the participating countries. The number of grades of formal compulsory schooling ranged from 5 to 12 grades, and the final age of compulsory schooling ranged from 11 to 18 years old, although it was age 16 in a number of countries.

Languages of Instruction

Each chapter begins with a description of the languages spoken in the country and the emphasis on literacy. Considering the amount of diversity and immigration in many of the PIRLS 2006 countries, it was not unusual for countries to have more than one official language, and, often, multiple languages were spoken. This presented some countries with a challenge in attempting to provide reading instruction in as many of the mother-tongue languages spoken by the children as possible.

Table 3 summarizes the information in the chapters about the languages of instruction in the countries and Canadian provinces that participated in PIRLS 2006. About half the participants were providing instruction in multiple languages, even if only in a small number of schools. Much more information is provided in the chapters. For example, in some cases the participants were addressing the needs of a small population minority in a particular region of the country. However, in contrast, Spain reported five official languages with multiple languages of instruction in many communities and South Africa was at the extreme with 11 official languages. In almost a reverse type of situation, in some countries by the fourth grade most students were not receiving instruction in their mother tongue. For example, Luxembourg reported that the primary language of reading instruction often was either the student's second language or a foreign language. Despite the range of language situations, the second column of information in Table 3 shows that most countries tested students in their language of instruction.

Reading Curriculum and Instruction in the Primary Grades

The results in Table 4 show that 31 of the PIRLS 2006 countries reported having a national curriculum for reading. There is more detail and explanation in the chapters, however, those not having a national curriculum included Belgium with its two systems, Qatar with two systems, the Canadian provinces, and Germany and the United States with various state and local curricula, as well as Georgia and Poland. Even across the countries with a national curriculum for reading, there was considerable diversity regarding the structure of the curriculum through grade 4. The grade-to-grade structure ranged from one curriculum encompassing a range of grades that included the curriculum for grade 4 (e.g., grades 1-6) to the primary education level having a separate curriculum for every grade.

Curriculum development appears to be an ongoing activity in many countries; 22 participants had a curriculum that was introduced in 2000 or later, and 10 of those were undergoing revision. Only about one fourth of the countries had a curriculum that had endured 10 years, and several of those also were under revision.

In general, the reading curriculum was contained within the language curriculum together with other areas, such as writing, speaking, listening, and sometimes viewing. Only the Netherlands, the Russian Federation, Sweden, and the United States (in some states), as well as the Canadian province of Ontario, had reading as a separate curriculum area.



PIRLS 2006 Encyclopedia

ble 1	Selected Characteristics of	Selected Characteristics of PIRLS 2006 Countries								
	Countries	Population Size (in Millions) ¹	Area of Country (1000 Square Kilometers) ²	Population Density (People per Square Kilometer) ³	Urban Population (% of Total)⁴	Life Expectancy at Birth (Years) ⁵	Infant Mortality Rat (per 1,000 Live Births) ⁶			
	Austria	8.1	84	98	68	79	5			
	Belgium (French and Flemish)	10.4	31	343	98	78	4			
	Bulgaria	7.8	111	71	68	72	12			
	¹⁵ Canada, Alberta	3.4	662	5	81	80	6			
	¹⁵ Canada, British Columbia	4.3	945	4	85	81	4			
	¹⁵ Canada, Nova Scotia	0.9	55	17	56	79	5			
	¹⁵ Canada, Ontario	12.5	1076	13	85	80	6			
	¹⁵ Canada, Quebec	7.6	1542	6	80	79	5			
	¹⁷ Chinese Taipei	22.8	4	633	79	79	5			
	Denmark	5.4	43	127	85	77	4			
	¹⁷ England	50.0	130	380	90	79	5			
	France	59.8	552	109	76	79	4			
	Georgia	5.1	70	74	57	74	41			
	¹⁰ Germany	82.5	357	237	88	78	4			
	Hong Kong SAR	6.8	1	6541	100	80	3			
	Hungary	10.1	93	110	65	73	8			
	Iceland	0.3	103	3	93	80	3			
	Indonesia	214.7	1905	119	44	67	31			
	Iran, Islamic Rep. of	66.4	1648	41	66	69	33			
	Israel	6.7	22	308	92	79	5			
	¹² Italy	57.6	301	196	67	80	4			
	Kuwait	2.4	18	135	96	77	8			
	Latvia	2.4	65	37	90 60	71	10			
	Lithuania	3.5	65	55	69	71				
	Luxembourg	0.4	3	55 173	93	72	8			
	Macedonia, Rep. of	2.1	26	81	60	78	5			
	-									
	Moldova, Rep. of Morocco	4.2	34 447	129	42	67	26			
	¹⁶ Netherlands	30.1		68	57	69	36			
		16.2	42	479	90	79	5			
	New Zealand	4.0	271	15	86	79	5			
	Norway Poland	4.6	324	15	76	79	3			
		38.2	313	125	63	75	6			
	¹³ Qatar	0.8	11	72	93	75	11			
	Romania	21.7	238	95	56	70	18			
	Russian Federation	143.4	17075	9	73	66	16			
	¹⁷ Scotland	5.1	78	66	81	77	5			
	¹⁴ Singapore	4.3	1	6343	100	78	3			
	Slovak Republic	5.4	49	111	58	73	7			
	¹² Slovenia	2.0	20	99	49	76	4			
	South Africa	45.8	1219	38	59	46	53			
	Spain	41.1	506	82	78	80	4			
	Sweden	9.0	450	22	83	80	3			
	Trinidad and Tobago	1.3	5	256	75	72	17			

All data taken from the World Bank's World Development Indicators Online, retrieved April 19, 2007, unless otherwise noted. Data is from most recent year available. A dash (–) indicates comparable data are not available.

NOTE: Data provided for Belgium (French and Flemish) is for the entire country of Belgium.

1 Includes all residents regardless of legal status or citizenship except refugees not permanently settled in the country of asylum as they are generally considered to be part of their country of origin. Data for Qatar provided by NRC.

- 2 Area is the total surface area in square kilometers, comprising all land area, inland bodies of water, and some coastal water way.
- 3 Midyear population divided by land area in square kilometers. Data for Qatar provided by NRC.

- 4 Urban population is the midyear population of areas defined as urban in each country and reported to the United Nations. It is measured here as the percentage of the total population.
- 5 Number of years a newborn infant would live if prevailing patterns of mortality at its birth were to stay the same throughout its life.
- 6 Infant mortality rate is the number of infants who die before reaching one year of age, per 1,000 live births in a given year.
- 7 GNI per capita in U.S. dollars is converted using the World Bank Atlas method.
- 8 An international dollar has the same purchasing power over GNI as a U.S. dollar in the United States.
- 9 Current and capital public expenditure on primary, secondary, and tertiary education expressed as a percentage of total government expenditure.

PIRLS 2006 4th Grade

Countries	Gross National Income per Capita (in US Dollars) ⁷	GNI per Capita (Purchasing Power Parity) ⁸	Public Expenditure on Education (% of GDP) ⁹	Net Enrollment Ratio in Primary Education (% of relevant group) ¹⁰	Primary Pupil-Teachei Ratio ¹¹
Austria	26810	29740	6	99	13
Belgium (French and Flemish)	25760	28920	6	100	12
Bulgaria	2130	7540	4	90	17
¹⁵ Canada, Alberta	38628	-	5	100	17
¹⁵ Canada, British Columbia	41690	_	6	100	18
¹⁵ Canada, Nova Scotia	35518	-	7	100	13
¹⁵ Canada, Ontario	42812	35534	5	100	17
¹⁵ Canada, Quebec	29856	28940	8	100	15
¹⁷ Chinese Taipei	13970	14030	4	99	18
Denmark	33570	31050	9	100	10
England	-	_	6	100	22
France	24730	27640	6	100	19
Georgia	770	2610	2	89	14
¹⁰ Germany	25270	27610	5	100	14
Hong Kong SAR	25860	28680	4	98	20
Hungary	6350	13840	5	91	10
Iceland	30910	30570	6	100	11
Indonesia	810	3210	1	92	21
Iran, Islamic Rep. of	2010	7000	5	87	24
Israel	16240	19440	7	100	12
¹² Italy	21570	26830	5	99	11
Kuwait	17960	19480	8	83	13
Latvia	4400	10210	6	88	14
Lithuania	4500	11390	6	94	16
Luxembourg	45740	55500	4	96	12
Macedonia, Rep. of	1980	6750	4	92	21
Moldova, Rep. of	590	1760	5	79	19
Morocco	1310	3940	7	90	28
¹⁶ Netherlands	26230	28560	5	99	14
New Zealand	15530	21350	7	100	18
Norway	43400	37910	7	100	10
Poland	5280	11210	6	98	11
¹³ Qatar	-	29607	4	95	12
Romania	2260	7140	3	88	17
Russian Federation	2610	8950	3	99	17
Scotland	-	_	6	100	16
¹⁴ Singapore	21230	24180	4	96	24
Slovak Republic	4940	13440	4	87	19
¹² Slovenia	11920	19100	6	100	13
South Africa	2750	10130	5	89	35
Spain	17040	22150	4	100	14
Sweden	28910	26710	7	100	14
Trinidad and Tobago	7790	10390	4	91	12
United States	37870	37750	6	93	15

Selected Characteristics of PIRLS 2006 Countries (Continued)

10 Ratio of children of official school age who are enrolled in school to the population of the corresponding official school age based on the national education system. Based on the International Standard Classification of Education 1997. Data for Austria and Germany provided by NRC.

Table 1

- 11 Primary pupil-teacher ratio is the number of pupils enrolled in primary school divided by the number of primary school teachers (regardless of their assignment).
- 12 Public Expenditure on Education taken from World Bank's 2006 World Development Indicators, p. 84.
- 13 GNI Per Capita taken from World Bank's 2007 World Development Indicators database (PPP data revised), p. 1.
- 14 Public Expenditure on Education taken from Ministry of Education's Education Statistics Digest 2004 (p. xi); Primary Pupil-Teacher Ratio taken from Ministry of Education's, Statistics Digest 2006 (p. ix).
- 15 Population Size, Area of Country, Urban Population, Life Expectancy at Birth, and Infant Mortality Rate provided by Statistics Canada. All other information provided by provincial Ministries of Education. Please note that British Columbia, Nova Scotia, Ontario, and Quebec have provided Gross Domestic Product data in place of Gross National Income, and data for British Columbia, Nova Scotia, and Ontario (GNI per capita only) are in Canadian dollars.
- 16 Primary Pupil-Teacher Ratio provided by National Research Coordinator.
- 17 All data provided by National Research Coordinator.



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Table 2Years of Compulsory Schooling

PIRLS 2006 4th Grade

			4th Grade
Countries	Years of Schooling Provided	Compulsory Schooling	Preprimary Compulsory
Austria	Preprimary for ages 0—6; Grades 1—13	Ages 6–14; Grades 1–9	0
Belgium (Flemish)	Preprimary for ages 2 1/2–6; Grades 1–12	Ages 6–15 or 16 (Part–time 16–18); Grades 1–12	0
Belgium (French)	Preprimary for ages 2 1/2–6; Grades 1–8	Ages 6–18	0
¹ Bulgaria	Preprimary for ages 3–6; Grades 1–12	Ages 3–16; 3 years preprimary; Grades 1–11	0
Canada, Alberta	1 year preprimary; Grades 1–12	Ages 6–16; Grades 1–12	0
Canada, British Columbia	Grades K–12	Ages 5–16; Grades K–12	•
Canada, Nova Scotia	Grades K–12	Ages 6–16; Grades K–12	•
Canada, Ontario	Preprimary for ages 4–6; Grades 1–12	Grades 1–12 or until age of 18	0
Canada, Quebec	Preprimary for ages 5–6; Grades 1–12	Ages 6–16	0
Chinese Taipei	Preprimary for ages 2–6; Grades 1–12; 5 year junior colleges	Ages 6–15; Grades 1–9	0
Denmark	Preprimary for ages 6 months–6; Grades 1–12	Ages 7–15; Grades 1–9	0
England	Preprimary for ages 3–5; Grades 1–12	Ages 5–16; Grades 1–12	0
France	Preprimary for ages 3–5; Grades 1–12	Ages 6–16; Grades 1–9	0
Georgia	Grades 1–12	_	0
Germany	Preprimary for ages 3–6; Grades 1–12	Ages 6–18; Grades 1–12	0
Hong Kong SAR	Preprimary for ages 2–6; Grades 1–12	Grades 1–9	0
Hungary	Preprimary for ages 3–6; Grades 1–12; 2 years post-secondary	Ages 5–18; 1 year preprimary and grades 1–12	•
Iceland	Preprimary for ages 1 1/2–5; Grades 1–14	Ages 6–16; Grades 1–10	0
Indonesia	Preprimary for ages 0–6; Grades 1–12	Grades 1–9	0
Iran, Islamic Rep. of	Preprimary for ages 5–6; Grades 1–12	Ages 6–13; Grades 1–8	0
Israel	Preprimary for ages 2–6; Grades 1–12; 2 years post-secondary	Ages 5–16; 1 year preprimary; Grades 1–10	•
Italy	Preprimary for ages 3–6; Grades 1–15	Ages 6–11; Grades 1–5	0
Kuwait	Preprimary for ages 4–6; Grades 1–12	Ages 6–14; Grades 1–9	0
Latvia	Preprimary for ages 5–7; Grades 1–12	Ages 5–15; 2 years preprimary; Grades 1–9	•
Lithuania	Preprimary for ages 1–6, and grades 1–12	Ages 6 or 7–16	0
Luxembourg	Preprimary for ages 3–6, and grades 1–13	2 years preprimary; Grades 1–9	•
¹ Macedonia, Rep. of	Preprimary for ages 7 months to 5 years, and grades 1–12	Preprimary; Ages 6–15	0
Moldova, Rep. of	Preprimary; Grades 1–12	Grades 1–9	0
Morocco	=	_	-
Netherlands	Preprimary for children under age 4; Grades 1–14	Ages 5–16	0
New Zealand	Preprimary up to school age; Grades 1–13	Ages 6–16	0
Norway	Preprimary for ages 0–5; Grades 1–13	Ages 6–16	0
Poland	Preprimary ages 3–5; Grades 1–13; 1–3 semesters postsecondary	Ages 6–18	٠
Qatar	Preprimary for children under age 6; Grades 1–12	Grades 1–9	0
Romania	Preprimary; Grades 1–12 or 13 for some types of schools	Ages 6–16, or upon completion of grade 10, whichever comes first	٠
Russian Federation	Preprimary; Grades 1–11	Grades 1–9	0
Scotland	Preprimary for ages 3–5; Grades 1–13	Ages 5–16	0
Singapore	Grades 1–10; 3 years post-secondary	Grades 1–6, beginning at age 6	0
Slovak Republic	Preprimary for ages 2–6; Grades 1–13	Ages 6–16	0
Slovenia	Preprimary for ages 1–6; Grades 1–13	Ages 6–15, Grades 1-9	0
South Africa	3 years preprimary; Grades 1–12	Grades 1–9; Ages 6–15	0
Spain	Preprimary for ages 0–6; Grades 1–13	Ages 6–16	0
Sweden	Preprimary for ages 1–5; Grades 1–12	Ages 7–16	0
Trinidad and Tobago	2 years preprimary; Grades 1–13	Ages 5–12	0
United States	Preprimary; Grades K–12	Varies by state	0



Data provided by National Research Coordinators and Encyclopedia chapters. A dash (--) indicates comparable data are not available.

1 Compulsory preprimary education was introduced in 2004, but does not affect the students tested in PIRLS 2006.

Introduction

Table 3 Languages of Instruction and Testing

PIRLS 2006 4th Grade

		4th Grade
Countries	Language(s) of Instruction	Language(s) of Test
Austria	German	German
Belgium (Flemish)	Dutch	Dutch
Belgium (French)	French	French
Bulgaria	Bulgarian	Bulgarian
Canada, Alberta	English, French	English, French
Canada, British Columbia	English, French	English, French
Canada, Nova Scotia	English, French	English, French
Canada, Ontario	English, French	English, French
Canada, Quebec	English, French, Aboriginal languages	English, French
Chinese Taipei	Mandarin	Chinese Mandarin
Denmark	Danish	Danish
England	English	English
France	French	French
Georgia	Georgian	Georgian
Germany	German	German
Hong Kong SAR	Chinese	Modern Standard Chinese
Hungary	Hungarian	Hungarian
Iceland	Icelandic	Icelandic
Indonesia	Indonesian	Indonesian
Iran, Islamic Rep. of	Farsi	Farsi
Israel	Hebrew, Arabic	Hebrew, Arabic
Italy	Italian, French, German, Ladin, and Slovenian	Italian
Kuwait	Arabic and local dialects	Arabic
Latvia	Latvian, Russian	Latvian, Russian
Lithuania	Lithuanian, Russian, Polish	Lithuanian
Luxembourg	Luxembourgish, French, German	German
Macedonia, Rep. of	Macedonian, Albanian, Turkish and Serbian	Macedonian, Albanian
Moldova, Rep. of	Romanian, Russian	Romanian, Russian
Morocco	-	Arabic
Netherlands	Dutch	Dutch
New Zealand	English, Māori	English, Māori
Norway	Bokmål, Nynorsk, Sámi	Bokmål, Nynorsk
Qatar	Arabic, English	Arabic
Poland	Polish	Polish
Romania	Romanian, Hungarian	Romanian, Hungarian
Russian Federation	Russian	Russian
Scotland	English, Gaelic	English
Singapore	English, Malay, Chinese (Mandarin), Tamil	English
Slovak Republic	Slovak, Hungarian	Slovak, Hungarian
Slovenia	Slovenian	Slovenian
South Africa	Afrikaans, English, isiZulu, isiXhosa, Sepedi, Sesotho, Setswana, isiNdebele, SiSwati, Tshivenda, Xitsonga	Afrikaans, English, isiZulu, isiXhosa, Sepedi, Sesotho, Setswana, isiNdebele, SiSwati, Tshivend Xitsonga
Spain	Spanish (Castilian), Catalonian, Galician, Basque, Valencian	Spanish (Castilian), Catalonian, Galician, Basque, Valencian
Sweden	Swedish	Swedish
Trinidad and Tobago	English	English
United States	English	English

A dash (-) indicates comparable data are not available. This table lists the languages most frequently used for instruction. More detailed information is available in the chapter for each country.



Table 4Structural Character

acteristics of Reading		PIRLS 2006 4th Grade				
Countries National Curriculum					Reading as a Separate Curriculum Area	
Austria	•	1-2, 3, 4	2003	•	0	
Belgium (Flemish)	0	1, 2, 3, 4, 5, 6	1989	0	0	
Belgium (French)	0	1-2, 3-6	1999	0	0	
Bulgaria	•	1–4	2002	0	0	
Canada, Alberta	0	1–9	2000	0	0	
Canada, British Columbia	0	1–7	1996	•	0	
Canada, Nova Scotia	0	1-3, 4-6	1997	0	0	
Canada, Ontario	0	1–8	2006	0	•	
Canada, Quebec	0	1-2, 3-4, 5-6	2001	•	0	
Chinese Taipei	•	1-3, 4-6, 7-9	2003	0	0	
Denmark	•	1-2, 3-4, 5-6	2003	•	0	
England	•	1-2, 3-6	1988	0	0	
France	٠	1-2, 3-5	2002	٠	0	
Georgia	0	1, 2, 3, 4, 5, 6	1997	•	0	
Germany	0	1–6	2006	0	0	
Hong Kong SAR	•	1–6	2000	0	0	
Hungary	•	1-4, 5-6, 7-8	2003	0	0	
Iceland	•	1–4, 5–7, 8–10; Enabling objectives for each grade	1999	•	0	
Indonesia	•	1-3, 4-6	2004	•	0	
Iran, Islamic Rep. of	•	1–5	2000	0	0	
Israel	•	1, 2, 3, 4, 5, 6	2003	•	0	
Italy	•	1, 2–3, 4–5	2004	•	0	
Kuwait	•	1–5	1992	0	0	
Latvia	•	1-3, 4-6, 7-9	2004	0	0	
Lithuania	•	1-2, 3-4	2003	•	0	
Luxembourg	•	1-2, 3-6	1989	•	0	
Macedonia, Rep. of	•	1-4, 5-8	1996	0	0	
Moldova, Rep. of	•	1–4	1996	•	0	
Morocco	_	_	-	_	_	
Netherlands	•	1-8	2006	0	•	
New Zealand	•	1–13	1996	•	0	
Norway	•	1-4, 5-7	2006	0	0	
Poland	0	0, 1, 2, 3	1999	0	0	
Qatar	0	1–6	1995	0	0	
Romania	٠	1–4	1998	٠	0	
Russian Federation	•	1–4	2004	•	•	
Scotland	0	1-3, 4-7	1991	•	0	
Singapore	•	1–6	2001	•	0	
Slovak Republic	•	1-4, 5-9	1997	•	0	
Slovenia	•	1-3, 4-6, 7-9	1998	0	0	
South Africa	•	1-3, 4-6, 7-9	2002	0	0	
Spain	•	1-2, 3-4, 5-6	1993	•	0	
Sweden	•	1–5	1994	0	•	
Trinidad and Tobago	•	1-4, 5-6	1999	0	0	

O No

Background data provided by National Research Coordinators.

A dash (-) indicates comparable data are not available.

- 1 Grade to Grade Structure varies by federal states with binding character. All states offer grades 1–4, Berlin 1– 4 and 1–6, Brandenburg 1–6.
- 2 The Netherlands does not have a national reading curriculum that covers reading in the fourth grade. The Ministry of Education imposes a number of attainment targets students should reach before they enter secondary school at age 12. Freedom of education, guaranteed under article 23 of the Constitution, allows schools to determine their own educational content and how to attain these targets.

Table 5 contains reports about the components included in the curriculum. All of the country's curricula included goals and objectives, except Georgia where the reading curriculum was undergoing substantial revision. Twenty-eight of the PIRLS 2006 participants also provided guidelines about the processes or methods that could or should be used in delivering the curriculum, and 20 supported the curriculum with instructional materials.

Not all participants had official policies about the total amount of time that should be devoted to instruction or the percent of that time that should be spent on the language or reading curriculum. However, for the countries that did specify the total number of hours of weekly instructional time, the number of hours per week clustered in the 20 to 25 range (even though there were reports from 15 to 30). The percentage of the time to be devoted to language instruction ranged from 16 to 50% and the percentage to reading instruction from 10 to 60%, but there is some overlap among reports because reading was often part of language instruction or taught across the curriculum.

From the information in the chapters, it is evident that all the PIRLS 2006 countries placed considerable emphasis on language learning and reading as the foundation for progress in all areas of education. Most of the countries had developed an intended curriculum for reading at the fourth grade that had considerable depth and breadth, and often contained areas similar to those considered central to effective reading instruction across a number of countries. It appears that countries may be learning from the cross-pollination of ideas that occurs as part of participating in an international enterprise such as PIRLS.

The chapters also contain information about the use of instructional materials and technology, including the specific types of programs, materials, and approaches used. Some countries have shared information about the practices found most effective in teaching reading. There was considerable diversity in the approaches used to identify children with reading disabilities, as well as in the methods and resources available to help children having difficulties. A number of the PIRLS 2006 participants reported that reading specialists were rare.



PIRLS 2006 Encyclopedia

Table 5 Components Prescribed by Language and Reading Curriculum

PIRLS 2006 4th Grade

				Inten	Intended Instructional Time			
Countries	Goals and Objectives	Processes or Methods	Materials	Total Hours of Instructional	Percent Instructio	of Total onal Time		
				Time Per Week	Language	Reading		
Austria	•	٠	0	21	32	••		
Belgium (Flemish)	•	0	0	23	••	••		
Belgium (French)	•	0	0	••	••	••		
Bulgaria	•	•	0	23	30	••		
Canada, Alberta	•	•	•	25	25	••		
Canada, British Columbia	•	0	0	••	••	••		
Canada, Nova Scotia	•	•	0	25	37	••		
Canada, Ontario	•	•	0	••	••	••		
Canada, Quebec	•	0	0	25	28	••		
Chinese Taipei	•	•	•	20	25	••		
Denmark	•	0	0	17	27	H		
England	•	0	0	24	••	••		
France	•	0	0	26	26	30		
Georgia	0	•	•	16	30	20		
Germany	•	0	0	20	32	••		
Hong Kong SAR	•	•	•	27	19	••		
Hungary	•	0	•	19	••	••		
Iceland	•	•	•	27	22	••		
Indonesia	•	•	•	19	20	60		
Iran, Islamic Rep. of	•	•	•	18	46	••		
Israel	•	•	0	30	22	33		
Italy	•	•	0	30	25	25		
Kuwait	•	0	•	26	26	••		
Latvia	•	•	0	20	••	••		
Lithuania	•	•	0	17	35	••		
Luxembourg	•	•	0	25	46	••		
Macedonia, Rep. of	•	•	•	17	23	11		
Moldova, Rep. of	•	•	•	18	25	••		
Morocco	-	_	-	_	_	_		
Netherlands	•	0	0	H	••	••		
New Zealand	•	•	0	••	••	••		
Norway	•	0	0	22	27	22		
Poland	•	•	•	15	••	••		
Oatar	•	•	•	27	45	35		
Romania		0	0	18	24	••		
Russian Federation	•	0	•	19	42	30		
Scotland	•	•	0	23	20	► 4		
Singapore	•	•	•	25	20	••		
Slovak Republic	•	0	•	19	36	16		
Slovenia	•	•	•	19	30	10		
South Africa	•	•	•	27	25	1Z		
Spain	•	0	0	25	16	••		
Sweden	•	•	0	25 ••	10 ••	••		
Trinidad and Tobago	•	•	•	25	50	10		
United States			•	25 ••	50 ►4	10		

SOURCE: IEA Progress in International Reading Literacy Study (PIRLS) 2006

YesNo

Data provided by National Research Coordinators.

A dash (-) indicates comparable data are not available.

Please note that the percentages of instructional time devoted to language and reading

instruction are not mutually exclusive in most countries.

▶ Instructional time not specified.

Teacher Education and Certification

Each chapter contains information about teacher education and certification for the teachers of reading at the fourth grade. Typically, the PIRLS 2006 participants reported that the reading teachers were trained in colleges or universities to become teachers in the primary grades, responsible for teaching all or most subjects, including reading. Table 6 contains information about the requirements for becoming a primary grade teacher. Few countries required a prepracticum before entering a teacher education program, but almost all required it as part of the teacher education program. Almost all countries also required supervised practical experience in the field, and most required passing an examination. Twenty-three of the PIRLS 2006 participants required completion of a probationary period, and 11 required completion of a mentoring or induction program. Bulgaria, England, Hong Kong SAR, and Moldova were the only countries that had all six requirements.

The reports in Table 7 reveal that most of the countries and the Canadian provinces had a process to license and certify primary grade teachers. In 26 of the participating countries and provinces, universities or colleges certified teachers, and in 17 it was done by the Ministry of Education. Six participants had national or state licensing boards. Once certified, teachers in most countries were expected, but not required, to participate in professional development opportunities. A number of countries were actively training teachers in the use of educational technologies.

Examinations and Assessments

In all countries, assessment of students' reading achievement and learning progress was most frequently conducted by teachers within their own classroom environment. Some countries had a national assessment in language or reading, but in many countries it was rare for individual schools to use standardized tests. Most countries, however, had policies in place that provided for regular reporting of student progress to the students themselves and to their parents. Also, a number of countries required students to pass an examination in the language of instruction as part of obtaining a school-leaving certificate.

Conclusion

PIRLS 2006 provides an unprecedented opportunity to compare and contrast the common and unique features of the contexts, goals, resources, and instructional approaches used in teaching reading around the world. The information in the chapters makes it clear that the PIRLS 2006 countries and their school systems differ from one another in many important ways. However, there are important similarities in the emphasis placed on reading and language as the foundation for learning. There also are important similarities in the reading curricula across countries. Country reports indicate that national education systems are benefiting from the experience of participating in international assessments and other cross-cultural activities, and learning from one another.





PIRLS 2006 Encyclopedia

Table 6 Requirements to Become a Primary Grade Teacher

e nequiremente						4th Grade
Countries	Prepracticum Before Beginning Teacher Education Program	Prepracticum During Teacher Education Program	Supervised Practicum in the Field	Passing an Examination	Completion of a Probationary Teacher Period	Completion of a Mentoring or Induction Progran
Austria	0	•	•	•	0	0
Belgium (Flemish)	•	•	•	•	•	0
Belgium (French)	•	•	•	0	0	0
Bulgaria	•	•	•	•	•	
Canada, Alberta	0	•	•	0	•	0
Canada, British Columbia	0	0	•	0	0	0
Canada, Nova Scotia	0	•	•	•	•	0
Canada, Ontario	0	•	•	0	•	•
Canada, Quebec	0	•	0	0	•	0
Chinese Taipei	0	•	•	•	0	
Denmark	0	•	•	•	0	0
England	•	•	•	•	•	•
France	0	•	•	•	0	0
Georgia	0	•	•	•	0	0
Germany	0	•	•	•	•	0
Hong Kong SAR	•	•	•	•	•	•
lungary	0	•	•	•	•	0
celand	0	•	•	•	0	0
ndonesia	0	•	•	0	0	0
ran, Islamic Rep. of	0		0	•	•	0
srael	0		•	0		•
taly	0	•	•	•	0	0
luwait	•			0	0	0
atvia	0	•	•	•	0	0
ithuania	0	•	•	•	0	0
uxembourg	0	0	•	•	0	0
Aacedonia, Rep. of	0	•	0	•	•	0
Aoldova, Rep. of	•		•	•	•	•
Aorocco	-	•	-	-	-	-
Vetherlands	0	•	•	•	0	0
Vew Zealand	0	•	•	0	•	0
Vorway	0	0	•	•	0	0
Poland	0			0		0
Qatar	0		•	0	0	0
Romania	0					
Russian Federation	0	•		•	0	0
cotland	0		•	•	•	•
ingapore	0	•	•	•	•	•
ilovak Republic	0	•	0		0	0
ilovak Republic	0	•	•	•	•	0
South Africa			•	•		0
	0	•	•	-	0	•
Spain	0	•	•	•		0
Sweden	0	•	-	-	0	
Trinidad and Tobago United States	0	•	•	•	•	-

YesNo

Data provided by National Research Coordinators

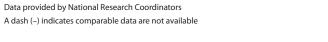
A dash (-) indicates comparable data are not available

Introduction

Table 7 Primary Grade Teacher Certification

	Process to License or	Primary Grade Teachers Certified By					
ountries	Certify Primary Grade Teachers	Ministry of Education	National/State Licensing Board	Universities/Colleges	Teacher Organization/Union		
lustria	•	0	0	•	0		
Belgium (Flemish)	•	0	0	•	0		
Belgium (French)	•	0	0	•	0		
Bulgaria	•	0	0	•	0		
anada, Alberta	•	•	0	0	0		
anada, British Columbia	•	0	0	0	0		
anada, Nova Scotia	•	•	0	0	0		
anada, Ontario	•	0	•	0	0		
anada, Quebec	•	•	0	0	0		
Chinese Taipei	•	0	0	0	0		
Denmark	•	•	0	•	0		
ingland	•	•	0	0	0		
rance	•	•	0	0	0		
Georgia	0	-	-	_	_		
Germany	•	0	•	•	0		
long Kong SAR	•	•	•	•	0		
lungary	•	0	0	•	0		
celand	•	•	0	0	0		
ndonesia	•	0	•	•	0		
ran, Islamic Rep. of	•	•	0	•	0		
srael		•	0		0		
taly		0	0		0		
lavait		0	0		0		
atvia	0	_	_	•	_		
ithuania	0	_	_	-	_		
uxembourg		-	-	-	-		
Aacedonia, Rep. of			-	•	-		
	•		-	-	-		
Aoldova, Rep. of Aorocco	•	•		•			
	-	-	-	-	-		
letherlands			0	•	0		
lew Zealand	•	0	0	0	•		
lorway	•	0	0	•	0		
Poland	•	0	0	•	0		
Qatar	0	-	-	-	-		
lomania	•	•	0	•	0		
Russian Federation	•	0	0	•	0		
cotland	•	0	•	0	0		
ingapore	•	0	0	•	0		
lovak Republic	•	0	0	•	0		
lovenia	•	•	0	•	0		
outh Africa	•	0	0	•	0		
pain	•	•	0	•	0		
weden rinidad and Tobago	0	-	-	-	-		

• Yes O No







Austria

Federal Ministry for Education, Arts and Culture (BMUKK)

Language and Literacy

German is the official language and language of instruction in Austria, except in regions with a linguistic minority, where primary school instruction is divided between German and either Slovenian, Hungarian, or Croatian in bilingual institutions. As of the 2003 school year, a modern foreign language is required in all primary schools starting in grade 1.

Emphasis on Literacy

In Austria, literacy is one of the fundamental components of primary and general education. For example, the goals of the Education Ministry's *Foster Reading! (Lesen fördern!)* initiative are to enhance all students' reading motivation and reading skills, effectively support weak readers, and develop a comprehensive reading culture in schools with support from teaching staff.^{1,2} The concept builds on developmental processes in the classroom and school. Schools institute individual and needs-oriented measures to promote reading, taking into account different motivational aspects and reading habits of girls and boys, as well as the needs of students whose first language is not German. This initiative is supported by in-service training programs for teachers, materials and brochures for parents (distributed during school registration), and school projects.

Overview of the Education System

Austria has nine federal provinces, called Bundesländer or Länder. Responsibility for legislation and its implementation is divided between the Federation (Bund) and the Länder, where legislation is executed by the Länder parliaments and administrative offices. As established in the Constitution, the Federation sets the framework, while detailed legislation is implemented by the Länder parliaments. The Federation has responsibility for the education system, including oversight of all areas of school management, the organization of school instruction in public and private schools, and the legal foundations for payment and retirement of education staff. In the 2004–05 school year, approximately 88% of students attended state-funded public schools; the remainder attended private schools.

Since March 2007, the Ministry for Education, Arts and Culture is responsible for primary, secondary, and non-university tertiary education. The Ministry for Science and Research is responsible for universities and Fachhochschulen (a university-level study program with a vocational-technical orientation). The Ministry of Economic Affairs and

Labour has responsibility for in-company apprenticeship training. The Länder are mainly responsible for the provision of public-sector compulsory education. They support the local communities in establishing and maintaining these schools via school construction funds that are administered by the Länder. The Länder have sole responsibility for crèches and kindergartens. Schools enjoy some autonomy in budgetary management and, to some extent, are free to adapt the curriculum to local needs. Provincial school inspectors in each of the nine Austrian Länder are responsible for school inspections and are assisted by district school inspectors for compulsory schools and subject inspectors for the intermediate and upper secondary levels.

Structure of the Education System

Preprimary education is for children o to 6 years of age. Infant or baby crèches (Krippe) cater to children under the age of 3. Between ages 3 and 6, children may attend a kindergarten. In the 2005–06 school year, 66% of all 3-year-olds, 90% of all 4-year-olds, and 92% of all 5-year-olds attended precompulsory education.

Primary education is for students 6 to 10 years of age, and takes place in the Grundschule or Volksschule. This is the beginning of compulsory schooling, which lasts for 9 years. Grundschule covers primary level 1 (preschool and grades 1 and 2) and primary level 11 (grades 3 and 4). In addition to the primary grades offered in Grundschule, Volksschule includes upper-primary grades 5 to 8, although the upper-primary grades are offered at very few locations today. Primary school compulsory subjects include religion, early science, German, reading, writing, mathematics, music, arts, textile/technical work, exercise and sports, modern foreign language (often English), and road safety (without grading).

At the **lower-secondary** level, for children 10 to 14 years old, students continue the subjects taught at primary schools with additional science and technical subjects. They attend the upper-primary level (Volksschule), secondary general school (Hauptschule), or secondary academic school, lower level (Allgemein bildende höhere Schule).

From age 14, students may attend **prevocational** school (Polytechnische Schule) or any other upper-secondary school. Prevocational schools emphasize vocational orientation and basic vocational training in specialized areas in a wide range of fields, such as technical-commercial occupations, commerce-clerical occupations, as well as the service industry and tourism.

General special schools (Sonderschule) are for children 6 to 15 years old and consist of levels 1 and 11 and an upper cycle. There are specialized branches for children with physical disabilities, children with linguistic disabilities, children with hearing or visual impairments, and children who are severely disabled and maladjusted. Students may attend Sonderschule during the entire period of compulsory schooling.

There are several different types of **upper-secondary** schools for students 14 to 18 or 19 years old.

- Allgemein bildende höhere Schule (secondary academic school, upper level);
- Polytechnische Schule (prevocational school);

- Berufsbildende mittlere Schule (technical and vocational school);
- Berufsbildende höhere Schule (technical and vocational college);
- Bildungsanstalten für Kindergartenpädagogik/Sozialpädagogik (schools for the ٠ training of kindergarten teachers and nonteaching education staff); and
- Berufsbildende Pflichtschule (part-time vocational school for ages 15 and up). ٠

Curricula at this level of education depend on the course chosen, although German, mathematics, and a modern foreign language are part of the general mandatory syllabi. Technical and vocational schools and colleges offer a wide variety of courses and special emphases. An important aspect of these courses is the consultation processes and close cooperation with social partners in the community, since curricula include practical instruction in addition to technical theory.

Many institutions offer tertiary education programs (ISCED levels 5 and 6) in a range of subjects and specialties. Such institutions include public and private universities, postsecondary and tertiary colleges (Kollegs), university-level programs offering technical/ vocational higher education (Fachhochschulen), universities of education (Pädagogische Hochschulen, formerly colleges for teacher training), colleges for higher-level medical/ technical professions, midwifery colleges (Akademien für gehobene technischmedizinische Dienste und Hebammenakademien), and the Danube University Krems for Continuing Education.

Reading Curriculum in the Primary Grades

Reading Policy

In Austria, literacy is one of the basic goals of primary education, as well as education generally, intended to enable individuals to participate in the culture and democracy of a society. The basis of literacy education is to work on textual and contextual exercises connected to reading and writing and to learn basic literary theory. Engaging with a variety of texts enables students to appreciate national culture and to develop moral, aesthetic, and social values. The national curriculum and a legislative decree on reading instruction reflect the current concept of reading literacy as a necessary means of communication and continuing education, and as a basis of lifelong learning.³ Reading development is understood as not only acquiring reading skills and their use but also, in a wider sense, as an important means of individual, cultural, and personal development.

The national curriculum objectives in reading to be reached by the end of grade 4 include the following:

- Reading aloud and/or silently at a skilled level;
- Developing an awareness of text, both fiction and nonfiction, through the process of reading, analysis, and explanation;
- Reading aloud fluently and accurately in a speed and intonation close to real speech;



- Demonstrating knowledge of various forms of literary work, such as folk poetry, tales, stories, instructional and popular works, articles that are suitable for children, and children's literature; and
- Using books and libraries, including familiarity with the content and form of books, periodicals, newspapers, and their place and arrangement in the library.

Austria participated in the 2000, 2003, and 2006 cycles of the Programme for International Student Assessment (PISA), which is an assessment of the academic performance of 15-year-olds internationally. As a consequence of the PISA 2003 results, the Education Ministry founded a competence and advisory center called Koordinationsstelle: Lesen for all issues related to reading. The center is a working group of delegates from all nine Austrian Federal Länder, nominated by pedagogical institutes, to support teachers and schools and offer nationwide programs.

Summary of National Curriculum

Introduction to reading starts at age 6 with compulsory schooling. There is an obligatory national curriculum that comprises general instruction for teaching methods and specific instructions for the content of the subject in question. Within the framework of the national curriculum, teachers are free to choose methods of reading instruction and the role of technology. A balanced approach that connects learning to read and write is recommended. Students should achieve competence in reading skills according to their abilities. Teachers differentiate instruction based on students' individual differences, including their initial range of abilities before entering compulsory school, linguistic competence, motivation, interest in learning, learning ability, and social background. Special consideration is given to children whose first language is not German. The combined instructional time for German, reading, and writing is about 7 hours each week.

Methods used for developing reading and writing literacy differ based on the creativity, thinking, experience, and independence of the students in the class. These methods may include activities such as reading aloud or silently or organizing students for instruction in different ways.

The most frequent recommendation for motivating children to read is to choose a variety of texts. Texts should be interesting and should be adapted to the development of the reader. Guidelines for first lessons in reading promote the practice of a mixed-methods, analytical-synthetic approach to instruction. Elements of the whole-language method (e.g., presenting whole words and short texts from the beginning to motivate the children according to the context) are used along with phonics to teach children to analyze the sound value of letters and syllables and to synthesize them as words. Studies have shown that the training of the aural skills is very important for children learning to read in their last year of kindergarten (age 5).⁴

Reading Instruction in the Primary Grades

When planning reading instruction, it is essential to address the individual needs and reading skills of each child, while also taking into account the long-term goals (e.g., reading in order to gather information or for entertainment) that should be achieved by the students. The individual reading strengths of children form the basis of an ongoing process aimed at increasing their reading competencies. In addition to various kinds of reading exercises, individualized reading promotion programs offer specific exercises to build sensory, motor, language, movement, and social skills.

Teachers appraise each student's individual reading preferences and interests, and in this way, encourage students' reading abilities and self-confidence as readers. The goal is to develop children's skills and thus enable them step-by-step to feel responsible for their own learning without supervision. For this to happen, children must acquire strategies (patterns) in order to pursue their goals. Table 1 lists various learning strategies within three distinct process domains: cognitive, metacognitive, and resource management.⁵ By using various techniques (e.g., how to acquire and store information), students learn strategies to read texts (e.g., underlining key words).

Cognitive	Metacognitive	Resource Management
repeating elaborating organizing	planning checking / monitoring steering their own learning process	optimizing their learning environment cooperating and organizing support

Table 1 Learning Strategies

Instructional Materials

Teachers work with a variety of textbooks by various publishers. These textbooks and materials are developed according to various methods of initial reading and must be approved by the Education Ministry to ensure that they fit with the standards and have the necessary methodological level.

Basic materials used for reading development come from a wide range of reading books offering samples of literature from different genres for children. Teachers appreciate the variety of materials offered by Österreichischer Buchklub der Jugend, a registered non-profit organization engaged in media and reading pedagogy and social and cultural issues for more than 55 years.⁶ The main objectives of the Buchklub are to foster interest in and enjoyment of reading and to promote books and access to the use of multimedia. Media and teaching aids developed by the Buchklub are often recommended to schools and teachers by the Education Ministry.

Some books are provided in sets complemented by didactic materials such as worksheets, folding alphabet letters, and sheets for practicing writing. For initial reading, there are spelling books and simple readers. There also are new kinds of multimedia materials (e.g., CD-ROMS) and other ways of using information communications technology (ICT) that support reading development. School and class libraries seek to



meet the needs of students. Schools also are encouraged to cooperate with public libraries and with organizations like Österreichischer Buchklub and KinderLiteraturHaus (an initiative of the Buchklub aimed at bringing together young readers with the authors and illustrators of books for young people) or with publishing houses on various projects and reading campaigns. Teachers also can conduct lessons within the school library.

Effective Practices

Research has shown that a prerequisite for the acquisition of literary language is phonological awareness, defined as "the capability to grasp the structural elements of spoken language and to be able to distinguish the sounds in the words."⁷ The relevance of phonological awareness and the possibility of improvement by specific guidance have been demonstrated by Küspert and Schneider in the evaluation of their Würzburg training program.⁸ Teachers in Austrian schools may choose either the whole-language or phonics method to teach students reading.

Students learn the letters of the alphabet by May or June in the first year of primary school, though different primers introduce the letters in varying sequence. In most classes, reading and writing are developed simultaneously, though some primers concentrate on the reading first and begin the writing process later. This also is true for teaching block letters and script. Since it is essential to detect difficulties in the reading process as soon as possible, Austria recently has placed particular importance on the introduction of an effective remedial system so that students' deficiencies can be detected as soon as possible.

Second-language Instruction

To ensure that students get a good start to school, the federal government sponsors language learning courses at municipal and local nursery schools. As of the 2006 school year, primary school children who are not fluent in German can receive up to 11 hours of small-group instruction per week. To accelerate integration of these students into primary schools, the number of existing teaching posts has increased.

Reading Disabilities

Diagnostic Testing

Reading instruction focuses on the early detection of possible disabilities in reading, such as dyslexia, and students who have slower developing reading skills. The Salzburger Lese-Screening 1-4 is a diagnostic tool that enables teachers to analyze students' abilities by measuring their basal reading skills.⁹ Results from this screening process are available within a short time period, thus allowing remedial programs to be implemented efficiently, individually, and more effectively. However, experience has shown that the actual implementation modalities vary; therefore, the results of the reading screening process may be informative at the class level only.

Teachers are trained to identify reading deficits or problems by listening to students read aloud and transcribing their reading according to the method developed by Wedel-Wolff.¹⁰ An audio-visual training program, *Reading Means Learning (Lesen können heißt*

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lernen können), is accessible to all teachers. If necessary, educational and psychological counselors or schools' special teachers and psychologists carry out an investigation of the student's needs and provide an individualized remedial program. Such a program requires intensive cooperation with the student's teacher and family. Some schools provide students who have dyslexia with reading instruction in a separate working group. In other schools, teachers work with students who have dyslexia not only within the regular classroom but also outside of regular class instruction. Some teachers develop (sometimes in cooperation with psychological experts) an individualized development program for students with reading difficulties, especially for slowly developing readers.

To determine their phonological awareness, students are often administered tests during the first school year. At the end of the first year or beginning of the second, a standardized reading test enabling an exact diagnosis of reading difficulties can be administered. Tutors with special training assist students with reading deficiencies in additional or integrated lessons. The amount of instruction varies from county to county, and there are differences even within counties.

Instruction for Children with Reading Disabilities

In compulsory education, students with special educational needs are taught according to the curricula of regular education, provided they are generally able to attain the objectives of instruction without being overtaxed. In all other cases, the curriculum of a special school geared to their disability is applied. There are special curricula for general special schools (for performance-impaired students or students with learning difficulties), as well as for the special schools for children who are blind or deaf, and for those children with severe disabilities.

The Austrian strategic program promoting reading competencies of students with learning disabilities is based on the principle that the reading process needs to be embedded in the entire concept of instruction (networked learning). The promotion of reading should be planned as an integrated part of weekly instruction. It also is important that teachers take into account the children's individual needs, abilities, and interests.

While the curriculum may vary depending on the particular learning disability, there are common reading instruction objectives and curriculum requirements for students with special educational needs. These include:

- Making students aware of the necessity for reading ability in everyday life;
- Recognizing how language-related activities are affected by the interdependent link between speaking, reading, and writing;
- Promoting reading as a significant means of obtaining information as well as its other functions (e.g., entertainment or gaining an understanding for oneself and others);
- Recognizing the significance of media; and
- Integrating reading education into other subjects being taught.^{11, 12}

Students with special education needs may be educated either in special schools or in inclusive settings in primary and lower-secondary schools. Parents have the right to



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choose the kind of schooling they prefer for their child. Special curricula and/or adapted mainstream curricula are applied in response to students' individual needs. During the 2002–03 school year, more than 50% of all students with special education needs attended integrated classes.

Teachers and Teacher Education

Admission to a teacher education program requires a general higher education entrance qualification obtained through the upper-secondary school leaving examination—the same as for university admission. As of the 2007 winter term, training for the teaching profession is the responsibility of universities of education (Pädagogische Hochschulen). Prior to this, such training was the responsibility of colleges for teacher training. A general teacher education course, leading to a diploma, takes about 3 years to complete.

Candidates are chosen to participate in the first year by their school records and after an interview. Upon successful completion of a thesis and the final state examination, teachers obtain a qualification certificate. The content of the courses consists of general humanities subjects, the German language, mathematics, music, arts, physical education, and pedagogical and psychological subjects. Studies include practical preservice training, during which trainees visit schools, usually once a week, to observe and practice teaching under the supervision of experienced teachers. This introduction to school practice (preparatory service) is comprised of practical involvement in schools and complementary training at seminars.

The primary school teacher is a general purpose teacher who is able to teach all the disciplines of the primary school curriculum. He or she has a vocation to teach and to educate from the junior section of pre-elementary school to the last level of elementary school. Professional skills are organized according to four main domains:

- The disciplines taught at primary school;
- The situations of learning;
- The behavior of the class and the diversity of students; and
- The exercise of educational responsibility and professional ethics.

Training is connected to students' class work. Even though it is a disciplinary domain with specific contents, the German language is approached mainly from the following perspectives:

- The problems of learning to read (steps and methods);
- The analysis of textbooks;
- The connection between reading and writing; and
- The evaluation of the competencies in reading.

There are no specific reading teachers, since reading is embedded in the teaching of German language.

Teacher In-service Education

In Austria there are special departments (Pädagogische Institute) connected to the Education Ministry that provide a wide variety of opportunities for continuing professional development for teachers. Beginning in the 2007–08 school year, Pädagogische Institute will be integrated into the universities of education. Since 2001, teachers in compulsory schools must attend 15 hours per year of in-service activities. These activities range from short one-day courses to courses over several semesters and include lectures about children's literature and courses on reading disabilities and remediation. Reading specialists offer courses as part of this in-service training. Teachers who are interested may attend a specific program and qualify as a reading expert for primary schools.

Since 2002, the in-service training literacy program has focused on the following: diagnostic tools, remedial reading concepts, local literacy programs, gender-specific literacy concepts, and the promotion of a broadly based reading culture at schools.

Examinations and Assessments

In Austria, there is no formal external testing during compulsory education. Teachergenerated assessment is based on classroom participation and oral, written, practical, and graphical work. Primary school students have to take written examinations (school tests) in German and mathematics in grade 4. As a rule, progression to the next educational level depends on achievement in all subjects (with the exception of music, arts, textile/ technical work, exercise and sports, and writing at primary school, or unsatisfactory achievement in only one subject). Students receive reports at the end of each term and at the end of the academic year. In German and mathematics, students may attend instruction in the next lower or next higher educational level, if this is more appropriate for their individual learning situation.

Developing Educational Standards is an Austrian project that focuses on reading literacy in primary schools.¹³ In 2003, the Education Ministry assigned a group of experts to develop, implement, and pilot a system of national educational standards in order to improve the quality of school education and the (international) comparability of school-leaving certificates in the Austrian educational system. These standards have been piloted under scientific supervision in approximately 50 selected primary schools throughout Austria since the 2004–05 school year.^{14, 15}

Austrian national standards focus on obtaining an average proficiency level for student achievement. A competence model, the basis for formulating standards, describes different areas of competence. The following is an example of a competence area within reading at the primary school level, called Reading: Dealing with Texts and Media:

- Encourage reading motivation and interest in reading;
- Reinforce and increase reading skills;
- Glean the content of texts independently;
- Reflect on the meaning of texts and clarify text comprehension;
- Creatively transform different texts in a creative way;



- Analyze formal and linguistic aspects of texts; and
- Develop an interest in the literary world.

These standards are illustrated by tasks of differing complexity, which assume an average level of proficiency and set clear objectives for schools, teachers, and learners. These tasks have been used, tested, and commented on by teachers in pilot schools during a pilot phase. However, they are not designed to be used for school-leaving examinations or as a basis to grant qualifications, since they only cover subsections of the national curriculum.

Following the evaluation of pilot tests, national assessments are to be implemented in 2008 at levels 4 (primary education) and 8 (secondary education). Test items reflecting the different competence areas are currently being developed under expert guidance according to subject-specific teaching. These tests will demonstrate the degree of success to which Austrian schools have imparted the core competences stated in the educational standards. The tests will provide results regarding the efficiency of the educational system (system monitoring) and are not to be used as a basis to grade students. Teachers instead are able to compare the competency of their classes with national results.

At grade 4, 99 classes from 49 pilot schools nationwide took part in an initial field test of Reading: Dealing with Texts and Media. All students in the selected schools were tested. The purpose of the pilot test was to obtain data in order to validate the competence model, show whether the test items used were reliable, and evaluate the administrative procedure of the tests (external test administrators were employed to do the evaluation). Results of the test are being evaluated at the moment and have not been published to date.

Test results will be published on an electronic platform in aggregate form, with participating students able to see their individual results and receive a profile of their individual strengths and weaknesses, including tips on how to improve their performance. Teachers will be able to see their class results and head teachers to see their school's results and also obtain feedback on their school results by specially trained moderators. Additionally, school supervisors will be able to view the results of the federal country. Data will not be made available to the public in order to avoid school rankings. The goal of implementing educational standards is to introduce a data-based process of quality development into schools, drawing their attention to outcome-oriented education.

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Suggested Links

- Austrian Presidency of the European Union: http://www.eu2006.at/en/Austria/Overview/ Geography.html
- Bundesministerium für Unterricht, Kunst und Kultur (вмикк) (Federal Ministry for Education, Arts and Culture): http://www.bmukk.gv.at
- Federal Ministry for Education, Arts and Culture—Schools and Education: http://archiv.bmbwk.gv.at/fremdsprachig/en/ schools/schools_index.xml
- Initiative klasse:zukunft: http://www.klassezukunft.at
- Österreichisches Institut für Wirtschaftsforschung (wifo) (Austrian Institute of Economic Research): http://www.wifo.ac.at

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Belgium, Flemish System

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Language and Literacy

Belgium is a federated country with three official languages: Dutch, French, and German. Flanders (the Flemish Region), the northern part of Belgium, has 6 million inhabitants. The official language and the language of instruction of this region is Dutch. Flanders combines the parliament and government of the Flemish Region and the Flemish Community (which includes the Dutch-speaking population of the Brussels-Capital Region) into a single Flemish Parliament and a single Flemish Government.

The Flemish Region, covering the Dutch language area, is responsible for territorial issues such as economy, infrastructure, agriculture, the environment, and employment. The Flemish Community is responsible for person-related issues, where providing services to the people is closely related to the language in which they should be carried out. Specifically, these include education, welfare, public health, and culture.¹

Emphasis on Literacy

Most of the municipalities have a public library and many schools maintain an active relationship with them. Most of the schools organize a *Book Week* every year, during which instruction is organized thematically around books, and authors are invited to the school. Encouraging children to read books or magazines and to explore on the Internet is part of the curriculum.

In Flanders, the Act of Equal Educational Opportunities ensures that schools adopt a long-term and targeted strategy to address the needs of educationally disadvantaged students and encourage their integration into the mainstream. To reach this goal, schools receive additional funds for monitoring and support. By opting for a comprehensive approach, the school provides better educational opportunities to children who come from disadvantaged backgrounds, as measured by equal opportunity indicators (e.g., proficiency in the Dutch language). If more than 10% of students in a school are disadvantaged according to these measures, the school can apply for additional support. It is believed that helping these students will benefit all students.

Overview of the Education System

The responsibility for education lies primarily with the communities. Therefore, the Flemish-, French-, and German-speaking communities each have their own educational system. The Flemish Government supervises education policy from nursery school

through university education. The Minister of Education heads the Flemish Ministry's Department of Education. Although education is a federated matter, the federal Belgian authorities still have some responsibilities, such as deciding the start and the end of compulsory education, minimum conditions for obtaining a diploma, and pensions for education staff.

In addition, the Flemish government provides subsidies for disadvantaged students covered by the general basic financing schemes and possible additional financing schemes of schools.

The concept of the "governing body" (i.e., school board) is a key concept in the organization of education in Flanders. The governing bodies are responsible for one or several schools. They are completely free to choose teaching methods to provide education based on a certain philosophy or educational view. They also can determine their own curriculum and timetables and appoint their own staff. However, schools that want recognition or financial support from the government must meet attainment targets of the government, be adequately equipped, and have sufficient teaching materials.

Most of the schools in Flanders are part of an educational network, an organization that supports a number of schools logistically, administratively, and pedagogically (e.g., the network of Catholic schools, public schools organized by a local council). In many cases, the educational networks take over the responsibilities of the governing bodies. They draw up their own curriculum and timetables, provided that they take into account the developmental objectives and the government's attainment targets.

Quality control and quality promotion in Flemish education rely on three pillars:

- The attainment targets, which provide a clear frame of reference regarding quality embedded in society;
- The Inspectorate, which acts as a professional system of external supervision; and
- The Educational Guidance, a group of advisors overseeing the professional internal support of schools and centers.

Structure of the Education System

The Belgian Constitution provides that all children have the right to education. Education is compulsory and starts on September 1st of the year in which a child reaches the age of 6. In principle, there are 12 years of schooling. A student has to comply with full-time compulsory education until the age of 15 or 16. After that, only part-time compulsory education is required (i.e., a combination of part-time learning and working), although most young people continue to attend full-time secondary education. Compulsory education ends in June of the calendar year in which the student reaches the age of 18.

All children who reside in Belgium are subject to compulsory education, including children with a foreign nationality. However, compulsory education does not necessarily mean compulsory in schools because home education also is possible. Also, children who are unable to attend school, mainly because of serious disabilities, can be exempt from compulsory education (including home schooling).

Access to education is free of charge through the end of compulsory education. Therefore, primary and secondary schools that are funded or subsidized by the government cannot demand any fees from students. Access to Flemish nursery education also is free of charge, although it is not compulsory.

Freedom of education is a constitutional right, meaning that every natural or legal person has the right to organize education and establish institutions for this purpose, and parents have the right to choose a school for their child. The authorities are not allowed to prohibit the establishment of free schools. In addition, the authorities are constitutionally obliged to provide access to neutral education. This means that each child is guaranteed that a public school supporting his or her (or his or her parents') religious or philosophical conviction will be reachable by public transportation. In these schools, parents can choose between several courses of religion or ethics.

In Flemish Belgium, there is mainstream and special nursery and primary education. Nursery education is available for children from 2¹/₂ to 6 years. Mainstream primary education is aimed at children ages 6 to 12 (6 consecutive years of study), the start of which normally coincides with the start of compulsory education. Repeating a grade, especially the last grade of preprimary education or the first grade of primary education, is not uncommon. In the second grade, more than 10% of the children are older than the normal age. Special nursery and primary education are aimed at children who need special help, temporarily or permanently. Integrated nursery and primary education is the result of cooperation initiatives between mainstream nursery and primary education and special education.

Although it is not compulsory, almost all children in Flanders receive nursery education. In mainstream nurseries, the nursery teacher is often assisted by a qualified childcare worker. During nursery education, the stimulation of the child's personality is the primary goal, together with the development of his or her social skills and cognitive and emotional development. Nursery education tackles every aspect of the children's multifaceted education, so that they will be ready to move into primary school. The child is taught such skills as language acquisition, motor development, and social skills as well as an initial way of exploring the world, which can be built upon in primary education. Wherever possible, an attempt is made to connect the various learning areas.

While preprimary schools have no official curriculum, they do have a nursery school work plan and attainment targets. Through playing, children achieve the general objectives for their age group. Many school governing boards have developed instructional methods and curricula to meet attainment targets, formulated by decree, for five learning areas: physical education, musical education, Dutch, introduction to the world (nature, people, society, technology, time, and space), and introduction to mathematics. There also are objectives specific to special nursery and primary education.

The five learning areas for **primary** school are nearly identical to those for preprimary school. The only differences are that, in primary school, French is added to the languagelearning area and attainment targets are formulated for two additional themes: learning





to learn and social skills. However, it should be noted that in Flemish primary education, it is also possible to organize education around particular themes.

The Primary Education Certificate is awarded to students after they are evaluated at the school level. This can be obtained at the end of the sixth year of primary school or at the end of the first year of **secondary** education, with permission from the Pupil Guidance Center. Students who need extra help because of poor performance are admitted to an alternative track in secondary school that provides this support and can earn a certificate equivalent to the Primary Education Certificate after their second year.

More than 80% of Flemish young adults (ages 25 to 34) have at least a certificate of secondary education. The Flemish region is above OECD average in this regard (75% of this age group completing secondary education).² Nevertheless, too many young people finish compulsory education without any certificate or diploma. Attempts are being made to change this trend by means of the modularization project. This project allows students attending vocational schools the opportunity to complete their education in a well-defined module (i.e., specialization area).

Reading Curriculum in the Primary Grades

Reading Policy

Attainment targets (or final objectives) are established for the subjects of compulsory basic schooling, including reading. They can be subject-bound or cross-curricular. The attainment targets for reading are summarized below.

- Students are able to *find* information in instructions for a range of activities, data in tables and diagrams for public use, and magazine texts.
- Students are able to *arrange* information in school and study texts (e.g., stories, children's books, dialogues, poems, children's magazines, and youth encyclopedias) and instructions for school assignments;
- Students are able to *evaluate* information based on their own opinions or other sources in different letters, invitations, and advertisement texts.

Summary of National Curriculum

During preprimary education, the emphasis is on preparatory instruction that increases phonemic awareness and graphemic identification, while introducing some concepts that will be used in later education.

Reading instruction in the first year of primary school focuses on the acquisition of decoding skills and includes stories and some activities aimed at the development of reading comprehension. Instruction in comprehension systematically takes place beginning in the second and third grades, when most schools adopt a curriculum for reading comprehension. Inventive teachers use various reading exercises, texts, lessons, and books. They use various forms of reading instruction: cooperative reading, tutorreading, discovering reading, and realistic reading (e.g., letters, song texts, recipes, user manuals, messages, practical information). The final objectives for Dutch in primary school are described below. These are minimum targets that the government regards as necessary and achievable for primary school students. They describe a minimum level of knowledge, understanding, skills, and attitudes.

According to the Ministry of Education, students are expected to be

...able to use skills and strategies in relation to listening, speaking, reading, and writing that are needed to achieve the respective final objective. In this, they take into account, amongst other things: the total listening, speaking, reading, and writing situation; the type of text; and the level of processing, as indicated in the final objectives concerned.³

Within a specific language context, students are prepared to reflect on: the use of standard language, and regional and social language variations; particular attitudes, prejudices, and role behavior in language; the rules of language behavior; how certain points of view are adopted and/or revealed through language; the listening, speaking, reading, and writing strategies that are used; the sound, word, sentence, and text level or language; and the use of language. For the above-mentioned final objectives, the students are expected to be able to use appropriate terms to discuss language (e.g., sender, noun, verb, paragraph).

Reading Instruction in the Primary Grades

Many schools use an indirect phonetic approach to reading instruction. Particularly in the first 3 months of reading instruction, there is a strong focus on the structure of the written and spoken language. Children acquire knowledge of graphemes, phonemes, and the connections between them. Halfway through the first grade, most children are able to decode simple Dutch words. In the second part of the year, there is more emphasis on reading short texts to increase fluency and elaborate on decoding skills. Some schools may use a reading method with standard words (reference words), a more global method, or a combination of methods.

Instructional time

School boards decide how many lessons should focus on reading instruction each week, usually following the instructions or recommendations of their educational network. Reading instruction, except for technical reading lessons, is usually integrated into the Dutch lessons throughout the curriculum of the primary school.

Instructional Materials

Most schools use teaching methods based mainly on textbooks from educational publishers. There are textbooks for integrated language reading education, as well as textbooks for separate language and reading education. There also is a considerable amount of other material addressing reading exercises, spelling and grammar, and texts with illustrations. Furthermore, schools have composition cards, plenty of readers, and series of reading material.



Use of Technology

The Flemish Government implemented a policy of promoting information communications technology (ICT) in education in 1997. The goal of this policy is to encourage schools to integrate ICT into their classroom practice by means of information and awareness-raising campaigns, in-service training, infrastructure, and project funding. While these ICT initiatives are not aimed specifically at reading instruction, schools are urged to use ICT in ways that are appropriate for individual subject areas. For example, students may use the Internet to search for information to help their reading comprehension or use software that provides remedial reading instruction.

Role of Reading Specialists

In primary schools, the classroom teacher is the reading specialist. If necessary, he or she can receive additional help from the remedial teacher or the child carer, a person in the school who coordinates efforts for children who need extra support. For a limited time, children with special needs can be helped by a specialist teacher or a speech therapist, inside or outside the classroom.

Second-language Instruction

Where there is a substantial number of students whose mother tongue is not Dutch enrolled in a school, funds are provided to hire a part-time staff member who can provide extra language support to these students and their teachers.

Reading Disabilities

Diagnostic Testing

The Pupil Guidance Center (CLB) is a service funded by the government that students, parents, teachers, and school management teams can consult for information, help, or guidance regarding issues of education, health care, or psychological and social functioning. The CLB is free of charge and monitors the welfare of students. In principle, the initiative for CLB assistance always comes from the applicant. Therefore, the supervision only starts when a student or parent has requested it. If a school asks the CLB to supervise a student, the center will always ask for the parents' consent. The supervision provided by the CLB has a multi-disciplinary character and focuses particularly on students with learning difficulties due to their social background and situation.

Instruction for Children with Reading Disabilities

Any admission to special education requires an enrollment report providing evidence that special education is necessary. When parents are advised to send their child to special education, they are not compelled to do so; it is their decision. Parents of children with reading disabilities decide if their child will attend mainstream primary school or special education, with advice from the CLB, or another recognized service, and the school.

Special Education

Many students with special needs are able to remain in regular education with some special attention and aid from a teacher or remedial teacher. In many cases, students

may repeat a grade. However, regular education is unable to meet the needs of some students who need special assistance temporarily or permanently. Special education schools provide these children with adapted education, training, care, and treatment. Approximately 3.5% of children in Flemish elementary education attend special education. This may be due to a physical or mental handicap, serious behavioral or emotional problems, or because of grave learning disabilities.

Teachers and Teacher Education

Teacher Education and Training

In recent policy declarations, the effectiveness and assessment of teachers has been given great importance. The goal of one such decree was the integration of all types of teaching courses into one coherent framework and the implementation of important changes in the area of in-service training.⁴ In the decree, minimum requirements have been incorporated in the form of teacher profiles. These profiles contain a minimum of common competencies for all teachers regarding knowledge, skills, and attitudes, as well as specific competencies that are connected with a specified level of education. The professional attitudes incorporated into the professional profile have a bearing on all types of functions. They affect decision-making ability to form relationships, eagerness to learn, ability to organize, desire for teamwork, sense of responsibility, creativity, flexibility, and the ability to use language appropriately and correctly. The professional profiles are developed by the Department for Educational Development.

Initial teacher training includes a 3-year course for teachers of preprimary, primary, or secondary school, in which there is a distinction between teacher-training courses and their academic (i.e., subject area) courses. In addition, continuing teacher-training courses allow teachers to acquire the necessary qualifications for a particular aspect of the teacher's profile.

There is no official training that is specific to teaching reading; it is part of the general training of the primary school teacher. Some private organizations, lead by volunteers and professionals, have initiatives concerning study and support about special reading issues, such as dyslexia. These often involve lectures, conferences, and symposia.

Teacher In-service Education

Teacher in-service education plays an important role in giving teachers the opportunity to work further towards a professional profile in their careers.

The aforementioned decree regarding teacher training and in-service training introduced a completely new system of further training initiatives.⁵ The decree consequently states that the organizing authority of the school in which the teacher works is responsible for supporting all the teachers in their quest for further professionalism. This training may contribute towards the management of the complex interactions between teaching staff and students, teachers with one another, students among themselves, or teachers and the outside world. The teachers also receive systematic in-service training



and guidance to help them improve their assessment methods (e.g., teaching materials and sample tests).

Supporting beginning teachers in their first steps in the teaching profession is also of great importance to furthering their careers. The school is responsible for the initial supervision of beginning teachers.

Examinations and Assessments

National or Regional Examinations

The idea of quality control and control of subject matter is treated very differently in Flemish Belgium than in most other countries. The Department for Educational Development divides this into three areas: freedom of education, the school as a focus of quality, and the professionalism of the teachers.⁶

In Flemish Belgium, education is expressly regarded as more than training and instruction. In addition to educational material, a school must also convey values, attitudes, and convictions according to its (freely specified) pedagogical framework. These often lead to outcomes that do not easily lend themselves to exact measurement. For this reason, there are no externally imposed tests and no national examinations. The schools themselves decide whether the students have attained all of the objectives (attainment targets and their own objectives). Thus, they award qualifications themselves and use their own tests.

The government checks, via the Inspectorate, whether schools are putting in sufficient effort to meet the attainment targets. The government also sets up criteria for monitoring the quality of curricula of the organizing authority itself. It must approve the curricula and ensure that they contain the attainment targets and the minimum goals. It also examines whether the curriculum-based goals are being achieved and if the developmental objectives and cross-curricular attainment targets are sufficiently pursued.

Monitoring Individual Student Progress

While there is no formal assessment in preprimary education, there is assessment based on observation that has three purposes:

- Forward-looking: Is the degree of maturity and development attained by the child sufficient for a school career at primary school?
- Gauging: What has the child learned and how advanced is the child in comparison with his peer group?
- Diagnostic: Why has the development of a child been delayed, or why has knowledge not been acquired in particular fields?

The transition from preprimary to primary school, a stage which can be problematic, places greater demands on the Pupil Guidance Center, together with the school's educational team.

In primary education, teachers have to conduct tests at the end of each year to assess the extent to which students have achieved the stated objectives and to evaluate the efficacy of their teaching. A school report informs each student and his or her parents of the child's achievement results, progress, attitude toward learning, and personal development at regular intervals.⁷ At this level (as in secondary education), the teaching staff is encouraged to employ a teaching approach which emphasizes success and uses positive encouragement, taking into account the difficulties inherent in the proposed objectives and the varying abilities of the students. The results of the examinations, usually taken in December and June, are used together with other classroom assessments administered throughout the school year. All examinations and testing are given by the teaching staff, under the responsibility of the school management. Based on the results, parents can decide to have their child repeat a grade or attend special education.

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Belgium, French System

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Language and Literacy

The three official languages of Belgium are French, Dutch, and German, with the language of instruction varying by the language of the region (i.e., French is taught in the French-speaking region). Some Belgian municipalities have a special status meant to protect their minorities. For example, in the region of Brussels-Capital, the language of instruction is either French or Dutch, depending on the choice of the head of the family. According to a survey in 2005, the three languages that are most often spoken in Belgium, apart from one of the three mother-tongue languages and as a second language, are English (52%), French (44%), and German (25%).¹

Emphasis on Literacy

Freedom of the press has been protected by law in Belgium since February 7, 1831.² In 2000, there were 29 daily papers with a total average circulation of 1,568,000 copies per day, amounting to 153 daily papers per 1,000 inhabitants.³

There are various initiatives to promote reading in the French Community of Belgium. These include:

- *Read Us a Story*, a project in which senior citizens read stories to children in preprimary school;
- *Opening My Daily Newspaper*, a project that enables each grade 6 class to receive all daily papers of the French-speaking press for 2 weeks; and
- The *Reading Challenge*, a project that presents a selection of 10 books to primary schools each year, which is organized by a French and Belgian team of child-oriented reading specialists.

Overview of the Education System

In 1989, the education department was transferred from the central state to the French, Flemish, and German communities.⁴ There are four types of schools organized or subsidized by the French Community: public schools organized by the French Community, public schools organized by the local powers (i.e., provinces or municipalities), and private sectarian (e.g., Catholic) and nonsectarian schools.

In 1997, an important educational decree, the *Décret Missions*, was disseminated. This decree defines the main goals of each educational organizing authority. It also emphasizes equity objectives, such as "to get all students to acquire knowledge and skills which will enable lifelong learning" and "to guarantee all students equal opportunities of social emancipation."⁵ This decree also introduced an important curriculum reform for all schools and all grades by defining the Standards of Competencies (Socles de competences), the basic competencies to be acquired by the end of the first eight grades of compulsory education.⁶ Approved unanimously by the democratic parties of the French Community Parliament, these standards constitute the basic contract between school and society.

Structure of the Education System

Another major reform defined in the *Décret Missions* is devoted to the promotion of successful primary education.⁷ Every preprimary and primary school must implement a curriculum based on cycles that would enable each child to go through his or her education at his or her own pace, avoiding grade repetition if possible (see Table 1). The introduction of the Cycle "5–8" (cycle from the last grade of preschool to grade 2) is expected to create a better transition between preschool education and primary school levels.

Phase 1	Cycle 1	from preschool until 5 years old	Applied since September 1, 2000
	Cycle 2 (Cycle 5–8)	from 5 years old until the end of grade 2	
Phase 2	Cycle 3	grades 3 and 4 (primary education)	Applied since September 1, 2007
	Cycle 4	grades 5 and 6 (primary education)	
Phase 3	Cycle 5	grades 7 and 8 (secondary education)	Applied since September 1, 1994; abolished then re-applied since September 1, 2006

Table 1 Structure of the Education System

Since 1983, free compulsory schooling starts in Belgium at age 6 and ends at age 18 (part-time schooling is available from ages 15 to 18).

Role of Preprimary Education

Preschool education is available for children beginning from age 2½, and is free of charge but not compulsory. Nearly all children are enrolled in preschool education at age 3. In the 2004–05 school year, 176,215 children attended preschool—51% were boys and 49% were girls.⁸ Ninety-one percent of these children were born in Belgium.

By the end of Cycle 1 (from 2¹/₂ to 5 years old), the child must be able to recognize social and school written documents, be able to choose a book or to find a specific book in the reading corner or in a library, link a word or a sentence with a picture, and recognize some documents according to their layout (e.g., letter, entry ticket). Essentially, with the help of an adult, children must be able to handle the various types of written documents of everyday life.

Reading Curriculum in the Primary Grades

Reading Policy

Reading instruction formally begins at age 6, although aspects of using language are introduced as part of preschool education. Learning to read is one of the three major priorities of primary education, with a focus on reading comprehension, writing, and communicating.

The major intentions of the Standards of Competencies stress reading throughout the 6 years of primary education, with an emphasis on topics that are relevant to students and have some meaning for them. The objectives of the reading curriculum include:

- Progressively developing a broad range of technical abilities and comprehension strategies, meant to gradually foster an autonomous approach to reading acquisition in the context of various supports and situations;
- Making various places available for the student to read and making him or her aware of them, so he or she can enjoy the variety and the richness of the available books; and
- Considering learning to read a complex process that focuses on reading strategies and appropriate acquisition approaches that allow students to explore various aspects of the text (i.e., literal, inferential, and for personal meaning). As such, communication activities are fostered in a socioconstructivist manner.

Summary of National Curriculum

The Standards of Competencies, which are the same for all types of schools, define the basis of the reading instruction program. However, study programs are particular to each type of school and are distinct from one another. According to the Standards of Competencies, "Reading is building some meaning as a receptor of a written message. That meaning is determined by the message features, the reader's knowledge, and the situation characteristics in which the message is considered by the reader."9

Activities linked with reading lessons are mainly developed as part of the French (as mother-tongue) lessons. However, some lessons have the goal of facilitating the development of cross-curricular competencies in line with the various subject areas. The cross-curricular competencies that are focused on in the reading domain are directed towards information processing, a necessary skill in a range of subjects. They include the following:

- Reading the same information multiple times to strengthen comprehension;
- ٠ Analyzing texts to find the main ideas, ordering them, linking them together, and understanding their importance; and
- Synthesizing texts in order to summarize the main ideas.

These competencies are built into the context of educational activities linked with the various learning domains.

There are seven competencies specific to reading included in the Standards of Competencies. These are organized into subcompetencies, which define the Standards



more precisely for each grade level. For this reason, the same competency may be focused on in different ways at several grade levels. The seven specific competencies include the following:

- Directing one's reading according to the situation of the communication: This competency is organized into six subcompetencies, each directed towards the work that has been done in preparation for the reading activity (e.g., finding book references, selecting a document according to one's reading intention, anticipating a document content by considering the internal and external indications, understanding the author's intentions, adapting one's strategy according to the project, defining an appropriate reading speed).
- **Building meaning:** This competency refers to the processes the reader implements in order to comprehend the text and react to it appropriately. There are 11 subcompetencies that outline strategies needed to develop an "expert" reading approach.
- **Drawing the organization of a text:** This competency focuses on the text structure (e.g., narrative, descriptive) and the global organization of the text (e.g., layout, sections, textual organizers). Nine subcompetencies are grouped under this specific competency, which focus on defining the reading intention and selecting the strategies that are most appropriate to the type of text concerned.
- Detecting the cohesion between sentences and groups of sentences in the whole text: This competency is organized into four subcompetencies directed towards the identification of the cohesion factors in the text (e.g., anaphora, textual organizers, pronouns, subject progression). Identifying the idea articulation, chronology, and pronoun rules are all necessary skills to increase reading fluidity and comprehension of the text and the relationships between its different components.
- Taking the grammatical units into account: This competency is divided into two subcompetencies, one of them directed towards punctuation and grammatical units (organization and syntactic structure), and the other towards the recognition of noun and verb grammatical signs (e.g., gender, number of the words, verb tenses). These competencies are of major importance in the reading process because the reader must be able to detect the influence of the syntactic organization and grammatical links in the text.
- **Processing the lexical units:** This competency is made up of four subcompetencies directed towards strategies needed to clarify the meaning of a word, such as suggesting hypotheses or using the context, the dictionary, synonyms and antonyms, and different parts of the word (i.e., root, prefix, and suffix).
- **Detecting interactions between verbal and nonverbal elements:** This competency encourages the use of nonverbal elements to clarify one's reading (i.e., illustration, scheme, typography, and key).

The definition of reading competencies is relatively specific. However, these divisions between the various competencies are only theoretical, since they must be processed together in different learning activities. The teaching methods recommended in the Standards of Competencies and other curricular documents focus strongly on the integration of the various components through activities that are intrinsically interesting for the learner.

At the end of the first phase of primary education (grade 2), most subcompetencies are initiated and are at the center of reading lessons. The Standards of Competencies primarily stress the four specific competencies related to:

- Processes implemented prior to the reading activity;
- Elaboration of the first comprehension strategies;
- General structure of a text (typology and organizing signs); and
- Interactions between verbal and nonverbal elements.

At the end of the second phase of primary education (grade 6), most subcompetencies are assessed for the purpose of certification. This tests mastery of the skills introduced in the first phase, as well as the enrichment that has occurred in the second phase. Thus, at the end of primary education, children should have mastered the skills that help them become autonomous and adopt efficient reading strategies when they are confronted with a diverse range of reading situations.

Beyond these specific competencies, enjoying reading also is emphasized. Text subjects, device selection, and access to places that encourage a literary culture are all important elements in the process of learning to read in primary education in the French Community of Belgium.

Reading Instruction in the Primary Grades

Instructional Time

The school year is made up of 37 weeks, beginning in September and ending in June, for a total of 182 school days. The students' schedule must have 28 weekly periods of 50 minutes each, which are organized into 5 days per week. The time devoted to learning to read varies according to the teachers and schools.

Instructional Materials

Presently in Belgium, there are no compulsory didactic methods or supports for teaching reading. The selection of textbooks varies according to the teachers. They typically use materials from a variety of sources, including exercises and texts from different books, newsletters, reviews, and documents provided for them by the school system.

A 2006 official directive emphasizes the use of school textbooks, school software, and other educational tools in classrooms.¹⁰ The use of these materials is intended to support students throughout their learning and help teachers in the planning and implementation of their teaching activities. This directive is part of the Contract for School (Contrat pour



l'école), which aims for better-provided teachers, better-structured teaching methods, and higher-quality, more efficient and equitable schools.

The government of the French Community of Belgium has decided to grant schools financial aid specifically devoted to school textbook and software purchases. As of 2007, these funds are to be used to purchase textbooks that have received approval based on an ethical criteria (i.e., respect for equality and nondiscrimination principles), as well as an educational criteria (i.e., conformity with the Standards of Competencies and other decree requests).

Use of Technology

Computer technology is not emphasized in the process of teaching reading, although this depends on personal preference or educational staff initiatives. Computer technology is used most often in the context of looking for information and documentation during training or regulating activities aimed at increasing speed, lexical and syntactic knowledge, or comprehension of text. For instance, software programs Elmo and Elsa are used to support students' reading progress and are tailored to suit individual needs over a school year.

Role of Reading Specialists

Reading specialists play a minor role in reading education in schools. However, it recently was found that the global climate of books and reading was less favorable in the French Community of Belgium than in other countries.¹¹ Since then, a university team has been put in charge of initiating a study aimed at fostering more collaboration between primary education classrooms and public libraries. Some suggestions for collaboration for grade 8–12 teachers have been provided.¹² It is expected that the school-library partnership will motivate teachers to bring classes to the school or class library more frequently.

Second-language Instruction

A series of adaptation lessons in language instruction is available for students whose mother or usual tongue is not French and who do not know French well enough to successfully participate in class activities. Besides learning French, the goal of these lessons, organized according to a schedule of three periods per week, is integrating students into the school system.

Reading Disabilities

Instruction for Children with Reading Difficulties

Students with reading difficulties often receive support in their class as a result of formative assessments and the differentiated education system.

At the structural level, specific teacher training is provided in grades 1 and 2 to help immediately detect reading difficulties. Once difficulties are detected, remedial teaching procedures can be implemented efficiently inside or outside of the classroom. In some instances, students also may benefit from repeating a grade if they need deeper learning than is available in a single school year.

Special Education

The special education system is intended for children and teenagers who need adapted education because of their specific educational needs and lower learning abilities. If a child has less severe educational needs, then he or she can be partly or completely integrated into the regular education system. The special education system is organized into several types, according to the educational needs of students who are slightly or severely mentally challenged, have behavior or personality disorders, physical disabilities, are ill or convalescing, have vision problems, have hearing problems, or have instrumental problems (e.g., language or speech development problems).

Like the regular education system, the special education system works to achieve the objectives outlined by the Standards of Competencies. According to the acquired competencies, the student can obtain the Basic Studies Certificate (Certificat d'études de base) and the other study certificates.

In contrast to the regular education system, special education requires advanced training standards that enable individualized teaching and the presence of paramedical, psychological, and social staff to support the educational team.

Teachers and Teacher Education

In the 2004–05 school year, there were 30,645 full-time teachers in regular primary education, of whom 15% were men and 85% were women. In that period, nearly one third of primary education teachers (men or women) were 30-39 years old, and another third of them were 40-49 years old.¹³

Teacher Education and Training

In 2000, a major teacher education reform was introduced with two objectives: promoting the role of teachers and making teaching more professional.¹⁴ The reform states that primary education teacher training will take place in non-university tertiary education programs of study requiring 3 years. The primary education teacher training leads to a specific diploma. The training is made up of seven components:

- The acquisition of sociocultural knowledge;
- The acquisition of socio-affective and relational knowledge;
- The mastery of disciplinary and interdisciplinary competencies;
- The mastery of educational competencies;
- The acquisition of a scientific approach and research attitude; •
- The development of classroom management skills; and ٠
- Interdisciplinary activities aimed at building a professional identity.

In order to become a primary education teacher, one must have mastery of disciplinary and interdisciplinary competencies, as well as spoken and written mastery of the French language and knowledge of all the subjects and the practice of the educational tools specific to each domain.



Classroom management skills are acquired in professional training workshops and through periods of working in classrooms. The workshops offer students a range of activities meant to develop methodological competencies and the ability to reflect on them. The stages (practicum) are organized in each of the 3 study years. In the first year, they observe and participate in activities in a classroom with a supervising teacher, which prepares them for being responsible for the entire classroom. In the second and the third years, students are essentially responsible for a classroom of their own.

To obtain a primary education teacher diploma, the student has to present an endof-study product, which should be a personal and originally written production that shows the use of his or her competencies in the particular subject the student has decided to develop and research. A reinforcement of the mastery of French also is provided in the training. Once they meet these requirements, primary education teachers teach all subjects, with no special training for reading teachers.

Teacher In-service Education

Two recent decrees have reformed the professional training of teachers by making inservice training compulsory.^{15, 16} The decrees also created the Professional Training Institute (Institut de la Formation en cours de carrière), a reference organization of the French Community meant to implement and organize professional training for the teachers from the various education systems.

The professional training is structured into three levels, shown below in Table 2:17

Micro (School Project)	Training related to the school that employs the teacher, such as learning about the needs of the students, expectations of parents, or the school's social and cultural background.
Meso (Educational and Pedagogical Project)	Training related to the objectives or philosophy of the school's organizing authority or the pedagogical techniques used.
Macro (Curriculum Project)	Training related to implementing learning competencies, with the goal of reaching levels defined in the Standards of Competencies

Table 2 Teacher Professional Training

There is compulsory and voluntary in-service training. The compulsory training consists of 6 half days per school year, of which 2 days must be devoted to macro trainings. Voluntary training cannot exceed 10 half days per school year if they take place during the teacher's teaching time.

Examinations and Assessments

National or Regional Examinations

External, noncertifying assessments have been conducted since 1994. These assessments give teachers the opportunity to assess each student's level of achievement for some competencies, detect the competencies that have not been achieved that will need special attention, and evaluate their students in the context of all students of the French Community of Belgium. Reading competencies were assessed in grade 3 of primary

education in 1996 and 2005 and in grade 5 in 1994 and 1997. In May 2006, the Parliament of the French Community of Belgium adopted the Decree for the External Assessment of Compulsory Education Student of Achievement and the Basic Studies Certificate (décret relatif à l'évaluation externe des acquis des élèves de l'enseignement obligatoire et au Certificat d'Etudes de Base au terme de l'enseignement primaire), which formalizes and coordinates the system implemented in 1994.¹⁸

As of the 2006–07 school year, external noncertifying assessments have been organized on a 3-year cycle. In the first year, the assessments concern reading mastery and written production for all grades 2 and 5 students in primary education. The team in charge of these assessments consists of the President of the Monitoring Commission, teachers and inspectors from different education systems, and university researchers in education. The assessment results will be used to evaluate students' level of achievement, taking into account the individual characteristics of the various school populations.

Beginning in the 2008 school year, the Basic Studies Certificate will be awarded at the end of primary education based on an external certifying assessment, which will be compulsory in every educational system.¹⁹ The government expects that every student will be assessed at the same level, regardless of his or her education system and school. The examination will assess the mastery of the competencies expected at the end of the second phase of compulsory education in French, including training in mathematics, science, history, and geography.

Until this assessment is implemented, students can obtain their Basic Studies Certificate through a board of examiners from the school. Some schools include the students' results from an external assessment in the files that are reviewed.

Monitoring Individual Student Progress

There are various procedures of assessment in primary education. Using an effective teaching approach and enabling each student to progress according to one's own pace, the teacher should ideally focus on formative assessment and differentiated education, which takes into account the various difficulties linked to students' different abilities. Examination results then can be added to the observations and notations from a formative assessment.

For the purpose of informing teachers, the Commission of the Assessment Instruments Related to the Standards of Competencies (Commission des outils d'évaluation relatifs aux Socles de competences) circulates examples of assessments among all the schools organized and subsidized by the French Community. Before their distribution, these instruments have been tested in various classrooms of the different education systems. Developed to align with the Standards of Competencies, they represent some concrete examples of a competency assessment that are easily available to teachers on the education website of the French Community.

The child and his or her parents are regularly informed about the child's results, school progress, learning behavior, and personal development through a written school report.



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Bulgaria

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Language and Literacy

In Bulgaria, the national language and language of instruction is Bulgarian, a South Slavonic language that is spoken throughout the country. It is the official language of administration, public relations and services, and instruction in schools. Other languages used in the country are Turkish and Romany. In addition, ethnic minorities such as Jews and Armenians have other languages as their mother tongue. In foreign language high schools, instruction in different subjects is carried out in the corresponding language.

Emphasis on Literacy

Bulgaria is a country rich in literary history dating back to the 9th century. The old Slavonic script created by Cyril and Methodius was first accepted and developed in Bulgaria. From the foundation of the First Bulgarian State more than 1,300 years ago, learning and enlightenment, together with striving for education and culture, have been constant characteristics of the Bulgarian people. The first schools were set up in Bulgaria in the years 866 (the Preslav School) and 888 (the Ochrid School). The first Bulgarian newspaper was published in the mid-1800s. In 2006, there were 423 newspapers with a combined circulation of 310,023. Also, there were 746 journals with a combined circulation of 9,764, and 6,029 books published. The public library system includes a total of 4,552 establishments (including community libraries) with 8,658,162 volumes and 1,336,366 registered users.¹

Overview of the Education System

The Bulgarian education system is centralized. The Ministry of Education and Science is a specialized body of the Council of Ministers charged with determining and implementing a unified government policy in the field of education and science. The main functions of the Ministry of Education and Science are to:

- Exercise control over all types and levels of schools and kindergartens in the country;
- Participate in forming the national strategy for the development of education;
- Endorse educational documentation;
- Look after the introduction of innovations and the supply of textbooks and manuals;
- Organize publishing activities in the field of education;

- Define unified state education standards;
- Establish, transform, and, when necessary, close state and municipal schools;
- Approve the establishment of private schools and kindergartens; and
- Appoint the heads of the Inspectorates of Education.

The 28 Inspectorates of Education, one in each region, act as specialized regional bodies of the Ministry of Education and Science for administering the education system. They exercise planning and coordination and control the functioning of the schools and kindergartens within the regions. The heads of the Inspectorates appoint the school principals in the different regions.

Education departments of municipal administrations represent an element of the government structure and take part in implementing the education policy within the municipalities. The municipal departments are the supporting and managing bodies for preschool education. Municipal mayors appoint kindergarten principals, but municipalities have only a supporting role in school education.

Structure of the Education System

School is compulsory up to the age of 16. Primary education begins at the age of 7, although children may begin at the age of 6 with parental approval, if they are determined to be ready for school. The school year begins in September and ends in June, with 31 to 36 school weeks, depending on the level and grade.

The structure of the education system in Bulgaria has three stages. Kindergarten, for children ages 3–6, has been compulsory since 2004 as a stage of preparation for primary school. In many schools, these are called "preparation classes". Primary school, for children ages 7–10 or 11, includes grades 1–4. The first stage of secondary school includes grades 5–7 or 8 (lower-secondary education). After completing this stage at grade 7, students can apply to attend specialized high schools. High school education is 4–6 years, including grades 8 or 9 to 11 or 12. Five-year high schools (the first year is considered a "preparatory year") admit students following grade 7, whereas other high schools are 4 years and admit students following grade 8. There also are vocational high schools after grade 7, which are 5 years.

Further education is offered at universities, higher schools (mainly vocational), and colleges. A bachelor's degree at universities and higher schools is 4 years, with an additional year for the master's degree. A doctoral degree is 3 years beyond a master's. Colleges, which are 3 years, do not give diplomas for higher education, but award students certificates of specialization. After graduating from colleges, trainees can apply to universities for a bachelor's degree after 2 or 3 years of education.

In the 2005–06 school year, there were a total of 2,757 schools of all types, with 1,398,751 students and 122,339 teachers. There also were 254 private schools. In the same year, there were approximately 243,464 students and 21,534 teachers in higher education, which includes 43 universities and 47 colleges.²

Role of Preprimary Education

The main purpose of preprimary education (kindergarten) is to acquire knowledge, skills, and habits to prepare students for primary school. In this setting, the child, who is in a new social and multicultural context, learns how to communicate. It also is important to motivate children to read and learn. Students may attend a kindergarten with early foreign language learning, depending on the parents' choice. Second-language learning begins in grade 2 for all students. In the 2005–06 school year, Bulgaria had 3,331 kindergartens with 206,243 children.

Reading Curriculum in the Primary Grades

Reading Policy

The Bulgarian official policy on reading literacy requires all students to be able to read by the end of grade 1. However, many children have begun learning at home or in preparatory groups and can read when they start school.

In expanding Europe (i.e., the new countries in the European Union), the diversity of languages is believed to foster mutual understanding and tolerance towards differences, serve as a factor in preserving the spirit and cultural heritage of a language community, and aid in achieving stability and cooperation among nations. As a result, state education requirements (content standards) for Bulgarian primary and secondary school are being elaborated to synchronize Bulgarian and European standards in education. Significant changes are taking place in the Bulgarian school system, which are fully congruent with the changes in the European educational context.

The Bulgarian state education standards are applied in new education programs and textbooks in Bulgarian. The recommendations formulated in the *Conceptual Framework of the Council of Europe* for contemporary language education, language behavior, successful communication and the rules regulating it, and the sociocultural context of communication have been adapted as key factors in the education in the *Bulgarian as Language 1 Curriculum*.³ These concepts are operationalized and used to describe the outcomes of teaching the Bulgarian language. These ideas are similar to the national educational program for development of school education and preschool education and preparation (2006–15), mandated by the current government.⁴

Summary of National Curriculum

The grade-to-grade structure that covers reading instruction in primary school is from second through fourth grade. The main purpose of language instruction in the first grade is to develop basic literacy skills such as learning letters and connecting them to sounds; learning to read letters, syllables, words, and sentences; writing parts of letters and whole letters; and writing syllables, words, and sentences. Reading instruction starts in the second grade when students master the reading technique.

The current reading curriculum is a major part of the national content standards for grades 1–4. Reading is part of language instruction in the primary grades. Within the national standards for language instruction, there is the syllabus for Bulgarian language and literature, an interdisciplinary cultural-education domain that includes reading



instruction and reading skills. There are four components included in the national standards for grades 1–12: sociocultural competence, language competence, speaking, and writing.⁵

According to the national education standards, at the end of grade 4, students must have mastered language, sociocultural, and communicative competencies to a certain level. These include the ability to:

- Read with adequate intonation and understand the meaning;
- Find synonyms and antonyms;
- Explain, ask questions, and reply analytically;
- Use different word-order patterns;
- Speak logically and critically;
- Respect the speech of others;
- Analyze and compare literary texts; and
- Plan and create self-generated written texts.

Reading Instruction in the Primary Grades

Instructional Time

In grades 1–4, Bulgarian language and literature receive 7 hours of instruction per week, 3 are for Bulgarian language, 2 for literature, 1.5 for communication skills (writing and speaking), and 30 minutes for home reading.

Instructional Materials

New textbooks are chosen when the curriculum is changed, approximately every 10 years. Before new instructional materials are introduced, teachers from all over the country review textbooks, notebooks, resources, and materials for each grade from a list provided by the Ministry of Education and Science. Teachers rank the textbooks suggested by the Ministry and give feedback about their preferences. Based on teachers' choices, the Ministry mandates a set of materials to be used throughout the country. New textbooks for grade 1 to grade 4 conforming to the national educational standards of 2006 have already been distributed and are free of charge.

The materials used in grade 1 include an alphabet book, a reader, and workbooks. At grade 2 and 3, students use a reader, workbooks, and a textbook in the Bulgarian language. Materials in grade 4 include the Bulgarian language textbook, a literature textbook, and workbooks. There also are various handbooks and reference books that parents can choose for home reading and studying.

Use of Technology

The primary classroom teacher uses various technologies including information communications technology (ICT). ICT has been successfully introduced in nearly all Bulgarian schools. Part of this is the National Educational Portal, which is the first step to electronic learning in Bulgarian schools.⁶ Similar to an e-classroom, its goal is to

help both students and teachers make the process of teaching and learning active and interactive. The teacher becomes a constructor of knowledge and a facilitator of learning. The student becomes a partner in classroom dialogue. A free Internet connection is available in every Bulgarian school, and most schools have multimedia equipment.

According to the educational settings and context (pair, group, and individual work) technology is used in reading instruction. Different active methods of learning have already been applied in Bulgarian primary schools so that students can acquire autonomy in class.

Role of Reading Specialists

The primary classroom teacher is responsible for teaching reading. There are experts in Bulgarian language and literature at the Inspectorates of Education and the Ministry of Education and Science. These experts act as advisors and play an organizational role in reading instruction.

Second-language Instruction

There are no special second-language reading programs in Bulgarian for immigrants. However, for Roma children and children who do not speak Bulgarian well, there are additional classes to help students develop formal communication, extend their vocabulary, learn syntax structures, and improve their handwriting, speaking, and writing. Minority students also can study their mother tongue at public schools in the form of free elective instruction.

Effective Practices

Primary teachers and specialists apply various effective practices. For example, the goals of the program Step by Step, a nongovernmental organization, include disseminating and realizing ideas about democratic education, introducing modern educational technologies, and facilitating family participation in education.⁷ Also, the international project *Reading and Writing for Critical Thinking* introduces research-based, instructional methods for teachers and teacher educators. These methods are designed to help students think reflectively, take ownership of their personal learning, understand the logic of arguments, listen attentively, debate confidently, and become independent, lifelong learners.⁸ In addition to these programs, teachers use role plays, school theatre, and school papers. All these practices stimulate equal access to education for Bulgarian learners.

Reading Disabilities

Diagnostic Screening

Diagnostic screening often is used to identify reading difficulties and symptoms of a disability. Students who have reading difficulties are given support such as individual instruction from the teacher, small-group instruction, and various kinds of art therapy. If they fail to make progress while receiving such support, specialists can diagnose their difficulties. If the student has symptoms of a disability, he or she is taught individually



by pedagogical, psychological, and medical specialists. A few schools have specialists in reading disabilities.

Special Education

According to the Constitution and the National Education Program (2006–15), every child has equal access to education. There is a national program for the integration of children with special education needs into mainstream education. Most special education students are in classrooms with other students but follow an individualized program. They are not obliged to cover the National Educational Requirements (Standards). The team of specialists working with the student considers each particular case and determines the level of disability. In cases of serious disabilities, students are educated separately.

Teachers and Teacher Education

Teacher Education and Training

Teaching at a primary school requires at least a bachelor's degree in primary education (4 years). This diploma also is a certificate for qualification. Teacher education students can pursue degrees at the bachelor's, master's, and doctoral levels. They are taught courses such as modern Bulgarian language, teaching Bulgarian language and literature in primary school, pedagogy, and pedagogical psychology. Reading instruction is a main part of teacher training.

Preschool and primary education teacher education students make guided observations and deliver observed lessons in schools, followed by a pre-graduation practice, which is 30 hours per week for 12 weeks. To acquire a diploma, the students have to pass special state examinations.

Teacher In-service Education

There is a department for in-service training for primary teachers. Teachers are required to complete a minimum of 60 hours. The goals of this training are to:

- Periodically update pedagogical knowledge;
- Acquire new instruction methods; and
- Learn how to use ICT in education.

According to the National Program for the Development of Education, teachers can earn in-service certificates as a junior teacher, teacher, senior teacher, principal teacher, and teacher expert. A system for career development is being developed.

Examinations and Assessments

National or Regional Examinations

One of the main goals of the National Program for the Development of School Education and Preprimary Education and Preparation is quality control of education. To realize this goal, external assessment by standardized tests is being introduced. The system for external assessment includes assessment of knowledge and skills in grades 4, 7, 10, and 12. In some cases, these examinations will be used as university admission examinations.

Bulgaria

For those students who apply for specialized high schools after grade 7, there are national examinations in Bulgarian language and literature and mathematics. Some of these high schools also have other examinations (e.g., in a foreign language).

In the 2007–08 school year, national examinations were introduced after grade 12, beginning with a trial examination using a representative sample of grade 12 students. Those who take the examination receive a diploma for higher secondary education and are eligible to apply for higher education.

Standardized Tests

Standardized tests in Bulgaria are being developed. The Bulgarian Association for Assessment and Measurement in Education has constructed a Framework for External Assessment after grade 4 concerning the Bulgarian language and literature and mathematics. This framework was verified from 2004 to 2006 in various regions such as Sofia, Varna, Veliko Turnovo, and Vratsa.

Monitoring Individual Students' Progress

Teachers use portfolios and grade student achievement on a scale ranging from 2 to 6 points (where 6 is excellent, 5 is very good, 4 is good, 3 is satisfactory, and 2 is poor) in addition to non-standardized tests with multiple-choice and constructed-response items. Primary teachers are well acquainted with formative assessment and apply it in their teaching. An important goal for teaching is the improvement of internal assessments.

Suggested Readings

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Canada

Alberta Ministry of Education British Columbia Ministry of Education Ministère de l'Éducation, du Loisir et du Sport du Québec Nova Scotia Department of Education Ontario Ministry of Education

Canada is represented in PIRLS 2006 by five provinces: Alberta, British Columbia, Nova Scotia, Ontario, and Québec. The Canadian education system operates at the provincial level; therefore, each of the provinces is described separately in this chapter.

Alberta

Language and Literacy

The official languages of instruction in Alberta are English and French, with the majority of students receiving English instruction. Several bilingual and immersion programs also are offered in Arabic, Chinese, German, Ukrainian, and Spanish.

Literacy is emphasized in education, and the *English Language Arts* κ -9 *Program of Studies* states that "language development is the responsibility of all teachers." ¹ In the 2005–06 school year, Alberta Education completed a province-wide consultation on literacy and numeracy development in the early grades. As a result, an advisory committee made several recommendations to ensure that students have strong skills to be successful in their ongoing learning. Work is now underway on some of the recommendations, such as developing and providing access to diagnostic and classroom support materials.

Overview of the Education System

Alberta, like other provinces in Canada, is responsible for developing its own curriculum and has the authority to develop provincial assessments. All schools must follow the mandated curriculum, and teachers are responsible for developing instructional plans that assist students in achieving the learning outcomes that are outlined in the programs of study. School is mandatory for children, ages 6 to 16.

Structure of the Education System

Schools are generally grouped into three levels: elementary (grades 1–6), junior high school (grades 7–9), and senior high school (grades 10–12). There are four main types of schools operating within Alberta: public, separate (Catholic), private, and charter. A charter school must be approved by the Minister of Education and is established to

provide an innovative, different, or enhanced program to improve student learning.² Students also have the right to a home education.

Role of Preprimary Education

Early childhood services programs serve children before grade 1 and include kindergarten. Attendance at these programs is voluntary and may be offered by either public or private schools or other private institutions. Students attending kindergarten have access to at least 475 hours of instruction per year.³

Reading Curriculum in the Primary Grades

Reading Policy

Although Alberta does not have an official reading policy, literacy is emphasized across all subject areas. There is no separate curriculum for reading. It is included as one of the six language arts subjects within the *English Language Arts* κ –9 *Program of Studies*.

Summary of Curriculum

The two main goals underlying the English language arts curriculum are to have students appreciate and understand literature and language so they can effectively use it in different situations for a variety of purposes.⁴

The program of studies focuses on six language arts areas that are interconnected: listening, speaking, reading, writing, viewing, and representing. Students are expected to achieve the outcomes (attitudes, knowledge, and skills) outlined in the program of studies by the end of each grade.

Reading Instruction in the Primary Grades

Instructional Time

In Alberta, the amount of mandated instructional time in grade 4 is 950 hours per year. Approximately 25% of this time is devoted to language instruction.

Instructional Materials

A list of authorized basic resources that support teaching the curricular outcomes is compiled by the Ministry. These resources are subjected to an in-depth review and content validation and must meet the *Guidelines for Recognizing Diversity and Promoting Respect.*⁵

Resources for teaching reading are divided into basic student learning resources, student support resources, and teaching resources. Basic resources address most of the course outcomes, while support resources assist in meeting some of the outcomes. Resources are available in various forms such as print, audio, video, manipulatives, or computer software.⁶ The program of studies suggests that grade 4 students should "experience oral, print, and other media texts from a variety of cultural traditions and genres, such as personal narratives, plays, novels, video programs, adventure stories, folk tales, informational texts, mysteries, poetry, and CD-ROM programs."⁷

Use of Technology

Alberta has a program of studies for information communications technology.⁸ It provides technology-specific outcomes for students that can be integrated into many subject areas including language arts. Students are encouraged to use technology to facilitate communication and interact with others. Authorized CD-ROM resources also are available to support reading and writing instruction.

Role of Reading Specialists

The role of a reading specialist may include participating as a member of the learning team, supporting the teacher, aiding in the development of student programs, instructing students, and/or administering assessments. However, some schools may not have a designated reading specialist.

Second-language Instruction

As the population of students who speak English as a second language continues to grow by an average of 14% each year, it is important that the needs of these students continue to be met.⁹ *The English as a Second Language Elementary Guide to Implementation* provides teachers with strategies for teaching these students. Examples include literature-based reading programs, literacy scaffolds, attention to phonics, and various pre-reading strategies.¹⁰ Many of the accommodations and effective strategies for teaching students who speak English as a second language are similar to those used with other students who have special needs.

Effective Practices

Teachers employ a number of strategies and teaching methods to ensure that their students are successful. Each teacher modifies his or her instruction to meet the needs of individual students. The following practices have been found to be effective in teaching reading.

- Stressing the connections between all six language arts and emphasizing reading for pleasure;
- Developing basic skills in identifying words, including using phonics and phonemic awareness instruction and attention to reading orally;
- Teaching comprehension strategies through teacher modeling, explicit instruction, thinking aloud, guided practice, and supporting students when they use the strategy independently;
- Using a variety of reading methods, such as shared readings of common texts, guided reading and literature circles, reading aloud, and independent reading;
- Grouping multilevel texts into themes to allow for discussion of thematic content, while accommodating students at different reading levels; and
- Using a readers' workshop format where word study or comprehension strategies are developed with the whole class and then applied in a variety of texts.¹¹



Reading Disabilities

Diagnostic Testing

A variety of ways are used to identify students with reading disabilities. Teacher observations and informal assessments (such as paper-and-pencil tests, inventories, questionnaires, and surveys) are used. Some teacher assessments may include concepts about print tests, surveys of reading attitudes or strategies, assessments of a student's ability to read sight words, and running records (kept by the teacher) of skills such as the ability to read a passage orally.¹²

Instruction for Children with Reading Disabilities

Students with reading disabilities and other special needs are usually integrated into the regular classroom rather than segregated in special needs classrooms. At times, a teacher's aide may work with students individually or in small groups to assist them with reading difficulties. Children with reading disabilities may benefit from accommodations similar to those described in the following special education section.

Special Education

In Alberta, educating students with special education needs in inclusive settings is the first placement option to be considered. There are three general types of accommodations:

- Environmental accommodations, such as enlarging reading materials, providing access to computers for word processing, spell checkers, organizers, alternative seating, and adaptive devices;
- Instructional accommodations, such as providing copies of notes and alternative reading materials, varying the amount of material to be learned, pairing written instructions with oral instructions, and using peer partners, tutors, or small-group instruction; and
- Assessment accommodations, such as giving extra time, oral tests, opting out of questions that affect scoring for students with accommodations, breaking a test into parts and administering them at separate times, providing a reader or a scribe, and providing a taped test or a test in large print or Braille.

Teachers may provide instructional accommodations for reading in the following ways:

- Use less difficult reading material or reduce the amount of reading required;
- Identify and define words prior to reading;
- Allow alternative methods of data collection (dictation, interviews, fact sheets);
- Set time limits for specific task completion, and allow extra time for assignment completion;
- Enlarge the text of worksheets, reading material, and tests, and limit the number of words on a page;
- Read directions several times at the start of assignments and tests; and
- Use assistive technology (e.g., optical character recognition system, books on tape or CD, screen readers).¹³

Teachers and Teacher Education

Elementary school teachers must complete 4 years of postsecondary education to receive a Bachelor of Education degree. At least one supervised practicum in the field is mandatory in any teacher education program. After receiving a degree, a teacher is granted a probationary teaching certificate from the Alberta Ministry of Education. After 2 years, with a recommendation from his or her school district, a teacher may be granted a permanent teaching certificate.¹⁴ Although there are no requirements specific to teaching reading, basic language arts curriculum courses are offered to teacher education students, with several instructional courses taken by those specializing in English language arts. Teacher in-service education is managed by each school district and the regional consortia that coordinate professional development opportunities.

Examinations and Assessments

Regional Examinations

In addition to extensive classroom assessment, curriculum-based provincial achievement tests are administered annually in English language arts (grades 3, 6, and 9), mathematics (grades 3, 6, and 9), and social studies and science (grades 6 and 9). A teacher has the option of using the marks from these tests as part of the final class mark, but it is not mandatory.

In grade 12, students must take diploma examinations in order to receive their high school diploma. Diploma examinations are administered five times each year in mathematics, English language arts, biology, chemistry, physics, science, social studies, and French language arts courses. Each examination is combined with the student's school-awarded mark and is worth 50% of a student's final mark in a course.

Following each test administration, detailed reports at the district, school, class and individual student levels based on the data collected from the provincial assessment are generated and sent back to schools and teachers to help them identify their students' strengths and areas for improvement.

Standardized Tests

In addition to informal reading inventories, teachers use a variety of standardized tests to assess reading achievement including, but not limited to:

- Canadian Achievement Test
- Stanford Diagnostic Reading Test
- Test of Early Reading Ability
- Wechsler Individual Achievement Test, Canadian version
- Woodcock Diagnostic Reading Battery

Monitoring Individual Student Progress

Classroom teachers use a variety of assessment approaches, including ongoing classroom assessment and provincial assessments, to monitor student progress.



Teachers communicate student progress through report cards and parent teacher conferences, as well as informally through regular communication with parents.

British Columbia

Language and Literacy

In British Columbia, every student is entitled to receive an education in English. Students who have a constitutional right to a Francophone education may receive an educational program provided in French. Second-language programs are available in American Sign Language, Arabic, German, Heiltsuk, Italian, Japanese, Korean, Mandarin, Nsiylxcen, Punjabi, Secwepemctsin, Shashishalhem, Sim'algaxhl Nisga'a, Sm'algyax, Spanish, Upper St'át'imcets, and Tsek'ene.

One of the provincial government's goals is to make British Columbia the besteducated and most literate jurisdiction on the continent. The government has announced a series of literacy initiatives for teachers, parents, and students to help children gain the reading, writing, and math skills they need to succeed at school.¹⁵

Overview of the Education System

In British Columbia, the Ministry of Education funds K–12 education. Education services are delivered locally through boards of education, public schools, and independent schools, while the ministry provides leadership, develops policy and legislation, oversees system governance, sets curriculum learning standards, and builds accountability frameworks in partnership with school boards. The provincial library system also is the responsibility of the Ministry of Education.

Structure of the Education System

In British Columbia, school is mandatory for all children between the ages of 5 and 16. The first year of school is kindergarten, and most children attend only half-days. Schools generally are grouped into elementary (grades κ –7) and secondary (grades 8–12) schools. The κ –12 system serves approximately 570,000 public school students, 63,000 independent school students, and more than 2,700 home-schooled children.¹⁶

Role of Preprimary Education

The government offers a wide range of early learning experiences to preschoolers to ensure that children are ready for success when they enter kindergarten. Early learning takes place in multiple settings including homes, as well as preschools, childcare environments, early learning centers, and other community settings. Children's early learning is supported by parents, family members, the broader community, early childhood educators, and multiple other service providers.¹⁷

Reading Curriculum in the Primary Grades

Reading Policy

Although British Columbia does not have an official reading policy, literacy is emphasized across all subject areas. The British Columbia *English Language Arts \kappa to 7 Curriculum* encompasses reading, but there is no separate curriculum.¹⁷

Summary of Curriculum

The English language arts curriculum for κ through 7 emphasizes the practical application of communication skills by focusing on oral language, reading, and writing. The curriculum states that

...the aim of English language arts is to provide students with opportunities for personal and intellectual growth through speaking, listening, reading, viewing, writing and representing to make meaning of the world and to prepare them to participate effectively in all aspects of society.¹⁸

The curriculum provides opportunities for students to experience the power of language by dealing with a range of texts and with the full range of contexts and purposes associated with the use of language. The prescribed learning outcomes for English language arts in κ to 7 are grouped into three curriculum organizers: oral language (speaking and listening), reading and viewing, and writing and representing. These describe what students are expected to know and do in each grade. There is a parallel curriculum for French as a first language.

Reading Instruction in the Primary Grades

Instructional Time

The time allotted for English language arts is merged with social studies and second languages, so the exact time for reading cannot be determined. However, prescribed learning outcomes for independent reading specify a 30-minute daily time requirement.

Instructional Materials

Although the Ministry of Education does provide a list of provincially recommended resources, the school board or Francophone education authority chooses the educational resource materials. Before a learning resource is used in a classroom, it must be evaluated to ensure that certain criteria are met, including curriculum match, social considerations, and age appropriateness. These criteria are distributed to all British Columbia schools.¹⁹ A list of the provincially recommended learning resources for English language arts in grade 4 can be found at the Ministry of Education Website.²⁰

Use of Technology

Teachers are encouraged to embrace a variety of educational technologies in their classrooms such as using video when teaching observable skills, using software to help students develop critical-thinking skills through the manipulation of a simulation, or using CD-ROM to provide extensive background information on a given topic.



Second-language Instruction

British Columbia schools have offered English as a second language services for many years. Services may be delivered in a number of ways, including (but not limited to) separate instruction to students, supportive services within a mainstream classroom, and specialist support for the classroom teacher. The specialist, the classroom teacher, and others with appropriate expertise have a role to play, depending on the nature of the services to be provided. At least annually, the student's progress should be reviewed through an assessment of English language proficiency. If the student is not making progress, it may be necessary to conduct further assessment of the student's needs and to adjust services accordingly.²¹

Effective Practices

Many schools use the *British Columbia Performance Standards* developed for reading, writing, numeracy, and social responsibilities.²² The standards set expectations, provide assessment rubrics, and give many examples of student work.

Reading Disabilities

Diagnostic Testing

Most students with learning disabilities, including those with reading disabilities such as decoding, phonetic knowledge, word recognition, and comprehension difficulties, are identified by the school system through the progressive assessment and systematic documentation process.²³ This includes the following steps:

- Pre-referral activities: For most students, the identification or assessment phase begins in the classroom as the teacher observes exceptionalities in learning and behavior.
- Referral to the school-based team: The school-based team provides extended consultation on possible classroom strategies; planning for and coordination of services for the student; access to additional school, district, community, or regional services; and planning for and coordination of services in the school.
- Referral for extended assessments: Extended assessments (e.g., psychoeducational, behavioral, speech and language, orientation, and mobility) are sometimes used to understand the student's strengths and weaknesses for planning purposes.

Instruction for Children with Reading Disabilities

There are two main approaches for supporting students with learning disabilities used in British Columbia schools: intense, direct instruction and instruction in learning and compensatory strategies. This instruction may take place in regular classrooms or in different learning environments, such as small group instruction in a resource room, self-contained classes, or other specialized settings.²⁴

Some ways that students with learning disabilities are supported include but are not limited to the following.

- Direct remedial, corrective, tutorial, or skill-building instruction;
- Adapted, modified, or supplementary curriculum and materials;
- Alternate instructional and/or evaluation strategies, including adjudicated provincial examinations;
- Use of equipment, including computer and audiovisual technology;
- Social skills training and instruction and practice of self-advocacy skills; and
- Learning-strategies instruction.

Special Education

In British Columbia, approximately 11% of the student population is enrolled in special education programs.²⁵ The local schools and/or districts decide how students with special needs are identified and taught. An individual education plan is created for each student with special needs, which describes individualized goals, adaptations, modifications, services to be provided, and measures for tracking achievement. The teacher responsible for a student with special needs is responsible for designing, supervising, and assessing the educational program for that student. At some schools, teachers' assistants play a key role in programs for students with special needs, performing functions that range from personal care to assisting the teacher with instructional programs.

Teachers and Teacher Education

To teach in the public schools of British Columbia, an educator must hold a Certificate of Qualification issued by the British Columbia College of Teachers or an Independent School Teaching Certification. Graduates of a teacher education program (e.g., Bachelor of Education program) are qualified to apply for certification to teach in the province.

Examinations and Assessments

Regional Examinations

British Columbia students participate in three types of examinations and assessments: the Foundation Skills Assessment, graduation program examinations (grades 10, 11, and 12), and optional grade 12 examinations.

The Foundation Skills Assessment is an annual, province-wide assessment that provides a snapshot of how well students in grades 4 and 7 are learning foundation skills in reading, writing, and numeracy. The main purpose of the assessment is to help the province, school districts, and schools evaluate how well students are achieving basic skills, and make plans to improve student achievement.

The graduation program examinations in grades 10, 11, and 12 certify the performance of British Columbia students. Graduation program examinations are large-scale examinations designed to certify that individual students have met provincial graduation requirements. In addition, optional examinations in grade 12 are offered in mathematics,



biology, chemistry, French, German, geography, geology, history, Japanese, English literature, principles of mathematics, Mandarin Chinese, physics, Punjabi, and Spanish.

Standardized Tests

The province does not administer standardized commercial tests. Instead, provinciallydeveloped criterion-referenced assessments are administered under standardized conditions. However, individual school districts or schools may use standardized commercial tests to evaluate their students' learning. These tests may include the Canadian Cognitive Abilities Test, Canadian Test of Basic Skills, Canadian Achievement Test, and the Developmental Reading Assessment.

Monitoring Individual Student Progress

Teachers document student progress through report cards, which indicate student's performance based on the provincial curriculum, areas in which the student may require further attention or development, and ways of supporting the student in his or her learning and behavior, including information on attitudes, work habits, effort, and social responsibility. Classroom assessment and provincial assessments are used by classroom teachers to monitor student progress.²⁶

Nova Scotia

Language and Literacy

The majority of students in Nova Scotia are educated in English first-language programs. However, the province also offers French first-language programs to meet the needs of the Acadian and Francophone populations. Public school programs ensure that students have opportunities to learn both of Canada's official languages.

Programs offered by the Anglophone boards include the English program, English as a second language program, and four French second-language programs. In the English program, a second language must be offered beginning at grade 4, and most students study French. Where offered, Gaelic and Mi'kmaq may be introduced at grade 3, which fulfill the second language requirement of the public school program. At the secondary level, German, Latin, and Spanish programs also are made available to school boards who wish to offer these programs.

French first-language programs are offered by the Provincial Acadian School Council (Conseil Scolaire Acadien Provincial). All courses are taught in French and the same English language arts course as the one offered in the English first-language schools is mandatory for all students beginning in grade 3. At the secondary level, most students in the French schools take the same English language arts courses that are offered in the English first-language schools. A Spanish program also is available at the secondary level.

Emphasis on Literacy

Literacy is a priority in Nova Scotia's public schools at all grade levels and in all subject areas. Nova Scotia's *Literacy Success* strategy centers on improving teaching, learning, and

achievement. In 2003, the government committed to providing more learning materials for students in literacy, mentors for teachers and students, and professional development for teachers of English or French language arts.²⁷ This commitment underscores the importance of literacy in the 21st century and the need to extend the traditional concept of literacy to encompass media and information literacies.

The *Literacy Success* strategy at the elementary level includes an initiative entitled *Active Young Readers* (Jeunes lecteurs actifs).²⁸ This initiative focuses on the following:

- Explicit reading instruction in language arts and the content areas;
- Increased time for reading instruction and reading across the curriculum;
- Expanded student access to Reading Recovery®;
- A school-wide focus on literacy;
- Literate learning environments that immerse students in the widest possible range of texts, including engaging and exemplary literature;
- High quality professional development and resources for teachers focused on effective assessment, instruction, intervention, and support; and
- Pamphlets for parents and an Active Young Readers Website to provide information.

Overview of the Education System

The Minister of Education supervises public schools and education in the province. The Minister's authority includes prescribing courses of study and authorizing learning materials for use in public schools. School boards are accountable to the Minister and responsible for the control and management of the public schools within their jurisdictions. Seven regional Anglophone boards enroll 97.1% of all public school students. The provincial school board for Acadian/Francophone students enrolls 2.9% of the students. Nova Scotia's total public school population for grades primary–12 in the 2005–06 school year was 142,304.²⁹

Structure of the Education System

Children who are 5 years old on or before October 1 have the right to attend public school, which is free. Children are required to attend school from the age of 6 to 16. While schools in Nova Scotia are organized with various grade-level configurations, public school programs are organized in four key stages: grades primary–3 and 4–6 at the elementary level, and grades 7–9 and 10–12 at the secondary level.

Role of Preprimary Education

Nova Scotia is currently piloting a preprimary program in 19 schools. The program is designed to address the learning needs of 4-year-olds and to influence and encourage a positive attitude towards learning. One of the key goals is to establish a positive relationship between families and their school.



Reading Curriculum in the Primary Grades

Reading Policy

Reading and viewing graphic and visual messages are meaning-making processes. They include making sense of a range of representations including print, film, television, technological texts, among others. To help students become better readers, learning experiences reflect the belief that reading must be meaning-driven, practiced, purposeful, modeled, and supported.

Summary of Curriculum

The curriculum requires that students learn to: ³⁰

- Use the various cueing systems (pragmatic, semantic, syntactic, and graphophonic) and a range of strategies to construct meaning;
- Read and view a range of literature, information, media, and visual texts with understanding;
- Select, combine, and interpret information using a variety of strategies, resources, and technologies; and
- Respond personally and critically to a range of texts, applying their understanding of the relationships among language, form, genre, purpose, and audience.

The curriculum, therefore, requires a balanced reading program that includes the following components:

- Reading aloud or modeled reading;
- Shared, guided, and independent reading;
- Opportunities to read books and other materials for pleasure; and
- Opportunities for personal, critical, and shared response.

Effective readers use a variety of strategies to construct meaning from text. The curriculum addresses strategies to encourage students to continue reading, such as predicting, confirming, monitoring, word solving, sampling or gathering, and maintaining fluency. The curriculum also addresses strategies essential for deeper comprehension, such as making connections, visualizing, inferring, questioning, determining importance, analyzing, and synthesizing.

Learning to read is a developmental process. It is expected that many grade 4 students will be at the transitional stage of reading development, characterized by a growing sense of independence in selecting text, identifying purpose, and making meaning of text through a growing repertoire of strategies. Transitional readers read longer pieces of text that are not necessarily supported by illustrations and are able to make inferences from words and illustrations. These readers are able to respond personally and are developing the ability to respond critically and aesthetically. It is expected that there will be some students in grade-4 classrooms whose reading development more closely resembles the emergent or early stage. Some students will be moving beyond the transitional stage to the fluent stage.

In addition to providing focused instruction and explicit demonstration of reading strategies, the curriculum provides opportunities for students to think and talk about how they construct meaning as they read and pay close attention to the strategies they use. It is crucial that all students have opportunities to read texts at their level widely and frequently, so that they will achieve fluency. Modeling is important for fluency as well.

Students are challenged across the curriculum to engage in meaningful involvement with many kinds of text, including printed words. Reading print texts has always been an essential component of the language arts program and other disciplines and is becoming increasingly important in a complex, global, information-based technical society. Students are required to make sense of information and be able to reflect, pose questions, discover connections, and communicate what they have learned. Students work with multilayered texts, especially in science, math, music, and electronic media. Therefore, students need to learn specific strategies to assist them in constructing meaning from these various texts and in these varied disciplines.³¹ In grades 4–6, our dual focus is on learning to read and reading to learn.

Reading Instruction in the Primary Grades

A minimum of 90 minutes instructional time is required every day for language arts, grades primary–2, and a minimum 115 minutes every day for language arts grade 3, including *Active Reading Hour* (L'heure de lecture active).³² For language arts in grades 4–6, a minimum of 90 minutes is required every day. In grades 4–6, there is a requirement of one or more blocks of *Learn to Read/Read to Learn Time* (Apprendre à lire/Lire pour apprendre) in language arts and other subject areas totalling 60 minutes every day.

Nova Scotian teachers use *Atlantic Canada English Language Arts, Grades 4–6* (1997) as the basis for instructional design. In grades 3–6, teachers provide explicit, strategic instruction, considering the needs of transitional readers. Reading instruction components include reading aloud and shared, guided, and independent reading. Instruction in specific comprehension strategies include making connections, visualizing, inferring, questioning, determining importance, analyzing, synthesizing, monitoring comprehension, and "fix-up" strategies when meaning breaks down.³³

The province is working with school boards to provide literacy mentors to assist teachers in enhancing classroom instruction, assessment, support, and intervention.

Reading Disabilities

An early-literacy intervention program, *Reading Recovery*[®], is currently being implemented across the province. This program helps the lowest-achieving students in grade 1 (approximately 20% of each grade 1 class) become successful readers and writers. Nova Scotia worked with the founder of the program, Marie Clay, to redevelop *Reading Recovery*[®] in French, and the program is now available to the lowest achieving grade 1 students in English, French Immersion, and Francophone schools. The goal of the program is to enable students to reach at least the average performance levels of their classroom peers after 12–15 weeks of intensive instruction with a highly-trained teacher.



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Diagnostic Testing

Local school boards determine the process for professional diagnostic testing, including the identification of students with learning difficulties. Most often, the classroom teacher first identifies the problem and recommends further testing.

In Nova Scotia, a distinction is made between students at risk, students with behavior problems, and students with disabilities. Once a student is identified as having learning difficulties, a qualified teacher administers a diagnostic test to identify the source or nature of the problem. When the cause is determined, appropriate learning strategies are used to meet realistic goals for each individual student

Instruction for Children with Reading Disabilities

Students who do not reach the average level of classroom performance in reading and writing during *Reading Recovery*[®] are referred for long-term help. Students work with resource teachers to provide additional assessment and support. Many of these students meet provincial outcomes with the support of the resource teacher.

Student progress in reading and writing is evaluated provincially using Nova Scotia provincial literacy assessments in grades 3, 6, and 9. Students not meeting expectations on any of these assessments are identified and a literacy support plan is developed for each student based on individual strengths and needs.

A small number of the students, even after *Reading Recovery*[®] and resource teaching, experience serious difficulties learning to read and write. An Individual Program Plan (IPP) in literacy is created by specialized teachers in each school board working with school staff to support these students. Individual strengths are identified and specific outcomes are developed to address the individual needs of students who cannot meet the prescribed learning outcomes of the provincial curriculum. A comprehensive IPP team is put in place to provide an appropriate education for students with special needs. The IPP team includes parents, school administration, teachers, other professional staff and, if appropriate, the student. The progress of each student on an IPP is monitored regularly and must account for changes in an individual's strengths and needs over time. An IPP plan remains in place until the student is able to attain the public school programs' curriculum outcomes for literacy or, if these outcomes are not attainable, throughout the duration of the student's time in public school system.

Students requiring additional support also may be referred for speech, language, pathology, or school psychology services. Each school board also has specialized and targeted teaching support focused on students who have severe learning disabilities.

Teachers and Teacher Education

Teacher Education and Training

As of 2000, elementary school teachers in Nova Scotia must complete a 3- or 4-year undergraduate degree that includes course work in social studies, mathematics, science, and language arts followed by a 2-year teacher education program offered at four universities in the province. Graduating students are granted teacher certification by the Minister of Education. Preservice teacher education at the elementary level includes curriculum and instruction in social studies, mathematics, science, and language arts, as well as a minimum of 15 weeks of student teaching.

Teacher In-service Education

In Nova Scotia, the provincial Department of Education, the faculties of education of the universities, the school boards, and the Nova Scotia Teachers Union all provide in-service education for teachers. Teachers employed by school boards are required to complete 100 hours of professional development every 5 years. Pursuant to Section 10A of the governor in Council Education Act Regulations, teachers are required to complete professional development. A review was completed by the Teacher Certification Review Committee in 2004, and the subsequent report confirmed that, on average, a teacher spends 66 hours per year on professional development activity.³⁴

Examinations and Assessments

Regional Examinations

Provincial assessment in grades 3, 6, and 9 are administered as "assessments for learning." These assessments in language and mathematical literacy are used to identify student learning needs and to focus provincial improvement strategies. Assessment results are returned to each school in a timely manner so that schools can develop support plans for individual students. Students' progress is monitored each year until they reach the provincial assessment at the next grade level. Provincial funding is provided to support students whose results on their assessments are below expectations. Senior high school students participate in provincial examinations in language arts, mathematics, sciences, and social studies. Examination results count as 30% of the student's final course marks.³⁵

Standardized Tests

The province does not administer standardized commercial tests. Instead, provincially developed criterion-referenced tests are administered under standardized conditions. However, individual school boards or schools may use standardized commercial tests to evaluate their students' learning. These tests may include the Canadian Cognitive Abilities Test, Canadian Test of Basic Skills, Canadian Achievement Test, Developmental Reading Assessment, *Reading Recovery*[®], and First Steps.

Ontario

Language and Literacy

Canada's two official languages, English and French, are the languages of instruction in Ontario. According to the 2001 census statistics of Ontarians, approximately 71% have English as their mother tongue, 4% have French as their mother tongue, and 24% have a first language other than English or French.³⁶ Ontario has rich cultural diversity with a significant immigrant population. In some large urban areas, school boards have identified more than 75 different home languages and dialects among the students.



Emphasis on Literacy

The Ontario government recognizes that strong literacy skills are the foundation for success in school and life. The government's goal is that 75% of 12-year-olds will reach the provincial standard (level 3 of 4 levels) on annual, province-wide large-scale assessments by 2008. In 2006, 64% of Ontario grade 3 and 6 students met or exceeded the provincial standard on assessments of reading, writing, and mathematics overall combined, up from 54% in 2003.³⁷ The Ontario Ministry of Education launched a comprehensive strategy to help students acquire a solid foundation in literacy. The Literacy and Numeracy Secretariat was established in 2004 to provide expert coordination and direct support to the field in order to improve literacy and numeracy skills and close gaps in student achievement. The Secretariat works with school boards and schools to develop meaningful change focused on improved school and classroom practices. The province, district school boards, and schools have adopted an approach to building the capacity of teachers, school leaders, boards, and district leaders and work in partnership with parents and community members.

Overview of the Education System

The Ministry of Education in Ontario administers the system of publicly funded elementary and secondary school education in accordance with the Education Act. The Ministry of Education issues curricula, sets diploma requirements, and sets policy for student assessment. Elementary and secondary public education is provided free to all persons who are qualified to be resident students of a school board. With the passage of the Education Amendment Act (Learning to 18) in 2006, students are required to keep learning until they graduate or turn 18.

In the 2004–05 school year, there were 3,980 elementary and 868 secondary schools in the public system in Ontario. There were 875 Ministry-recognized private schools that do not receive government funding, and 22 provincial schools for students who are deaf, blind, or have severe disabilities. There were 72,196 Full-Time Equivalent teachers at the elementary level and 41,995 at the secondary level.³⁸

In the 2004–05 school year, there were 2,123,904 students in publicly funded schools in Ontario, 1,425,744 of which were enrolled in junior kindergarten to grade 8. In the same school year, there were 698,160 students enrolled in secondary schools in grades 9–12.³⁹

Role of Preprimary Education

Most school boards in Ontario offer half-, full-, or alternate-day junior kindergarten (4-year-olds) and/or senior kindergarten (5-year-olds). Ontario's Ministry of Children and Youth Services has a *Best Start* (Meilleur départ) plan for preschoolers to strengthen their healthy development and early learning. As part of *Best Start*, an expert panel was established in 2005 to develop an early learning framework for young children in a variety of settings.

The kindergarten program document for English-language students (there is a similar program document for French-language students), revised in 2006, has learning

expectations for language in four areas: oral communication, reading, writing, and understanding of media materials. There is an emphasis on the importance of oral language as the foundation for literacy development.

Reading Curriculum in the Primary Grades

Reading Policy

Ontario has a language curriculum policy document for English-language students in grades 1-8, which was revised in 2006, that identifies the expectations students are to demonstrate by the end of each grade. For English-language students, expectations for students are organized in four strands: oral communication, reading, writing, and media literacy. The French curriculum for French-language students was organized similarly with four strands entitled communication orale, lecture, écriture, and littératie critique.

Summary of Curriculum

The reading strand of the language curriculum document is divided into four areas: reading for meaning, understanding form and style, reading with fluency, and reflecting on skills and strategies. The 2006 revised French reading strand is also divided into four areas: prélecture, lecture, réaction à la lecture, and littératie critique.

The French-language curriculum is developed, implemented, and revised in parallel with the English-language curriculum. A distinct feature of the French-language education system is language planning, which is intended to support the French language and culture in a minority setting. With respect to reading, the policy focuses on optimal oral and written language acquisition, as well as integrating cultural experiences into the daily life of the classroom and school.

Reading Instruction in the Primary Grades

Instructional Time

In Ontario's public elementary schools, there are 300 minutes of instructional time per day. The Ministry of Education's Literacy and Numeracy Secretariat recommends an uninterrupted 100 to 120 minute block of time per day for literacy learning.

Instructional Materials

The Ministry of Education provides a list of evaluated and approved textbooks for use by students in Ontario classrooms. Textbooks approved by the Ministry must support at least 85% of the curriculum expectations for the subject area. All textbooks that meet the Ministry requirements are placed on a central list from which schools and school boards select textbooks that meet their local needs.

Second-language Instruction

All English-language schools offer programming, resources, and support to Englishlanguage learners in Ontario, and all French-language schools offer programming, resources, and support to French-language learners. In the English-language system, about 20% of Ontario students have a first language other than English.⁴⁰ A new policy



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for English-language learners, English as a Second Language, and English Literacy Development programs for kindergarten to grade 12 (κ -12) will be released beginning in September 2007. The policy will help teachers better assess students' reading, writing, listening, and speaking skills to determine the right grade level and programs. A practical guide entitled *Many Roots, Many Voices* was published in 2005 to assist κ -12 teachers who support English-language learners in classrooms.⁴¹ English-language learners are encouraged to build on their prior knowledge and use their first language to assist in developing English-language proficiency.

Effective Practices

The Ministry of Education supported the development and publication of expert panel reports on reading and literacy from kindergarten to grade 6. These reports, with parallel documents for French-language schools, form the basis for teachers' professional learning at the provincial, board, and school levels in Ontario.^{42, 43, 44} Ontario educators and academics who are experts in their field developed these reports based on national and international research, as well as knowledge drawn from the field. The information in these reports and related guides provide the foundation for professional learning that is intended to build the capacity for instructional leadership and improvement in Ontario schools. Strong school, family, and community partnerships also are encouraged to support the literacy learning of students in the junior grades. The following are some of the key points from these reports.

- Beginning readers build on a foundation of oral language;
- Reading, writing, listening, and speaking are interconnected experiences that build on and reinforce one another;
- Teachers should develop appropriate instructional strategies and methods for evaluating student learning based on assessment data;
- Teachers should provide scaffolded support to help their students learn new literacy strategies and skills by modeling, guiding, and supporting students as they practice and monitoring independent student achievement;
- Teachers should differentiate instruction for individuals and small groups of students;
- Students develop the ability to use a range of strategies to make meaning from many kinds of text;
- Teachers should explicitly teach and model the use of higher-level thinking skills that enable students to understand, appreciate, and evaluate what they read;
- Students should be encouraged to reflect on and talk about the strategies that help them construct meaning in reading (metacognition); and
- Students are motivated to learn when they encounter meaningful and interesting texts on topics that matter to them.

The following are some of the key points about resources that support student learning.

- Students learn best when they can identify themselves and their experience in the texts;
- Texts for shared or guided instruction and independent reading should have a range of difficulty; and
- Resources should be relevant and current and aligned with new curricula.

In 2006, the Ministry of Education published *The Guide to Effective Literacy Instruction, Grades 4 to 6,* which was based on the research in the expert panel reports. This resource document is supported by online modules (http://www. eworkshop.on.ca). The guide also addresses a number of issues such as the gap in literacy achievement levels between boys and girls. The Ministry also has published a practical guide for κ -12 teachers entitled *Me Read? No Way!* with strategies to help improve boys' literacy skills. Parallel documents and online modules are available for French-language schools.⁴⁵

To further the goal of 75% of students meeting or exceeding the provincial standard in reading, writing, and mathematics by 2008, the Ministry's Literacy and Numeracy Secretariat works with district school boards to set student achievement targets, develop improvement plans, and identify initiatives that will help improve student achievement. The Secretariat has developed a strategy to improve student achievement based on proven practices (e.g., uninterrupted blocks of time for reading, writing, and mathematics), using common assessment tools and providing professional learning support for staff. More than 12,000 teachers and principals have been trained in shared reading, and 16,000 have been trained in differentiated instruction. The Secretariat also has focused on literacy leadership of school administrators. In addition, there are a number of initiatives in place to identify effective literacy strategies and allow schools and districts to share their effective strategies with others. Recent initiatives include encouraging the establishment of a professional learning community in every school. Support has been provided to boards to implement tutoring programs and purchase additional student resources. The Ontario Focused Intervention Partnership provides a range of supports for boards and schools, in general, and more intensive support for specific schools that have experienced difficulty in achieving continuous improvement in literacy and numeracy.

The Secretariat conducts research in Ontario's English-language and French-language schools to identify successful practices that result in improved student achievement. Successful practice is shared through monthly webcasts; an online journal, *Inspire*, and research monographs. In addition, the *Schools on the Move* initiative has been launched to identify schools demonstrating effective practice resulting in improved student achievement. These schools share their successful strategies with other schools across Ontario.

Funding has been provided to school boards to hire 3,600 teachers in an attempt to reduce class size to 20 students in junior kindergarten through grade 3 in 90% of classes by the 2008 school year. The Ministry also provides a range of targeted funding



for boards and schools (e.g., low-performing schools) for additional learning resources, instructional materials, and textbooks.

Reading Disabilities

Diagnostic Testing

The Ministry of Education has provided all school boards in Ontario with an early screening and intervention tool for assessing reading disabilities. The Web Based Teaching Tool assists teachers in identifying students from junior kindergarten to grade 2 who are struggling with literacy and numeracy skills and provides a database of teaching strategies and tracking tools. Special education resource teachers also may administer educational assessments that usually include standardized reading tests. In addition, students may be referred for further in-depth psycho-educational assessments where psychological staff can diagnose a learning disability.

Following the release of the publication *Education for All: The Report of the Expert Panel on Literacy and Numeracy Instruction for Students With Special Education Needs, Kindergarten to Grade 6*, the Ministry provided funding to school boards for projects that have led to improvements in teaching literacy skills and assessing the reading skills of students with reading disabilities.³⁴ In particular, these projects have demonstrated the effectiveness of assistive technology in supporting student achievement.

Special Education

In Ontario, the rights of students with special education needs are protected by legislation. In the 2004–05 school year, more than 190,000 students were identified by an Identification, Review and Placement Committee as exceptional students. A further 99,000 students who were not formally identified were provided with special education programs and services. Over 80% of all students with special education needs are instructed in regular classrooms.⁴⁶ In May 2006, the Ministry of Education published *Special Education Transformation: The Report of the Co-chairs with the Recommendations of the Working Table on Special Education.*⁴⁷ The report recognized the need for a paradigm shift in special education and made recommendations for a transformed system to enhance success for students with special needs.

Teachers and Teacher Education

Teacher Education and Training

To teach in the publicly funded school system, a teacher must be certified by the Ontario College of Teachers. To become a member of the College, a teacher must have completed a minimum 3-year postsecondary degree from an acceptable postsecondary institution and a 1-year teacher education program consisting of course work and at least 8 weeks of practice teaching. Teachers may complete both the undergraduate degree and the teacher education program together in a concurrent program. Teachers receive qualifications in two consecutive divisions (primary/junior, junior/intermediate with one subject, or intermediate/senior with two subjects) of the elementary or secondary school system.

Primary or junior preservice training covers the full range of teaching subjects, including reading, which falls under the language section of the provincial elementary curriculum. Teaching assignments are determined based on a teacher's qualifications and the needs of the school.

All eligible new teachers participate in the New Teacher Induction Program. This program builds on and complements preservice education programs by providing another full year of professional support, including orientation, mentoring, and professional development in areas such as literacy and numeracy strategies, classroom management, and effective parent communication skills.

Teacher In-service Education

Teachers graduate from their preservice teacher education program with initial qualifications and supplement these with Additional Qualification courses as practicing teachers. All qualifications are regulated by the college through a formal accreditation process. Once completed, they become a permanent part of a teacher's certificate and are used by school boards to determine teaching assignments and salary placement. Elementary teachers can specialize in reading instruction by taking the three-part reading specialist series of Additional Qualification courses available through Ontario faculties of education.

In Ontario, responsibility for regulating teachers' professional development is shared between the Ontario College of Teachers and the Ministry of Education. The college sets professional standards for teachers and provides for teachers' ongoing learning through its Professional Learning Framework, a framework of formal accredited Additional Qualification courses and informal learning opportunities, programs, and activities such as mentoring, research, networking, and curriculum development. Boards of education and the teacher affiliates (teachers' federations) are primary partners in developing, delivering, and monitoring professional development for teachers.

The Ministry of Education provides funding to boards to cover six professional activity days per year. Two of the 6 days are required to be devoted to education priorities identified by the ministry.

Examinations and Assessments

Regional Examinations

In 1996, Ontario established the Education Quality and Accountability Office to develop and administer province-wide assessments based on the Ontario curriculum. Currently, assessments are administered annually to all students in grades 3 and 6 (reading, writing, and mathematics), grade 9 (mathematics), and grade 10 (Ontario Secondary School Literacy Test). To obtain an Ontario Secondary School Diploma, all secondary students must meet a graduation literacy requirement. Most students meet this requirement by passing the Ontario Secondary School Literacy Test. Students who fail this test may retake it or enroll in the Ontario Secondary School Literacy Course. Students who



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improve their literacy skills through the course and pass it also meet the graduation literacy requirement.

Standardized Tests

In Ontario, individual school boards or schools determine whether or not to use commercial tests of reading achievement. Commonly used tests include the Canadian Cognitive Abilities Test, Canadian Test of Basic Skills, Canadian Achievement Test, Developmental Reading Assessment, and CASI Reading Assessment.

Monitoring Individual Student Progress

Classroom assessment and evaluation are based on the expectations in the provincial curriculum. These include overall expectations that are the basis for evaluation, and specific expectations. All curriculum documents have achievement charts with four levels of achievement and four categories of knowledge and skills. The provincial standard or expected level of achievement is Level 3, the level at which teachers and parents can be confident that students are well prepared for work in the next grade or the next course.

Québec

Language and Literacy

Elementary education in Québec is provided in French, English, or aboriginal languages, and secondary education is provided in French or English. The languages most commonly spoken in Québec, in addition to French and English, are Italian, Spanish, and Arabic. Montréal, the largest city in Québec, which represents nearly half of the province's population, is a multicultural and multilingual city.

Instruction in a second language (English or French) is provided by specialists in elementary and secondary school. In elementary school, the second language is taught an average of 1 hour per week. As of September 2006, instruction in French as a second language begins in cycle 2, and English as a second language begins in the first year of elementary school. In secondary school, the basic school regulation prescribes 150 hours per year of instruction in the second language in the first 3 years and 100 hours per year in the fourth and fifth years.

Overview of the Education System

In Québec, the education system offers a variety of programs and services from preschool to university. The role of the Ministry of Education, Leisure, and Sport (Ministère de l'Éducation, du Loisir et du Sport) depends on the level of education concerned. In preschool, elementary, secondary, and college education, the Ministry establishes the programs and defines the objectives and often the content or the standards. With regard to labor relations, the Ministry negotiates and signs provincial agreements. With regard to funding, it defines a normative framework and provides most of the resources. At the university level, the Ministry ensures the advancement of teaching and research by

providing teaching institutions with resources for operation and development, while respecting their autonomy and encouraging concerted action among partners.

Structure of the Education System

The preschool, elementary, and secondary education system provides services from kindergarten to secondary 5 or vocational training. Preschool education is for 5-year-olds and is full time but not compulsory, although nearly all children are enrolled. Four-year-olds with handicaps or those from disadvantaged areas also may be admitted to preschool education. Elementary education is structured into three learning cycles of 2 years each. Elementary school attendance is compulsory. Secondary education consists of 5 years of studies divided into two cycles, the first of which lasts 2 years. Similar to elementary school, this first cycle uses a common core education for all students. The second cycle of secondary school lasts 3 years. School is compulsory for students up to the age of 16, which normally corresponds to the fourth year of secondary school.

The public school system is administered by 72 linguistic school boards, 60 of which are recognized as French speaking, 9 as English speaking, and 3 have a special status (2 of these provide services mainly to aboriginal students). Elementary and secondary education also is provided by private institutions, with some institutions receiving subsidiary funding from the Ministry. Private educational institutions enroll 5% of elementary school students and 17% of secondary school students. These institutions are subject to the same regulations as the public institutions and must implement the official curriculum.

Reading Curriculum in the Primary Grades

Reading Policy

The Québec Education Program is based on the development of competencies. It includes cross-curricular competencies (i.e., those needed in all subject areas and broad areas of learning that address major issues confronting young people), as well as programs of study grouped in various subject areas. The preschool and elementary education program has been in force in Québec schools since September 2000, and the secondary cycle 1 program was implemented in September 2005. The application of the secondary cycle 2 program began in September 2007 and will take place over 3 years.

Reading is at the heart of the Québec Education Program, since it is seen as a tool for communication and the development of thinking and enables students to acquire the culture of Québec and elsewhere in order to construct their identity and worldview. There also is a special connection between reading and the cross-curricular competencies that focus on the use of information and information communications technology and the exercise of critical judgment. Reading also is essential to the development of competencies in the other subjects. Therefore, reading instruction concerns all teachers in the school. In the language of instruction programs (French and English), reading is one of the competencies to be developed, in conjunction with writing and oral communication competencies.



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Summary of the Curriculum

In kindergarten, children are introduced to the subject areas of elementary school, including learning to read and write. They discover the various forms and functions of language and learn to adapt them to different communication situations.⁴⁸ In elementary and secondary school, they read and appreciate different types of texts dealing with subjects covered in the language of instruction and other programs. They gradually learn to explore the range of meanings of these texts. At the end of secondary cycle 2, they are able to gather information from everyday material, justify critical assessments, discover literature, and construct cultural references.⁴⁹

To support teachers in implementing the Québec Education Program, the Ministry set up the *Action Plan for Reading in School* in January 2005. The plan consists of four measures to encourage young people to read and to improve access to various literary and documentary resources. The main objective of the action plan is to make students lifelong readers.

Reading Instruction in the Primary Grades

Instructional Time

The basic school regulation prescribes 9 hours per week for French and English language of instruction programs in elementary cycle 1 and 7 hours per week in cycles 2 and 3. In secondary school, the Basic school regulation prescribes 200 hours per year in the first 3 years and 150 hours per year in the fourth and fifth years.

Instructional Materials

Teachers must use instructional materials approved by the Ministry. However, they may choose learning situations, pedagogical approaches, and problems to give students, texts students use, and how students use the texts. They do not have to limit themselves to one pedagogical approach or instructional resource.

Effective Practices

In preschool education, teaching practices should encourage emergent reading and writing. Real, meaningful learning situations from everyday life are used. In order to develop reading competence, students in elementary and secondary school use the Internet at the library to access all kinds of texts. They are exposed to increasingly complex texts that permit a variety of interpretations to enable them to meet greater and greater challenges. Working on the texts encourages discussion between students and teacher. Teachers of all subjects help students to develop their reading skills.

Reading Disabilities

Diagnostic Testing

Assessment of students with learning difficulties is done mainly through observation. Information is gathered both from school personnel and parents. Diagnostic instruments may be used to validate hypotheses concerning the type of difficulty. The school calls on external services when a student's situation requires it.

Instruction for Children with Reading Disabilities

Intervention with students who have difficulties in reading first involves developing their desire to read by giving books a prominent place in the class and by reading in their presence. To give meaning to reading activities, students read complete texts and carry out full, rather than partial, tasks, with help appropriate to their level of development. Other activities help them to use cognitive and metacognitive strategies effectively in reading.⁵⁰ These activities are part of reading activities and are carried out regularly.

Integration into regular classes is the first choice for students with special needs in order to promote their success. According to the policy in force in the schools, they may receive support from resource specialists. Special classes also are provided for students with special needs. The services provided to each student are decided using an individualized education plan.⁵¹

Teachers and Teacher Training

A 4-year bachelor's program in preschool and elementary education is required to teach in preschool education or elementary school. The program trains teachers who are generalists (those responsible for teaching all general subjects), as opposed to those teaching special subjects such as music, physical education, and second languages. No additional diploma is required to teach reading in elementary school. To teach French or English as the language of instruction, secondary school teachers must hold a bachelor's degree, preferably specializing in teaching this subject in secondary school.

Teacher In-service Education

The most common forms of professional development for teachers are university studies, training provided by the Ministry or the school boards, and conferences. Peer training and participation in action research projects also are increasingly appreciated by teachers.

Examinations and Assessments

At the end of elementary school, the Ministry sets compulsory examinations in subjects such as French or English, the language of instruction. The examinations are scored by teachers using a scoring guide. In 2005 and 2006, the Ministry collected samples of students' writing in order to better understand student learning in this area.

For certification of studies, there are compulsory Ministry examinations at the end of secondary school. The written examination in French as the language of instruction is scored by the Ministry. In order to monitor the system, the Ministry is currently developing an action plan involving additional examinations in French and English as the language of instruction, mathematics, and a second language. Student evaluation is the responsibility of the schools, which must put in place a local policy on evaluation.





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Chinese Taipei

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Language and Literacy

Mandarin is the official language of Chinese Taipei, as well as the language of instruction for most subjects at all school levels. Other languages include Taiwanese, Hakka, aboriginal languages, and Cantonese. Of these, Taiwanese and Hakka are most commonly spoken.

Emphasis on Literacy

One of the four primary policies listed by the Ministry of Education (MOE) in 2006, "To form literate citizens who can think independently and have self-esteem," is evidence of a national emphasis on literacy.¹

Several initiatives have been proposed and implemented to promote reading and literacy. For example, book clubs for adults are organized in almost every sector, including businesses, local communities, and libraries. In 2000, the MOE introduced the National Children's Reading Movement for young children to emphasize the importance of reading and children's literature. The *Focus 300* project distributes extra funds to 300 elementary or junior high schools in remote areas, to be put towards the purchase of books and related reading activities. In addition, at elementary schools and in regional libraries, there are many volunteer groups that are responsible for children's extracurricular reading. "Story Mothers" is one such group of volunteer mothers who prepare books and related reading activities for children such as storytelling, drama, and discussions. There are also two extremely popular children's reading club websites where children can read, watch, discuss, and write about books. One of these, Openbook, is supported by the MOE. The other website, Children's Literary Museum, is funded by the Council for Cultural Affairs.^{2, 3}

Overview of the Education System

In Chinese Taipei, the government has adopted a centralized educational administration system that is characterized by a national standard for curriculum and assessment (i.e., senior high school and college entrance examinations). All schools in Chinese Taipei have to follow the national curriculum standards, use approved textbooks, and prepare their students to pass entrance examinations.

Structure of the Education System

The current education system in Chinese Taipei is comprised of the following components: basic, intermediate, advanced, and returning education. Basic education includes kindergarten, primary school, and junior high school. Intermediate education includes vocational schools and senior high schools. Advanced education includes junior colleges, universities, and graduate schools. Returning education refers to schools for continuing education and supplementary schools. In addition, special education is provided at all levels for students with physical and mental disabilities.⁴

In 1968, a 9-year compulsory education program for primary and junior high school students was implemented. **Basic** education is divided into three levels: level one (grades 1 to 3), level two (grades 4 to 6), and level three (grades 7 to 9). All children in Chinese Taipei are required to have 9 years of education, beginning the year the child turns 6 years old.

There are two types of **intermediate** education institutions for students above the junior high school level; senior high and senior vocational schools, both requiring 3 years to complete. Senior high school students take courses that prepare them for a college or university education. Senior vocational schools offer courses in areas such as agriculture, industry, business, marine products, nursing, home economics, drama, and art.

Advanced education includes junior colleges and university programs. Junior colleges fall into two categories: 5-year junior colleges and 2-year junior colleges, each having a different set of admission requirements. Five-year junior colleges admit junior high school graduates and offer 5-year courses. Two-year junior colleges admit senior vocational high school graduates and offer 2-year courses.

University programs require 4 years of study; however, students have flexibility to fulfill their requirements in 3 to 6 years. Specialized undergraduate programs such as dentistry or medicine require 6 to 7 years of study, including a 1-year internship period. Graduate programs leading to a masters or doctoral degree require 1 to 4 years and 2 to 7 years, respectively. Students who enter graduate school as part of on-job training can be granted an extension if they fail to finish the required courses or to complete their thesis/dissertation in time.

Returning education provides citizens with an alternative way to achieve their educational goals. Based on the curriculum provided, it is classified into three main categories, including basic education, advanced study, and short-term supplementary education. A wide range of courses are offered at different levels of difficulty, such as literacy education, cooking, pottery, flower arrangement, economics, Chinese or Western philosophy, and psychology. The length of the courses varies according to the curriculum.

Role of Preprimary Education

About four out of five children receive preprimary education. Most of Chinese Taipei's young children attend kindergarten and day care, the majority of which are privately owned. In 2005, of the 224,220 children enrolled in preprimary institutions, nearly 70% were enrolled in private institutions.⁵ To ensure that every child receives basic care and

education, financial support for preprimary education is available from the government for children from low-income families. The stipend is 6,000 New Taiwan Dollars (180 USD) per semester, per child.

In the past, kindergartens and day cares belonged to different government departments. In 2005, new policies were introduced to have these two preschool institutions integrated under the мое to serve children ages 2 to 7. The new policy will impact preprimary institutions, teacher qualification, training, and curricula. The мое has formed an executive committee to ensure a smooth transition.⁶

Reading Curriculum in the Primary Grades

Reading Policy

A clear statement of the country's reading policy is included in the *Nine-Year Integrated Curriculum*, which was published and implemented in 2003 by the MOE.⁷ Within this, the section on language curricula includes guidelines for Chinese, dialects, and English instruction. The following is a description of the Chinese reading section, since Chinese (Mandarin) is the language of testing for PIRLS 2006 in Chinese Taipei.

The reading curriculum has general goals for students' academic attainment and requirements for the three levels of basic education, as well as guidelines for reading materials and instruction. Generally, students in grades 4 to 6 are learning strategies and practices necessary for them to learn from reading. Goals for these students are the following:

- Be familiar with the orthographies, sounds, and meanings of new words, and use them flexibly, distinguishing between the writing styles of spoken and classical Chinese;
- Form a habit of reading extracurricular books;
- Regulate the reading strategies to promote the speed and efficiency of reading.
- Understand the main ideas and structure of articles;
- Have a general understanding of grammar and rhetoric skills;
- Recognize the features of basic styles of articles;
- Master the reading strategies of different kinds of articles;
- Understand the tones and the feelings of articles;
- Search for information in the library to enhance the ability of self-learning;
- Enhance students' independent problem-solving abilities by using reference books;
- Learn to compile, abstract, and organize information;
- Have a general understanding of how sentences form different contexts, and be able to use words according to the contexts;
- Enjoy words and voices in different contexts that communicate and express different things;
- Discuss the content of readings, and share thoughts with others;



- Understand the meanings that express respect of people, things, and objects;
- Cultivate the spirit of group participation by engaging in reading activities that enhance interactions;
- Read literature that is ancient and modern, Chinese and foreign, as well as Taiwanese;
- Connect reading materials to real life;
- Apply the knowledge of organization structures (e.g., sequential, causal, contrast) to reading;
- Enhance language ability by using computers and other technological products;
- Read attentively and keep details in mind; read the content thoroughly and develop thoughts broadly;
- Write personal feelings and reflections;
- Grasp the process of problem solving in the text; and
- Think and criticize the content of texts.

Summary of National Curriculum

The general goal for reading at elementary grades is to cultivate students' abilities to use the Chinese language. Students are expected to listen, speak, read, and write effectively in order to think, comprehend, reason, coordinate, discuss, appreciate, and create. Hence, their experience and vision will be expanded. Moreover, students should be motivated to read extensively and to appreciate literature and Chinese culture. Also, students should learn to use the Internet and other tools to encourage independent learning.

Reading Instruction in the Primary Grades

Instructional Time

Instructional time is regulated by the *Nine-Year Integrated Curriculum*. In grades 1 and 2, 22–24 classes (40 minutes per class) are required per week for all subjects, which is increased to 28–31 classes in grades 3 and 4 and 30–33 classes in grades 5 and 6. Twenty to thirty percent of all the classes should be devoted to language instruction. The language classes for grade 4 students are Chinese (five classes), English (two classes), and dialects (one class).

Instructional Materials

In the *Nine-Year Integrated Curriculum*, the content and format of the instructional materials are described as follows:

- Materials should cover traditional, current, foreign, and local well-known literature, so that students have multicultural knowledge and respect for other cultures.
- The vocabulary and the number of Chinese characters in each lesson should fit the level of difficulty.
- Pictures, figures, and tables should complement the text correctly and attractively. The ratio of picture to words in level one texts should be one to one.

The selection of appropriate textbooks for students is the responsibility of local schools. In general, publishers compile Chinese textbooks according to the guidelines in the *Nine-Year Integrated Curriculum*. These textbooks are examined by a committee formed by the MOE, and a list of approved texts is created. Schools then form a textbook selection committee which is comprised of teachers, administrators, parents, and subject specialists to choose appropriate texts for their students from this list.

Use of Technology

In 2001, to meet the challenges of the technology era, the MOE announced guidelines for information technology education in elementary and junior high schools. The MOE then allocated money for schools to build a technological hardware and software environment, train teachers to use technology, and investigate issues of unequal access to technology. As a result, almost all elementary schools have computer classrooms or computers in the classrooms, and teachers are asked to integrate technology into different subjects. Students are required to take computer literacy classes and are often assigned tasks which ask them to collect information via the Internet.

Second-language Instruction

As mentioned above, students in grade 4 receive instruction in Chinese, English, and dialects. However, qualified English teachers are in great demand. The MOE subsidizes schools to bring in more qualified foreign teachers who speak English, especially in disadvantaged areas.⁸

Effective Practices

Typically, the elementary classroom teacher is responsible for the instruction of Chinese, social studies, and math. For grades 1 to 3, the classroom teacher also teaches science. For grade 4 to 6, there are specialized teachers for science and social studies. However, in small rural schools, a teacher may be expected to teach 4 to 5 subjects. There are no reading specialists in elementary schools.

The following guidelines of effective practices for teachers are listed in the *Nine-Year Integrated Curriculum*:

- Reading is the center of language instruction; however, reading should be learned in conjunction with listening, speaking, composition, and writing.
- Student-centered instruction of comprehension strategies should be considered in order to cultivate independent reading abilities.
- Teaching a text should begin with an overall review of the text and then proceed to a paragraph-by-paragraph analysis to understand the content in depth, followed by a study of the format, rhetoric, structure, characteristic, and style of the text.
- Different strategies to comprehend different structures of texts should be provided and should consider students' background knowledge.
- Language and semantics should be transformed to help students with in-depth understanding of the content arrangement.



- Sentences in the text should be used to highlight grammar and to provide situations for grammatical practice.
- New vocabulary should be learned in context.
- While reading aloud, pronunciation, accent, and gestures should be correct in order to appreciate the beauty of literature.
- Reading literature from different cultures and different groups is important in order to cultivate students' respect and concern for many cultures.
- Students should be instructed to use the library and the Internet to collect information and to read extensively in order to have independent research abilities.

For the most part, teachers are very loyal to the textbooks and workbooks while teaching Chinese. Teachers feel obligated to teach everything in the textbooks.⁹ In 1998, the Ministry of Education announced the Education Reform Action Plan, which includes a policy to convince parents and students that the textbooks should not be the only teaching materials.¹⁰ Still, most teachers follow a set of procedures in teaching Chinese, and all instructional activities comply with textbooks and workbooks. For example, in grade 1, the lesson always starts with a warm-up activity, mostly through chorus reading or questioning, to review lessons and preview the new lesson. This is followed by a variety of activities to consolidate learning, and the lesson ends with work at students' desks.¹¹ One reason for the strict adherence to textbooks is the pressure to reach the curricular goals.

A prominent technique in reading education is the teaching of phonetic symbols (Zu Yin Fu Hou). In the beginning of elementary school education, children are introduced to phonetic symbols to help them recognize Chinese characters. There are 37 consonant and vowel symbols that can be put together and spelled. First graders learn phonetic symbols and the synthesis (spelling) of symbols for 10 weeks. After 10 weeks, Chinese characters are presented in short paragraphs. Character instruction focuses on the sequence of each stroke to form a radical (i.e., character component). A very common practice in the classroom is for the teacher to specify the radical by writing it on the blackboard and students to model the teacher's writing by "writing" the radical in the air. In general, 60–80% of classroom time is focused on character instruction and practice.¹² Many teachers believe that without proper knowledge of the Chinese characters, students cannot understand text well.

In higher grades such as grade 3, teaching procedures are similar to grade 1 except with more extended and integrated activities as the focus of the lessons. Activities such as brainstorming or drama playing are used to elaborate, reinforce a lexical or linguistic focus of the lesson, or enlighten the story in the book.¹³

Reading Disabilities

In Chinese Taipei, the Special Education Law was first introduced in 1984 and was revised in 1997.¹⁴ The MOE established that the Special Education Unit would be in charge of policymaking and education program administration. This law mandates that there must

be schools offering educational programs and doctors or therapists to provide diagnosis and treatment or rehabilitation. However, research indicated that, because of a lack of information resources and disconnected educational, medical, and social programs, most special education or intervention programs were provided by the private sector.¹⁵ To improve this situation, the MOE listed special education as one of 13 administrative and government directives in 2004. In these directives, special education services were extended to children with foreign parents or aboriginal roots.¹⁶

In general, for special needs students (including gifted students), special classes or resource classes are offered at regular education institutions, including primary, junior, and senior high schools.¹⁷ Only designated schools are allowed to admit students with mental and physical disabilities. These schools are for students who have visual, hearing, mental, and physical disabilities. At the college and university level, specially designed learning equipment is provided for students who are blind or deaf.

In Chinese Taipei, the screening and referral of students who are suspected of having reading disabilities is made by regular classroom teachers or parents. After referral, the child will be diagnosed by the local school district's trained special education teachers and/or by clinical psychologists at hospitals. After diagnosis, the child is observed for 1 year to confirm that ordinary classroom instruction cannot improve the child's reading. However, even with confirmation, there is no specially designed program for students with reading disabilities. In most cases, these students stay in the regular classroom and are sent to resource classrooms periodically to practice phonetic symbols and Chinese characters.

Teachers and Teacher Education

In 1994, there was a new Teacher Education Act to deregulate teacher education. This enabled all regular universities besides teacher colleges, to establish Teacher Education Programs to produce κ -12 teachers. In order to become a primary school teacher, a college degree with 40 extra credits in a pre-teacher training program is necessary.

In 2005, under the same act, all teacher colleges were transformed into education universities, which provide the same teacher education programs as regular universities. The university-based, 40-credit-hour program for elementary school teacher training includes minimum course requirements in each of the following areas: education foundations (e.g., educational psychology, philosophy, sociology); general methods (e.g., principles of counseling, tests, and measurement); subject methods (e.g., nature and social science); and basic subject content (e.g., children's literature, general mathematics, and nature science). On completion of this program, all elementary school teachers in Chinese Taipei are expected to be able to teach any subjects at school when needed.

After graduation, the prospective teacher goes to a supervised practicum (student teaching) at a school for one semester. Then he or she must pass a national written qualification examination. When qualified, the student teacher is eligible to go on a job interview. The Bureau of Education in each regional government is responsible for recruiting teachers for local schools. The bureau forms a committee comprised of college



professors, school administrators, teachers, parents, and local government personnel to select teachers.

All graduates from teacher education programs, either from teacher colleges or universities, have to compete with each other for job openings in all schools. The competition is great, but a large salary and excellent benefit packages leads to a large demand for teacher education programs. In 1995, there were 25 programs, which increased to 63 programs in 2000.¹⁸

Teacher In-service Education

Teachers are required to participate in in-service education for a certain number of credit hours per year, though this number varies across schools and districts. Each school arranges its own training program for its teachers, or teachers might attend seminars and workshops related to their own interests and needs. After each seminar or workshop, the participant gets a credit note that states the name and the length of the training.

When new education policies are being implemented, teachers are asked to attend workshops pertaining to them. For example, when the guidelines of the *Nine-Year Integrated Curriculum* were announced, every elementary school teacher was required to take at least 30 credit hours of training in their subject area. Training programs were mainly organized by professors from teacher colleges (now education universities).

Examinations and Assessments

After graduating from junior high school, if students want to attain a higher education, they must take national or regional entrance examinations. There are two main national entrance examinations—one for entrance to senior high school or senior vocational school and the other for entrance to colleges or universities. Regional intermediate schools and private schools have their own entrance examinations.

To assess if the curricular goals stated in the *Nine-Year Integrated Curriculum* are achieved, the MOE has launched the Taiwan Assessment of Student Achievement program. It is a nationwide achievement assessment planned for students in grades 4, 6, 8, and 11. The subjects tested include Chinese, mathematics, science, social studies, and English. In 2006, approximately 10% of grade 6 students were the first to be tested. In addition, all participating students are required to fill out questionnaires concerning their personal and family background information. The Taiwan Assessment of Student Achievement will be used to create a database for the study of Chinese Taipei's students' progress and the education system in the future.

Monitoring Individual Student Progress

At elementary school, a student's progress is evaluated twice in each grade, and his or her parents are sent a report card at the end of each semester. Some schools will have a school-wide examination for each subject and each grade. Nevertheless, the classroom teacher is responsible for his or her students' evaluations.

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Denmark

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Language and Literacy

The official language in Denmark is Danish. Like most of the Nordic languages, Danish belongs to the Germanic family of languages. Danish is the language of instruction in public schools and in the majority of private schools as well. Very few private schools offer schooling in another language (e.g., English, German, or French).

Since the 1960s, immigration from both Western and non-Western countries has resulted in an increasing number of people in Denmark who speak Danish as a second language. In 2007, immigrants or descendents of immigrants were 8.8% of the Danish population. Immigrants from non-Western countries alone make up 6.1% of the population.¹ Foreign-language instruction in schools includes English from the third grade, and either German or French beginning in seventh grade.

Emphasis on Literacy

In 2003, the Ministry of Culture initiated the *Love of Reading* campaign, with the goal of improving the love of reading in children and youths (1–16 years old) by creating a variety of ways to discover literature. An event arranged in connection with this campaign is the Danish Read-aloud Championship 2007 for children in sixth grade.

The focus of Danish reading campaigns in recent years has been on strengthening the love of reading and increasing the number of lifelong readers. Concern for Danish students' inadequate literacy skills, revealed by international surveys, is the reason for the campaigns. The Danish results in the IEA's 1991 Reading Literacy Study caused nothing less than shock in all areas of the educational system in Denmark. The subsequent debate gave rise to a number of both national and local initiatives, particularly in language and reading instruction in the first grades.^{2, 3}

The Ministry of Education has funded a number of development and research projects, among them a large-scale longitudinal study on the efficiency of different textbooks used as the basis for reading instruction.⁴ Many municipalities have listed reading as a priority, and many schools have implemented literacy-improvement initiatives. For example, some schools have introduced sustained silent reading time, which is a fixed time every day set aside for reading involving all students from preschool to tenth grade.

Overview of the Education System

Public primary and lower-secondary schools are one coherent school in Denmark called "School for the People" (folkeskolen). Although "the Folkeskole" is centrally regulated by the Folkeskole Act, it is the responsibility of the individual municipalities to decide how local schools are to function in practice within the framework of the act.

All municipal schools have common goals and provisions for the subjects that are to be taught at the different levels, as well as common provisions for the central knowledge and proficiency areas of the subjects, and the organization of the school system. However, it is possible to give individual schools a unique focus.

Every school is required to have a school board with representation from parents, teachers, and students. The school board makes recommendations regarding local curricula, based on the national goals. This local plan is presented to the local authorities and, if approved, made binding for the individual school. The majority of municipalities in Denmark choose to have a common plan for all schools in the municipality.

Public schooling is free in Denmark. Moreover, in order to give everyone equal access to training or education beyond compulsory education, the government offers a monthly grant to students, 18 years of age or older, who are enrolled in youth and further education.

Structure of the Education System

The Danish school system (see Figure 1) is comprehensive in the sense that it includes both primary (grades 1–6), and lower-secondary education (grades 7–10), and there is no streaming (i.e., students are not grouped according to ability). When a student enters first grade, he or she meets the classmates with whom he or she normally shares education in all subjects, throughout the 9 or 10 years of school life. The different grades are defined by age groups, and retention is almost nonexistent. The average class size is about 20 students.

Basic schooling, grades 1–9, is compulsory. Apart from that, the Folkeskole includes a preschool year (kindergarten class) and a tenth year, both of which are optional. Approximately 98% of all children attend the voluntary 1 year of preschool.⁵ Over 50% of the students leaving ninth grade attend the optional tenth year, either at the Folkeskole or a continuation school.^{6, 7}

Continuation schools are all private boarding schools that emphasize social learning and areas such as sports, music, nature, or ecology. The continuation schools offer schooling from grades 8 to 10, and some may even offer an eleventh year as well. Parents also may choose a private school for their children called Free Elementary Schools. These are self-governing institutions required to measure up to the standards of the municipal schools. Free Elementary Schools and continuation schools receive approximately 85% of their funding through state subsidies.

It is education itself that is compulsory, not school. Children may be educated in public municipal schools, private schools, or at home, as long as certain standards are met. Of all students, 84.1% attend public schools, 12.2% attend free elementary schools,

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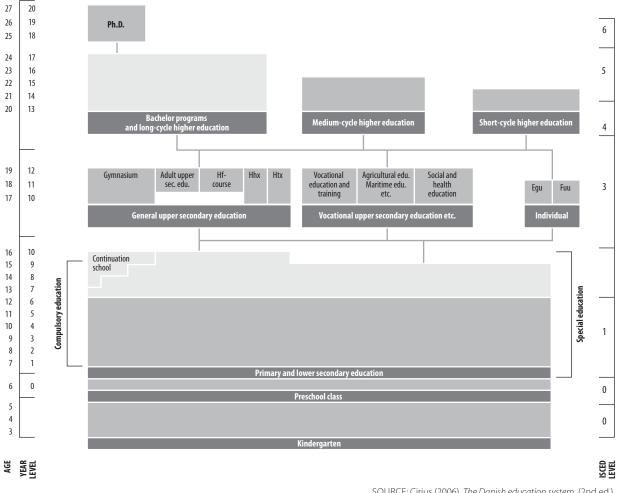


Figure 1 The Danish Education System

SOURCE: Cirius (2006). *The Danish education system*, (2nd ed.). Retrieved February 9, 2007, from http://www.ciriusonline.dk/

2.9% attend continuation schools, and 0.9% receive instruction in other educational options (e.g., at home).⁸

After compulsory education, a number of different youth education programs are available. These are either academically or vocationally oriented, or both. Today, nearly 80% of students each year complete some form of upper-secondary education. The government wants to improve this percentage to 95% by 2015.⁹

Role of Preprimary Education

Since 2003, preschool classes have centrally formulated goals within the following areas: language and modes of expression, nature and science, art and music, motor function skills and learning, social skills, and fellowship and collaboration.

Before children attend preschool, most children below the age of 6 are in day care. The municipal authorities are responsible for providing day-care for all children from 6 months old until they enter kindergarten. All day care institutions and municipal child minders (i.e., persons who care for children in their home) must present educational plans that include different themes such as social skills and language. The goals of the learning



plans are determined by the individual day care. Below the age of 1, most children are taken care of at home by one of the parents on maternity leave.¹⁰

Reading Curriculum in the Primary Grades

Reading Policy

The current national policy on reading was published in the 2003 ministerial guidelines, *Common Aims* (Fælles Mål).¹¹ In addition to the established nationally required goals, local schools and municipalities may develop their own reading policy, a common practice since 2000. The establishment of locally anchored reading policies is important for the development of the reading level in the municipality.¹²

Summary of National Curriculum

The national curriculum guide, *Common Aims*, establishes binding national goals in the form of centrally defined objectives and intermediate and final achievement goals for each subject, as well as the goals and description of content of subjects in preschool. Moreover, *Common Aims* contains the common written, binding guidelines, and recommendations for the teaching of every subject for different grade levels.

The introduction of *Common Aims* in 2003 was a milestone in Danish schools. For the first time, the goals were no longer merely recommendations for the municipalities, but binding national goals for the schools to follow. However, only the goals and not the specific decisions regarding content and teaching materials are centrally defined. Therefore, there are a variety of different school practices around the country.

Reading instruction is included under the general teaching of Danish language that focuses on three main areas: oral language proficiency; reading and writing skills; and awareness of language, literature, and communication. The goal of language instruction is to advance students' experience of language as a source of developing a personal and cultural identity based on aesthetic, ethical, and historical understanding. Danish language instruction is considered a single unit from grades 1 to 10. For each language topic, there are intermediate goals and optional guidelines, which are structured as two courses for primary school, covering grades 1-2 and 3-4.

The focus of instruction in grades 1 and 2 (7–8 years of age) is the acquisition of elementary reading strategies and the development of reading comprehension based on literary experience and enjoyment.¹³ The guidelines emphasize the importance of learning letter names, shapes, and sounds; discovering the relationship between pictures and text; reading alone and with a partner; reading books in print and on the computer; and reading simple texts aloud to the teacher and other students.¹⁴

After grade 2, students should have knowledge of letter shapes, sounds, and combinations; be able to read simple literary and informational texts for their age level; use different reading strategies; and demonstrate an understanding of what they read and be able to present it orally. As part of instruction, different kinds of reading strategies are suggested (e.g., using headings and photos to enhance the understanding of the text).

The optional guidelines for grades 3 and 4 stress working purposefully with reading comprehension, consolidating decoding skills, and gradually improving reading speed.

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The importance of supporting and encouraging the enjoyment of reading by reading often and by reading a variety of text types is emphasized. Students practice their reading proficiency by reading literary and informational texts, which increases their awareness of the requirements of different reading purposes. The development of reading and writing are regarded as supplementing each other. The course builds upon students' knowledge of genres, syntax, and different renderings.

After grade 4, students are expected to read both literary and informational texts with good comprehension. It is stressed that students must be able to use tools such as underlining and making summary reports, as well as mastering different search strategies. Moreover, it is expected that students can read easy Swedish and Norwegian texts.¹⁵

Reading Instruction in the Primary Grades

Instructional Time

The Ministry of Education prescribes the minimum hours of instruction in school, but it does not decide how many hours are to be spent on elementary reading instruction itself or any of the other main subject areas. The individual teacher is entrusted with a great deal of freedom and flexibility in planning and organizing his or her instruction.

Specialist teachers are responsible for instruction in individual subjects in primarily all grades. Therefore, reading instruction is the responsibility of the language instruction teacher. However, there is a growing awareness of the fact that reading instruction must be strengthened, and students' acquisition of literacy skills is the responsibility of all the school's teaching staff and not just the teacher of language instruction.¹⁶

Instructional Materials

Danish teachers often plan their teaching from a mixed-approach perspective, using some phonics, whole-word instruction, easy basal readers, and, in most cases, a textbook as a basis or supplement.^{17, 18}

Since the 1990s, a large number of new creative instruction materials have been published. Although Denmark is a small country with only 5 million inhabitants, teachers have a wealth of material from which to choose when planning their reading instruction. A series of textbooks will typically contain readers, workbooks, and teacher manuals, as well as different kinds of supplementary materials like flash cards, overhead sheets, wall pictures, color slides, audiotapes, talking books, songbooks, games, and computer programs.¹⁹ Some schools choose to use published materials, such as basal readers, while others develop their own instructional materials. The published materials usually have been prepared to cover at least three successive grades. Budget cuts, however, have put a limitation on the accessibility of new material.

Use of Technology

Frequent handwriting is a priority in early elementary instruction. Once students are confident with writing by hand, the use of computers gradually becomes part of instruction as well. The use of computer technology is a priority in the Danish Folkeskole. From 2004–07, individual schools can apply for government funds to purchase computers



for third graders. In 2006, these funds could also be used for equipment such as video projectors and interactive whiteboards. As of 2005, there was a ratio of 1.82 third-grade students per computer.²⁰

Role of Reading Specialists

Most municipalities employ reading specialists, called reading consultants, who play a key role in coordinating the reading and literacy strategy of the entire municipality. The reading consultant acts as a resource for language-instruction teachers, and other teachers, at municipal schools. The reading consultant renders assistance to the teachers on reading assessments, guides on materials, and methods of reading instruction. Moreover, the reading consultant may disseminate recent reading research to teaching staff, as well as motivate and engage the staff on reading initiatives. Another responsibility of the reading consultant may be to monitor the reading level of the school, yearly.

Recently, a new type of reading specialist (læsevejleder) has been employed at the school level. Their work is similar in nature to the reading consultant, but restricted in focus to the individual schools. In some municipalities, the goal is to have reading specialists at every school.

Second-language Instruction

In Denmark, around 10% of all students in basic school speak Danish as a second language. However, these students are very unevenly distributed, ranging from 5% in some municipalities to more than 30% in others.²¹ Schools offer instruction in Danish as a second language for children who are not able to follow the same instruction as the rest of the class. As a rule, these students are included in the class. Instruction in Danish as a second language is viewed as part of the ordinary instruction, though differentiated to meet the specific needs of students. If needed, the children may be instructed outside the classroom by a second-language specialist.

Effective Practices

The *Danish Reading* project (Danlæs) is a research project on effective reading practices.²² Through interviews, questionnaires, and current assessments of reading skills, the survey has demonstrated a number of different factors that advance and/or impede the progression of reading in schools.

The Danish government is very concerned about promoting effective practices. In 1998, a report was published on 86 reading developmental projects, and in 2005 the ministry appointed a committee to put forward a plan of action to promote reading literacy.^{23, 24} Today the ministerial web page presents reading initiatives of municipalities that have made progress in improving reading skills (e.g., *Reading Recovery*[®]-inspired methods or preventive initiatives).

Moreover, the Danish Teacher Association and the Minister of Education implemented a special initiative in March 2007 that selects a "School of the Month" as a way of recognizing exemplary schools. The focus is not on selecting high-achieving elite schools, but on selecting general schools whose management of daily challenges can be an inspiration to other schools.

Reading Disabilities

Diagnostic Testing

Early screening procedures to identify children at risk of reading failure are not yet required in Danish schools. However, some schools have instituted a procedure in preschool and first grade, where speech therapists use one or more linguistic and cognitive screening materials in order to test general vocabulary and readiness for school. Different kinds of reading and spelling assessment materials, including group tests and individual tests, are available at all grade levels. Some materials focus primarily on decoding and comprehension, whereas others also take into account student attitudes towards reading and learning.²⁵

Instruction for Children with Reading Disabilities

When a child encounters reading difficulties, the priority is always the lowest degree of intervention. This is usually support in the classroom offered by a remedial teacher. If this is not sufficient, the next step is instruction in the school's reading clinic (if established). The students may be included in the classroom's ordinary instruction in all subjects except Danish.

The goal is to provide structured and explicit instruction in decoding and comprehension for students encountering reading disabilities, as well as to ensure sufficient time on task. Furthermore, information communications technology is increasingly used both as an instructional and compensatory tool. At the moment, there is no special training for remedial education teachers.

Special Education

It is the teacher's responsibility to recommend special education for a student. If it becomes necessary, the educational psychological counseling center assesses the student and proposes initiatives. However, it is the school's principal who finally decides how to act on the suggestions.

In larger municipalities, special classes for students with dyslexia have been arranged and led by specially trained teachers. In these cases, the student has to leave the district school and attend a special class that usually includes five to seven other students requiring special education.

In 2002, 8.1% of students in primary or lower-secondary grade levels received remedial support within the framework of the Folkeskole, and 1.3% of students received help in a special school or special classes segregated from mainstream instruction.^{26, 27}

Teachers and Teacher Education

Teacher Education and Training

In January 2007, the teacher education program in the Folkeskole was reformed. One of the changes is that teacher students have the possibility of specializing in the Danish





language and mathematics subjects at either the primary or lower-secondary level, although it is still possible to graduate as a comprehensive teacher for primary as well as lower-secondary level students. Some unique features of Danish teacher education include the broadness of the curriculum, the in-depth study of two or three subjects, and the integration between theory and practice that exists between didactics, psychology, school subjects, and teaching practice.

The admission requirements of the colleges of education are comparable to the admission requirements of the universities (i.e., completion of ISCED level 3A). Training lasts 4 years, including 24 weeks of practice teaching. The relative emphasis on theories regarding reading acquisition and teaching methods varies from college to college.

Teacher In-service Education

In-service education is provided at a number of university colleges, which is also where the teacher training takes place. Courses range from stand-alone courses in different subject areas to further education diploma programs. Participation in in-service education is voluntary, and a limited number of courses are available. Usually, they are paid for by either the school or the participating teachers themselves.

Examinations and Assessments

National or Regional Examinations

At the end of compulsory education, students take formal examinations in up to 10 subjects. Two levels of examination are offered-the Leaving Certificate of the Folkeskole (leaving examination after ninth grade) and the Advanced Leaving Certificate of the Folkeskole (leaving examination after the voluntary tenth grade). The Leaving Certificate of the Folkeskole after ninth grade is compulsory for all students.

Examinations are both written and oral, and standard rules for all examinations ensure uniformity throughout the country. The Ministry of Education develops written examinations while teachers conduct oral examinations. In addition, a mandatory project assignment gives students in the ninth and tenth grades the opportunity to complete and present an interdisciplinary project. The project assignment is assessed in a written statement on the content, the working process, and the presentation of the final work. The assessment of the project assignment can be indicated in the leaving certificate.

Standardized Tests

The use of standardized tests in the primary grades to assess students' basic reading skills is common practice. Four different standardized reading tests developed in the 1970s and further revised in the 1980s are among those primarily used when testing elementary skills, such as word recognition and sentence reading.^{28, 29} The reading tests all relate to a country standard of expected reading skills.

A report from the Danish Institute of Evaluation found that in 88% of schools the principal reported that they had developed procedures regarding student assessment in the first three grades.³⁰ Only 60% of the respondents confirmed that they had decided upon a systematic procedure to assess students' reading skills after the third grade.

Monitoring Individual Student Progress

The Folkeskole Act implies that schools are obliged to make current evaluations of students' learning at every grade. The binding intermediate goals presented in the ministerial framework for curriculum are to be evaluated on a regular basis, together with the individual learning goals of the student.

General progress (not grades) in each subject is reported to parents at least twice a year until the seventh year. Beginning in the eighth year, a grade is awarded in subjects that offer a leaving examination. The information is given in writing or (more usually) verbally in a meeting attended by the student, parents, and the class teacher. In grades 8 to 10, the information system is extended to include a written report at least twice a year giving the student's attainment in academic achievement and in application. This only applies to the leaving examination subjects.

The Ministry of Education wants to support and further develop a management and evaluation culture based on knowledge of approaches that work. A new website developed in 2007 (www.evaluering.uvm.dk) provides teachers with evaluation tools and guidelines in the evaluation process. Compulsory computer adaptive tests for eighth-grade students in reading and science were introduced in the 2006 school year. Moreover, national assessments in grades 2, 4, and 6, related to the intermediate goals, were introduced in the 2007-08 school year, also as computer-adaptive tests. Students who have dyslexia and use computer-assisted reading programs on a regular basis will be allowed to use these in connection with the national assessment tests.

The Ministry of Education also recently introduced the Individual Student Plan. From preschool to tenth grade, teachers are now obliged to write individual plans for students, which serve several purposes. The student plans are meant to strengthen the foundation of the educational planning and organization, support the current evaluation of individual students, and strengthen collaboration between home and school. The student plan will be the center of continuous information sent to the home about students' progress and is supposed to improve discussions of how parents and schools may support students' educational development.³¹

This major change in Danish school history from recommended to binding goals, together with the introduction of national assessments and individual student plans are all in line with the overall focus on quality assurance and evaluation in an internationalized society.

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England

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Language and Literacy

In England, the official language and medium of instruction is English in all centrally funded schools. In 2006, 12.5% of students in primary schools spoke a language other than English at home, an increase of 1% from the previous year.¹ This proportion rises to 39% in London.² The most predominant other languages are those originally from South Asia such as Punjabi, Urdu, Gujarati, Hindi, and Bengali.³ The official policy is that children who are at the earliest stages of learning English should be integrated into mainstream schools, with additional language support if necessary.

Amid concerns about the impact that poor basic skills have on employment prospects, the goal of the government's *Skills for Life* initiative is to improve the literacy, language, and numeracy skills of 2.25 million adults by 2010.⁴ Local authorities provide classes for new arrivals and others wishing to develop their competence in English.

Overview of the Education System

Approximately 93% of students in England attend publicly funded educational institutions, including 1% of students in special schools.⁵ The remaining 7% attend privately funded institutions. Education at a national level is administered by the Department for Education and Skills. At municipal and county levels, local authorities are responsible for organizing state-funded education within their area, although a great deal of education policy is centrally determined and responsibility for day-to-day decision making is with the schools. In January 2006, there were 17,504 primary schools in England, with 4,148,950 students enrolled. This represents a decrease of 565 schools and 257,270 students since 2001.⁶

Most primary schools (64%) have no religious affiliation, although all are required to teach religious education and hold a daily act of collective worship.⁷ Twenty-nine percent of primary-age students attend a school with a religious affiliation, the majority having an Anglican or Roman Catholic foundation. There are a small number of schools with other Christian faiths and those with Jewish, Muslim, or Sikh affiliations.

Most primary schools include students from ages 4 or 5 to 11. Thereafter, students move on to secondary school. Most secondary schools include students up to the age of either 16 or 18. Compulsory schooling starts from the term after the child's fifth birthday and continues to age 16. In 2005, 38% of students remained in full-time education until age 18, and another 21% were participating in education or training.⁸ Publicly funded

primary education is nonselective. Most secondary education is also nonselective, with students attending a local school based on parental choice. However, a minority of schools operate some form of selection based on ability or aptitude.

Table 1 shows the structure of the three major phases of the education system: preprimary (up to age 5), primary (5 to 11 years), and secondary (11 to 16 years). All publicly funded schools must follow the National Curriculum for students ages 5 to 16, the years of compulsory schooling. This curriculum was introduced in 1989 and revised in 2000. In the foreword to the 2000 curriculum, the aim of the curriculum is specified:

[The National Curriculum] sets out a clear, full and statutory entitlement to learning for all students up to the age of 16. It determines the content of what will be taught and sets attainment targets for learning. It also determines how performance will be assessed and reported.⁹

Compulsory education							
Phase	Preprimary	Primary	Secondary				
Age	Up to age 5	5 to 11 years	11 to 16 years				
Stage	Foundation stage: 3–5 years	Foundation stage: (to end of reception year) Key stage 1: 5–7 years Key stage 2: 7–11 years	Key stage 3: 11–14 years Key stage 4: 14–16 years				
ISCED	Level 0	Level 1	Level 2				
Curriculum	Personal, social, and emotional development; communication, language, and literacy; mathematical development; knowledge and understanding of the world; physical development; creative development.	Core subjects: English, mathematics, science; Foundation subjects: design and technology, information and communication technology, history, geography, art and design, music, and physical education. Religious education is also taught.	Key stage 3: as for primary plus a modern foreign language and citizenship. Key stage 4: the three core subjects plus design technology, information and communication technology, modern foreign language, physical education, and citizenship.				

Table 1	Structure	of the	Education	System
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Role of Preprimary Education

A wide range of provisions exist for children between the ages of 3 months and 5 years, including child minders (i.e., persons who care for children in homes), day nurseries, preschool groups and play groups (from ages 2½ to 5), nursery schools or classes (ages 3–5), and reception classes in primary schools (from age 4). Since April 2004, all 3- and 4-year-olds are entitled to free, part-time preschool education in a variety of provisions, including preschools and play groups.

In January 2006, most 4-year-olds (79%) were receiving their preschool education in publicly funded nursery and primary schools, and all of these children received some

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form of free preprimary education. Ninety-six percent of 3-year-olds received some form of free preprimary education.¹⁰

The preschool curriculum includes six areas of learning covering children's development: personal, social, and emotional development; communication, language, and literacy; mathematical development; knowledge and understanding of the world; physical development; and creative development. Progression in the early years is captured in the Foundation Stage Profile, which consists of 13 scales, completed on the basis of the practitioner's accumulating observations and knowledge of the whole child. Assessments are finalized at the end of the academic year in which children turn 5, before they enter compulsory education.

Reading Curriculum in the Primary Grades

Reading Policy

The current government has announced a series of targets related to achievement in English (reading and writing) at age 11, the end of the primary phase of education. The most recent target was for 85% of 11-year-olds to have reached at least the level expected (level 4) in English in the national tests by 2006. The actual figure for 2006 was 79%, with 36% of students achieving level 4 in reading in 2006 and 47% achieving level 5, the highest attainable in the end of key stage tests for this age group. Achievement in writing is historically much lower than in reading at the end of key stage 2 (67% of students achieved level 4 or above in 2006). Performance at these levels in reading is described in the National Curriculum as follows:

Level 4: In responding to a range of texts, students show understanding of significant ideas, themes, events, and characters and begin to use inference and deduction. They refer to the text when explaining their views. They locate and use ideas and information.

Level 5: Students show understanding of a range of texts, selecting essential points and using inference and deduction where appropriate. In their responses, they identify key features, themes, and characters and select sentences, phrases, and relevant information to support their views. They retrieve and collate information from a range of sources.

Summary of National Curriculum

Reading is one of three elements in the National Curriculum for English, alongside speaking and listening, and writing. The knowledge, skills, and understanding to be taught in each key stage are specified, alongside the contexts, activities, areas of study, and ranges of experience through which the subject is to be taught. The revised National Curriculum for English describes the development of students' reading skills at each of the key stages as follows: ¹¹

• During key stage 1, students' interests and pleasure in reading are developed as they learn to read confidently and independently. They focus on words and sentences and how they fit into whole texts. They work out the meaning of straightforward texts and say why they do or do not like them.



- During key stage 2, students read a range of materials and use their knowledge of words, sentences, and texts to understand and respond to the meaning. They increase their ability to read challenging and lengthy texts independently. They reflect on the meaning of texts, analyzing and discussing them with others.
- During key stages 3 and 4, students read a wide range of texts independently, both for pleasure and for study. They become enthusiastic, discriminating, and responsive readers, understanding layers of meaning and appreciating what they read on a critical level.

The National Curriculum does not specify any particular teaching strategies or resources that are to be used in primary schools, but in 1998, the National Literacy Strategy (NLS) was introduced. This was intended to improve teaching and learning in reading and writing; a parallel program was introduced to improve teaching and learning in numeracy in 1999. In contrast to the National Curriculum, the NLS promotes very specific teaching practices. The teaching of reading is organized in three distinct ways.

- Shared reading is a class activity using a common text such as a "big book" or text extract. This work is supported by the teacher, often through modeling, and children are introduced to texts that are more demanding than those they are able to read independently.
- Guided reading is where children work with a greater level of independence. Small groups of children, at similar reading levels and with their own copy of the text, work with a teacher on texts that are matched to their ability.
- Independent reading, as the name implies, is when children work without the support of the teacher on texts that they are able to read with fluency and confidence.

The NLS framework for teaching, which includes detailed planning guidance, was revised and published as the *Primary Framework for Literacy and Mathematics* in September 2006. A key revision concerns the methodology for the teaching of phonics in the early years. This was the subject of a high profile review in the 2005 school year, and the new framework advocates that greater attention be paid to "systematic phonics teaching" from age 5.^{12, 13}

The stated goal of the *Primary Framework for Literacy and Mathematics* is to support and increase all children's access to excellent teaching, leading to exciting and successful learning. The renewed strategy includes 12 strands of learning for literacy:

- Speaking;
- Listening and responding;
- Group discussion and interaction;
- Drama;
- Word recognition: decoding (reading) and encoding (spelling) (up to age 7);
- Word structure and spelling;

- Understanding and interpreting texts;
- Engaging with and responding to texts;
- Creating and shaping texts;
- Text structure and organization;
- Sentence structure and punctuation; and
- Presentation.

The renewed framework has a reduced number of learning objectives within each strand.¹⁴ Those for grade 4 related to reading include the objectives for the Understanding and Interpreting Texts strand:

- Make notes on and use evidence from across a text to explain events or ideas.
- Infer writers' perspectives from what is written and from what is implied.
- Compare different types of narrative and information texts, and identify how they are structured.
- Distinguish between everyday use of words and their subject specific use.
- Explore how writers use language for comic and dramatic effects.

Fourth-grade reading instruction also includes the objectives for the Engaging and Responding to Texts strand:

- Reflect on reading habits and preferences, and plan personal reading goals.
- Compare the usefulness of techniques such as visualization, prediction, and empathy in exploring the meaning of texts.
- Compare how a common theme is presented in poetry, prose, and other media.

Reading Instruction in the Primary Grades

Instructional Time

The amount of time allocated to each curriculum subject is not prescribed. In 2006, the Office for Standards in Education, the organization that inspects and reports on the quality of education in England, reported that a daily literacy hour remained in most schools and, in 2005, "in many schools, a significant proportion of the week is taken up with English and literacy-related lessons, especially in reading". ^{15, 16}

Instructional Materials

There are no centrally published and mandated resources for the teaching of reading, although many publishers produce sets of graded readers for use in the early years. A variety of support materials are often used alongside graded books with controlled vocabulary. Most schools used graded schemes in conjunction with selections of fiction and nonfiction texts in class and school libraries. A small number of dual-language texts also are available. The Primary Strategy has produced units of work which use extracts from good quality texts to model various teaching approaches.



Use of Technology

There has been considerable investment in the use of information communications technology (ICT) in primary schools. However, a recent review of research in literacy and the teaching of English suggested that "its use is still limited in all phases of schooling".¹⁷ Nevertheless, a review by the British Educational Communications and Technology Agency in 2006 revealed that there has been a considerable increase in the use of ICT in primary schools from 2002 to 2005, with a focus on materials for the teaching of literacy and numeracy.¹⁸ Much of this increase was related to a large increase in the availability of interactive whiteboards. By 2005, 69% of primary school subject leaders surveyed indicated that interactive whiteboards were used in at least half of all lessons. In 2002, the equivalent figure was 6%.

Role of Reading Specialists

Typically, the class teacher teaches reading as part of the English or literacy curriculum. Within primary schools, the practice is to have subject leaders. These are generally middlemanagement teachers who are expected to focus on improving standards in their schools. This may include lesson observation, the management of resources, and the dissemination of good practice including coaching and peer support. These teachers generally continue with the teaching responsibility for most subjects for a particular class of students.

Some schools may have one or more teachers who are designated as Advanced Skills Teachers in literacy. These teachers are recognized as expert practitioners who are expected to share good practices within their own school and also with other neighboring schools. They receive an additional payment when they take on this role. Some schools may also have a trained *Reading Recovery*[®] teacher.

Nationally, the government employs a team of specialist regional advisers as part of the National Strategies field force to support local authorities in challenging and supporting their schools and providing networking and training. Each local authority employs English specialists in primary and secondary phases to similarly support schools with the greatest need.

Second-language Instruction

Teaching is generally provided in English, but support is often provided for students who are learning English as an additional language, depending on students' level of fluency. This is often assessed and described using a framework produced by the Qualifications and Curriculum Authority.¹⁹ Recently, a report was published by Ofsted looking at the writing competence of advanced bilingual learners entitled *Could They do Even Better?* that parallels the focus on attainment in writing for all students in primary schools.²⁰ Advanced bilingual learners are described as students who have had "all or most of their school education in the United Kingdom and whose oral proficiency in English is usually indistinguishable from that of students with English as a first language but whose writing may still show distinctive features related to their language background." The report indicated that the attainment at the end of primary school of advanced bilingual learners suggested some underachievement, and this was more notable in writing than reading.

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Effective Practices

In a report published in 2005 focusing on the teaching of English, Ofsted indicated that "English is one of the best taught subjects in both primary and secondary schools." ²¹ Teachers' use of information from assessment was thought to be the weakest area; in addition, it was thought that too little attention was paid to the teaching of speaking and listening. The report identified three areas where teaching had particularly improved:

- Teachers' subject knowledge had improved, especially in primary schools, largely as a result of the extensive training provided by the national strategies.
- Planning had improved, with clearer learning objectives and positive engagement from students.
- The teaching of writing was more systematic and clearly linked to students' experience of reading.

Reading Disabilities

Diagnostic Testing

There is no national screening program designed to identify children experiencing difficulties in learning to read, but the national assessments at age 7 may be used for this purpose. In addition, there are a wide range of standardized tests available that may be used by schools for screening purposes.

Instruction for Children with Reading Disabilities

Children experiencing significant difficulties in developing literacy skills may receive additional support from a specialist teacher or from a teaching assistant. Materials and training have been produced as part of the National Literacy Stragegy, in the form of Early Literacy Support (ELS), for students ages 5–6, Year 3 Literacy Support for students ages 7–8, and Further Literacy Support for students ages 9–10. In these approaches, the role of the teaching assistant, working under the guidance of the class teacher, is central. The programs are designed to target and support those children who will benefit from a more intensive program and are aimed at about 20% of students in each class. The ELS materials were published in a revised form in 2007, reflecting the recommendations from the 2006 Rose review of the teaching of early reading.²²

A recent initiative, *Every Child a Reader*, focuses on children in key stage 1 (ages 5–7) and incorporates the ELS materials as part of a layered approach that attempts to find the most appropriate level of support for all children who are experiencing difficulties in learning to read. Children with the highest level of need work individually with a teacher, whereas those with a lesser level of need may work in a group or individually with a teaching assistant. The focus for all groups is on the development of phonological awareness and phonic knowledge, again in line with the recommendations of the Rose review.²³



Special Education

Students with the greatest special educational need are given a statement that records their needs and the provision to which they are entitled. Over half (59%) of students with statements of special educational need were attending mainstream schools in England in 2006. This amounts to 1.6% of students in these schools; an additional 17% of children attending mainstream primary schools have a recognized special educational need.²⁴

Teachers and Teacher Education

Of the 198,200 regular teachers in primary and nursery schools in England in 2006, 25,300 worked part-time.²⁵

Teaching is an all-graduate profession into which there are three routes. Prospective teachers must have gained two or more Advanced levels (or equivalent) prior to acceptance in a training course and have passed five or more subjects at grade C or above in the General Certificate in Secondary Education (GCSE), including English and mathematics. GCSES are most commonly taken at age 16 and Advanced level examinations at age 18.

Prospective teachers may undertake a 3- or 4-year degree that combines the study of one or more academic subjects with professional training in aspects of education (Bachelor of Education or Bachelor of Arts with qualified teacher status). Alternatively, a 3-year bachelor's degree can be followed by a 1-year Postgraduate Certificate in Education (PGCE). The third, least common way of attaining qualified teacher status is an employment-based route.

The majority of teachers entering secondary schools have a relevant degree and a PGCE. First degrees that confer qualified teacher status are more common among primary teachers.

The content of initial teacher training programs is in part determined by the rigorous demands of a series of professional competencies which student teachers must attain. These are organized into three interrelated categories: professional values and practice, knowledge and understanding, and teaching. Prospective teachers must also pass skill tests in literacy, numeracy, and ICT.

Student teachers are registered with higher education institutions and spend a large proportion of their time in the classroom under the supervision of a practicing teacher. Primary teachers are trained to teach all subjects in the national curriculum.

During the early part of their teaching career, newly qualified teachers are supported by a mentor within their school, and qualified teacher status is confirmed on satisfactory completion of three school terms of teaching (the induction year). This is intended to provide a bridge between initial training and effective professional practice.

Teacher In-service Education

There is a variety of opportunities for continuing professional development for teachers. These range from short one-day courses to higher degrees, studied part-time over several years. In-service training may be provided by individual local authorities, higher education institutions, or specialist companies or consultants. Training on aspects of the

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literacy strategy is provided at the local level. Once they have obtained some teaching experience, teachers may specialize in literacy instruction and lead the literacy instruction in their own schools.

All schools have 5 days in each academic year allocated to in-service training, the specific days and subjects to be decided by the school.

Examinations and Assessments

National or Regional Assessments

There is an extensive structure of formal assessment in England, starting with the mandatory assessment of 5-year-olds in funded settings at the end of the Foundation Stage. Assessments also are mandatory at the end of each key stage (ages 7, 11, and 14). Children are assessed in English (reading, writing, and spelling) and mathematics at ages 7, 11, and 14, and science is included at ages 11 and 14. At age 7, the assessments are made by the teacher, informed by the outcomes of a series of formal tests. At ages 11 and 14, all mandatory assessments are through formal written tests, which are newly developed each year. Reading and writing are assessed separately but there is no mandatory test of speaking and listening, the other aspect of English within the national curriculum.

At age 11, the reading test is based on a full-color stimulus booklet, usually containing three or four different texts that are thematically linked and a separate question booklet with about 30 questions. There is a writing test in which students are required to complete two pieces of writing, each on a specified theme, that are assessed for both content and technical accuracy. There is a separate spelling test in which target words are presented in context. All the tests for children at ages 11 and 14 are marked externally by trained markers, and the scores are returned to schools. About 4% of children are judged by their teachers to be working below the levels covered by the tests at age 11. These children do not participate in the main assessment.

At ages 11 and 14, students are awarded a level for reading and writing separately and then for English overall. It is this last outcome that is the subject of the national targets. Since the tests are newly developed each year, extensive arrangements are in place to maintain standards from year-to-year. Results of the tests of children at ages 11 and 14 are published nationally on a school-by-school basis. This has contributed to the tests' high profile in England. The results for 7-year-olds are published at a national summary level. These results contribute to the measures of school effectiveness known as "value-added measures". These are intended to measure the progress made by students from the end of one key stage to the end of another, in comparison to students of the same or similar prior attainment.26

At age 16, secondary school students participate in a variety of vocational and nonvocational examinations. There are national targets for the percentage of students who attain these awards. Students take Advanced level examinations in three or four subjects at the age of 18, after 2 years of postcompulsory education. Examination results are published for individual schools for students ages 16 and 18.





Standardized Tests

A wide variety of additional test materials, including standardized tests, are available from commercial publishers. Some schools elect to use these to supplement information from the mandatory tests. In addition, national optional tests in reading and writing are available for children at ages 8–9, 9–10, and 10–11, and are widely used.

Monitoring Individual Student Progress

Teachers are expected to make regular assessments of students' attainment using the national curriculum-level descriptions. Shifting from a focus on summative, end of key stage assessments related to national education targets and performance league tables, attention is now being given to an assessment for learning, or formative assessment. Teachers report student assessment levels to parents alongside mandatory test results at the end of each key stage. In English, teachers assess children on each of the three attainment targets, speaking and listening, reading, and writing. Teachers can elect to use centrally produced optional tests in English and mathematics as a means of collecting further evidence to support their own assessments.

In the first years of schooling, teachers frequently use a "home-school book" in which teachers and parents can note reading progress to encourage reading practice at home. Schools must produce annual student reports that identify student progress and targets for the forthcoming year. These are sent to parents at the end of the school year.

In a recent initiative, a substantial pilot is beginning in 10 local authorities using individual student-level data to closely track the progress of students and to offer externally marked tests every 6 months for those students ready to take the next level. The government collects statistics that give an insight into the progress of schools, cohorts, and individuals over the course of their school careers.

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France

Marc Colmant Ministry of Education

Language and Literacy

French is the only official language and the language of instruction of France, and the most widely spoken language in the country. In 2003, the Ministry of Culture reported that approximately 150,000 students in both public and private schools in France received an education in their regional language and culture (Alsatian, Breton, Basque, Langue d'Oc, Corsican, and Catalan).¹ This represents approximately 2% of the 6.5 million students in primary school. Fewer than 1% of the primary students receive bilingual education in a regional language.

There also are various languages associated with recent immigration, spoken primarily in urban areas. France signed international agreements with several foreign countries (Portugal, Italy, Spain, Morocco, Turkey, and Algeria) to integrate foreign-language lessons into the education curriculum.

Emphasis on Literacy

Every year the Ministry of Education organizes or supports a number of nationwide literacy events. Among other purposes, these events facilitate an interest in reading and access to reading outside of school. Some examples of these activities include:

- *Week of the Press in School*: All teachers are invited to participate in a civic educational activity that helps students become familiar with printed media.
- *Poets' Spring:* Nationally, thousands of initiatives are developed during an entire week to promote poetry in all its forms.
- *Week of the French Language and the French-speaking World*: Students often are given theme projects to do, and attention is focused on the importance of France's literary heritage and on literacy as the key to its enjoyment. Schools can participate in hundreds of events organized throughout the country.
- *Read and Make Read*: At the request of teachers and schools, retired persons offer their spare time to help elementary school students develop an interest in reading and literature and pass on the pleasure of reading to children.²
- *Reading's Battle*: A competition of articles and reports to help 6- to 12-year-old children discover the world of books.

The goal of the National Agency to Fight Against Illiteracy is to coordinate and optimize the means provided by the state, regions, and companies to fight against

illiteracy. There is a literacy advisory group of the Minister of Education called the National Reading Observatory. Created in June 1996, this advisory group gathers together researchers, teachers, inspectors, and representatives of parents to analyze educational practices in the field of learning and improvement in reading. Also, Reading Challenges and Reading Rallies are organized based on local or private initiatives.

Overview of the Education System

France's education system is largely the responsibility of the state and, thus, the Ministry of National Education. The government is responsible for the definition and implementation of education policy. For many years, the education system was highly centralized, hierarchical, and uniform in its organization and operation. In 1982, in an important act of decentralization, France appreciably increased the role of regions and departments by transferring some powers and responsibilities to them that previously were exercised by the state.³

Regions are responsible for overseeing the functioning of upper-secondary schools (lycées), and departments (smaller administrative entities) have the same responsibility for lower-secondary schools (collèges). Nursery and elementary schools are under the direct control of the towns in which they were created. The towns also support and manage the budgets of these schools.

The state defines educational orientations and curricula. It recruits, trains, and manages education staff, establishes the status of schools and the rules for how schools function, and appoints teachers and administrative staff. Only the state may define and establish diploma levels. The education goals of the state are to distribute the resources dedicated to education, guarantee equal access in this public service, and control education policies.

Structure of the Education System

Instruction is compulsory, and children must be registered at elementary school at the beginning of the school year (September) in the calendar year they reach age 6. State education is free to all students in primary and secondary education. Compulsory schooling includes elementary school and lower-secondary school (between the ages of 6 and 16). In 2005, at the primary level, there were 50,668 public and 5,490 private schools.⁴ Since 1990, primary schooling has been organized in three cycles. Cycle 1 is the cycle of first learning (first and second section of preprimary); cycle 2 is the cycle of fundamental learning (third section of preprimary, grades 1 and 2); and cycle 3 is the cycle of consolidation of learning (grades 3, 4, and 5).

Schooling at the **elementary** level usually is 5 years, although it may be increased or decreased by 1 year according to the knowledge acquired by the student. Promotion from primary school to the first class of secondary education is automatic. The two main components of primary education are mastery of the French language and civics. The competencies that students must reach by the end of each cycle are described below:

- Cycle of Fundamental Learning (grades 1–2): This cycle allows every student to learn to read and write French while getting acquainted with some major aspects of the written culture. In grade 2, students begin learning foreign or regional languages, mathematics, and activities of world discovery, as well as artistic education (visual arts and musical education) and physical and sports education.
- Cycle of Consolidation of Learning (grades 3-5): In this cycle, the student develops mastery of the French language and continues to acquire the basis of his or her education including, civil education, mathematics, artistic education, and physical education. Students can now build knowledge in a more thoughtful way, and use intellectual instruments in a more assured way.

Secondary education is divided into two successive stages: lower-secondary and upper-secondary school. The lower-secondary school is from grades 6 to 9, usually ages 11 to 15. In 2005, 3.138 million students were enrolled in lower-secondary schools (public and private).⁵ Upon completion of the ninth grade, students attend a general, technical, or vocational upper-secondary school which prepares them for the corresponding Baccalauréat (known as "le bac"), an examination they usually take at age 18. There are two types of upper-secondary school:

- General and technological high schools lead to the General and Technological Baccalauréat or to the Certificate of Technician. General streams include: literature, economics, social studies, and science. Technological streams include: tertiary science and technology, industrial science and technology, and laboratory science and technology.
- Vocational high schools lead to the Vocational Aptitude Certificate, the Vocational Studies Certificate, and the Vocational Baccalauréat.

State education enrolls 86.4% of students at the primary level and 79.5% at the secondary level.⁶ Private schools are primarily religious (mainly Roman Catholic) and also subject to the control of the state.

In many schools there are composite classes with two or more grade levels (in 1999, they represented nearly 22% of all French classes). Some schools, mostly rural, contain only a single class, with all grade levels grouped together. In 2000, 2.4% of the French classes were in such schools. In 2005, the average size of classes was approximately 26 students in pre-elementary schools and 22 in elementary schools.⁷

Pre-elementary school (i.e., nursery school) is free of charge but not compulsory. It accepts children between the ages of 3 and 5 and at age 2 when places are available. In 2005, all children between ages 3 and 5, as well as 25% of 2-year-old children attended a pre-elementary school.⁸ All nursery school classes benefit from the services of a specialized instructor recruited by the municipality. The general objective of nursery school is to help the child develop, form his or her personality, and prepare him or her for success in elementary school. In nursery school, emphasis is placed on the mastery of language. Children learn to speak, begin to build their vocabulary, learn to write, and



discover the universe of the numbers. Artistic education also holds an important place in the nursery school curriculum.

Reading Curriculum in the Primary Grades

Reading Policy

To facilitate learning how to read in the primary grades, oral language must be mastered and developed in pre-elementary school. In France, knowing how to read and enjoying reading are the major objectives of the first years of elementary school. Between the ages of 6 and 7, children become acquainted with the functioning of written language. This includes connecting sounds with their graphic translation and understanding simple texts, sentence structure, and the differences between written and spoken language.

Between the ages of 8 and 10 (grades 3 to 5), students begin reading to learn. They begin encountering long texts that are increasingly complex across all disciplines. These rich texts motivate students to think, be moved, enjoy themselves, and learn. French language, literature, and social education are stressed during this period. In literature, the goal of the curriculum of this period (cycle 3) is to give every student a set of references suited to his or her age and preferences in the youth literature. Observation of the French language leads students to examine written products, describe them, and define their characteristics. They compare different linguistic elements (texts, sentences, words, sounds, written forms) to draw similarities and differences between texts.

Summary of National Curriculum

France has a national curriculum that covers reading instruction at the fourth grade of elementary school. The curriculum for the primary school, defined in February 2002, governs the action of each teacher. Programs are national and compulsory for all teachers and all students. The teaching staff has the responsibility to build a coherent progression, adapt the rhythm of the curriculum to the diversity of the children, define strategies, and evaluate students.

The elementary school curriculum indicates clearly that learning to read incorporates two very different activities: identifying written words and understanding the meaning of words in verbal and nonverbal contexts. The first activity is specific to reading, and the second also concerns oral language. The content competencies that students must acquire during each of the three cycles of primary school are defined nationally.

The mastery of French constitutes the major objective of the elementary school program. During cycle 3, students begin to shift from a school use of the language, characterized by strong guidance from the teacher, to a more personal use of language that allows students to work gradually at their own pace, especially in reading. Students must acquire the following general competences in reading by the end of cycle 3:

- Read the usual order of school activities independently;
- Read any school text concerning the class activities (textbooks, working files, posters of organization of the activities, etc.);

- Consult reference documents (dictionaries, encyclopedias, grammars, databases, websites, etc.) with an adult's help, and use navigation tools such as tables of contents, indices, notes, search engines, and hypertext links;
- · Connect texts with images, tables, graphs, or other document types; and
- Use supplementary materials to better understand what they have read.

The curriculum emphasizes reading for literary experience, to acquire information, and to improve reading comprehension. The programs also encourage reading for social awareness or civic duty, but in this domain, the emphasis is on oral expression competencies. Unfortunately, the curriculum allows little time for reading for enjoyment.

The curriculum emphasizes two aspects of reading: the diversity of written language and the kinds of written documents to be used by students, and learning to read for specific school courses, including the use of texts across disciplines. The focus of the curriculum is learning to read in all disciplines and a variety of document types.

At the end of cycle 2, the fundamental learning cycle, students should be able to:

- Understand explicitly stated information in a literary or documentary text suited to both the age and culture of the students;
- Find answers to simple questions in a printed documentary text or on an Internet site;
- Find the subject of a literary text;
- Read aloud a short passage, with the correct group accents and the melodic curve of the sentence (silent preparation);
- Independently reread an illustrated story read in class with the teacher;
- Understand the alphabetical system of coding writing;
- Recognize the regular correspondence between graphemes and phonemes;
- Propose a possible spelling (phonetically correct) for a regular word;
- Decipher an unknown word; and
- Identify immediately most of the short words (up to four or five letters) and the most frequently used long words.

At the end of cycle 3, the consolidation of learning cycle, students should be able to:

- Use school catalogs (paper or online) to find a book;
- Use the information from the jacket and the title page of a book to know if the book is the one required;
- Read silently and understand a short literary text (e.g., a small short story, an extract);
- Read and understand a long literary text, and remember what was read;
- Read personally at least one book of literature a month;
- Repeat in their own words something they heard being read;



- Debate the interpretation of a literary text, and find evidence to support their interpretations in the text;
- Understand that interpretation of a literary work depends on the constraints of the text;
- Understand the difference between a literary and a historical story, between fiction and reality; and
- Remember the titles of texts read during the year and the names of their authors.

Reading Instruction in the Primary Grades

Instructional Time

In France, the school year is at least 36 weeks, and the national school calendar is fixed by the Ministry.⁹ Since 1992, the average instructional time in elementary schools is 26 hours a week, with a maximum of 6 hours per day, including two 15 minutes breaks. Outside of the school hours, there often are additional supervised studies, mostly overseen by teachers, for children whose parents work.

The curriculum prescribes 9–10 hours per week in cycle 2 and 13 hours per week in cycle 3 for the Mastery of French Language domain, distributed across disciplinary fields. The exact amount of time designated for reading instruction varies according to the practices of teachers and schools.

Instructional Materials

France does not have compulsory instructional methods or materials for teaching reading. The choice of teaching equipment and material is made through discussion among the school's teachers, based on the range of materials offered by commercial publishers. Local or regional associations and resource centers sometimes publish educational materials.

In a recent publication, the *National Reading Observatory* addressed the issue of how best to choose and use a reading handbook for grade 1 students. Without creating a list of recommendations, this book presents a complete and meticulous analysis of textbooks from relevant criteria that are widely defined and exemplified.¹⁰

The official documents recommend using a textbook (no matter which one) for teaching reading, particularly for novice teachers. However, this textbook can never be the only book used. The reading of literature, facilitated by teachers, is also necessary and remains the only way to foster understanding of complex texts. The use of multimedia tools also is recommended by the Ministry.

Use of Technology

In 2006, 90% of pre-elementary schools and almost all elementary schools (99%) had microcomputers for educational use. Sixty-five percent of pre-elementary schools and 90% of elementary schools had Internet access.¹¹ On average, pre-elementary schools have one computer available for every 27 students. In elementary schools, on average, there is one computer for every 12 students. The extent to which these computers are used for reading instruction is unknown.¹²

Role of Reading Specialists

Reading specialists play little or no role in teaching reading in French schools. RASED, an institutional network of teachers and psychologists, assists children with school difficulties. The mission of RASED is to supply specialized help to students struggling in ordinary classes, in cooperation with the teachers, either inside or outside of class, although their assistance is not specific to reading.

Second-language Instruction

In the French school system, there are structures for the education and integration of non-French-speaking children who have recently arrived in France. The aim of these structures is to help these students become fluent enough in French to be able to follow the curriculum in ordinary classes. Integrated remedial courses are held for small groups of children schooled in ordinary classes. In addition, "initiation" classes that use a special syllabus are created for non-French speaking students. These classes group together students in grades 1 to 5 (with a maximum of 15 students per class) to provide instruction in French as a second language. Their role is to integrate the children into ordinary classes as soon as possible. In 2004, 19,000 students benefited from classes that taught French as a second language. In the same period, there were 1,000 initiation classes.¹³

Reading Disabilities

Diagnostic Testing

Since 1989, France has systematically administered a diagnostic evaluation in French and mathematics to all students at the beginning of grades 3 and 6. Conceived as an educational tool for teachers, this evaluation allows teachers to obtain information on the strengths and weaknesses of each student. There also is another type of diagnostic evaluation that was recently developed for use in grade 2. The goal of this evaluation is to facilitate the early tracking of students who have difficulties in reading, writing, and calculation and are at risk of not acquiring the competencies related to the end of the cycle. The goal is to offer those students a Personalized Program of Educational Success (PPRE) to boost their learning.

This PPRE contains two parts. The first part is intended to identify students who have reading difficulties that could impede the rest of their learning. A profile of each student is created to facilitate the implementation of differentiated teaching. The second part of the protocol clarifies the nature of students' difficulties. In 2007, the program was widened to include grade 5, with the same objective.

Instruction for Children with Reading Disabilities

The same curriculum is prescribed for all students despite different levels of ability. Naturally, some students arrive at the end of a learning cycle without having acquired the expected skills. Instruction for these students is differentiated in the form of a PPRE, in order to help them finish their learning cycle. At the national level, some geographic areas have higher concentrations of students with economic and social difficulties.



These schools receive additional resources (personnel and financial) to help students reach curriculum requirements.

Special Education

In 2005, 104,500 students with disabilities were schooled at the primary level. Within a school, integration can be individualized or collective.¹⁴ Individualized instruction is the first solution sought, with one or several students with disabilities in the regular class, receiving adapted schooling within the framework of a personalized plan of instruction. Collective instruction consists of a special class of students with disabilities (generally 10–12 students) in a regular school. Since 1991, Classes of School Integration (CLIS) within elementary schools have focused on students with physical, sensory, intellectual, or mental disabilities (89% of CLIS students) who can benefit from learning in the normal school environment. Within CLIS, students receive an education that is adapted to their age, capacities, and disabilities and share certain activities with other students in the school.

Teachers and Teacher Education

Generally, primary education teachers are responsible for teaching all subjects to their class. When a team of teachers agrees, it is sometimes possible to group students by subject. Teachers are prepared to teach at the pre-elementary or elementary level, according to their preference and the availability of posts in the department where they wish to teach. In 2005, there were 320,000 primary school teachers (80.3% were women) in the public sector. The average age was 40 years, and 8.9% worked part-time.¹⁵

Teacher Education and Training

Since 1992, primary teachers must hold a diploma from a post-secondary cycle of studies of at least 3 years. The candidates must be citizens of one of the countries of the European Union.

Initial training on theory and practice takes place at a university institute of teacher education (IUFM). Candidates either are chosen for participation in the first year by their file or after an interview. The competitive examination, required for all pre-elementary and elementary teachers, takes place at the end of the first year of IUFM. At the IUFM, training is conducted in connection with students' class work. The approach to learning how to teach the French language is mainly to look at the problems of learning to read, an analysis of textbooks from the first year of the cycle, the connection between reading and writing, and the evaluation of reading competencies.

Successful students become trainee teachers and are paid for a compulsory year of training. In 1 year of vocational training, the IUFM includes approximately 1,000 hours of training, divided into three parts: learning (45%), practice in schools (40%), and personal work (15%). Training future teachers in the school disciplines consists of 450 hours. Of these, approximately 100 hours are dedicated to French language education (didactics and pedagogy of oral expression, reading, and writing), a large part of which is used for reading and youth literature. At the end of training, trainees are assessed on their work with the students in class, the disciplines studied at the IUFM, and a report written by the

trainee concerning a practical aspects of education. If the evaluation is positive, then the trainee teacher becomes a full-fledged primary school teacher with civil service status.

Primary school teacher recruitment is based on competition. A 3-year academic degree is required in order to compete for the number of available places defined by the Ministry of Education.

Teacher In-service Education

Besides the initial vocational training of teachers, the IUFM also is responsible for organizing in-service training. During their careers, primary school teachers may obtain up to 36 weeks of further training (the equivalent of a school year), although it is not compulsory. In-service training courses are offered every year at both the local and national levels. National and local education priorities determine the content of this training. The teaching of reading features strongly in these courses.

Examinations and Assessments

National or Regional Examinations

France has been implementing systems to assess student skills for the past 30 years. These tests supply the information upon which pedagogical management resources are based at all levels of intervention, both local and national, and constitute an aid to decision making.

Diagnostic assessments are professional tools for teachers. They concern all classes and students, enabling an individual diagnosis of each student from which the teacher can define and implement instruction appropriate to each case. These assessments also provide information on identifiable groups of students such as the class, the school, or the region. The exercises proposed during these assessments are different in their content and form from those given during lessons by teachers to assess the knowledge of their students or train them in a particular skill. In class, a student's performance is often the combined result of his or her own skills and knowledge, the context of learning, and the involvement of the teacher. In a diagnostic situation, the student is alone with the test, and the answer requires him or her to master the knowledge and skills alone, without any outside help. Furthermore, a skill is made up of components, and diagnostic assessment enables analysis of these components.

Since 1989, a national assessment of competencies in reading, writing, and mathematics has been conducted each year at the beginning of grade 3 (the first year of cycle 3) and at the beginning of grade 6 (the first year of lower-secondary school). This is a large-scale assessment involving all students in each grade, testing approximately 1,500,000 students for both grades. The national assessment is administered at the very beginning of the cycle and the school year because its goal is to supply every teacher with knowledge of students' abilities in the three fundamental domains. This helps teachers choose the best educational approaches.

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Monitoring Individual Student Progress

Every child has a school report that is regularly sent to his or her parents. The school report is a good instrument for connection and communication between the teacher and the family. It details the results of periodic evaluations, competencies acquired by the student, recommendations for the student's passage into a class or into the next cycle, and final decisions. The progress of a student in each cycle is decided by the cycle teachers' council, with the recommendation of the student's teacher. Parents are regularly informed about their child's school situation, though only one third of parents ask to meet with teachers. In France, there is no examination in elementary school. Promotion and retention depends on academic progress, but not at each grade, only at certain key points.

Competencies that students must reach are fixed for each cycle. At the end of each cycle, if a student did not reach the required competences, the cycle teachers' council can suggest retaining the student in the cycle for one year. In this case, the director of the school presents this proposition to the parents. If they disagree, parents can present an appeal to the Inspector of schools by explaining why they disagree with the council's recommendation. The definitive decision belongs to the Inspector of schools. At the end of elementary school, in 2001, 19.5% of students were at least 1 year behind for their age.

Suggested Readings

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This book is free and downloadable in English, The state of education, from nursery school to higher education at: http://media.education.gouv. fr/file/57/9/2579.pdf and in Spanish, El estado de la Escuela, desde el parvulario hasta la enseñanza superior at: http://media. education.gouv.fr/file/68/1/3681.pdf

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Ministry of National Education, Higher Education and Research http://www.education.gouv.fr

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- 12 Ibid., p. 52.
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- 14 Ibid., pp. 26–27.
- 15 Ibid., pp. 262–267.



Georgia

Maia Miminoshvili National Examinations Center (NAEC) Simon Janashia National Curriculum and Assessment Center

Language and Literacy

The official language of Georgia is Georgian. It belongs to the Iberian-Caucasian family of languages, which has developed and evolved only in the Caucasus region.¹ Georgian has its own alphabet and a rich literary heritage that includes poetry and prose dating as far back as the fifth century. Georgia is a country with many ethnic groups, including Russians, Armenians, Azeris, Abkhazians, Ossetians, Greeks, Jews, and Kurds. These groups commonly speak their native languages, including Russian, Armenian, Azeri, Abkhaz, Ossetian, Greek, and Kurdish. Of these groups, the Abkhazians and Ossetians have autonomous republics in the territory of Georgia.

Emphasis on Literacy

In Georgia, there are 248 newspapers published daily per 1000 people.² In 2005, there were 2,056 national public libraries in Georgia with almost 28 million books.³ Nongovernmental organizations and some publishing houses are actively implementing literacy programs in Georgia. The Ministry of Education and Science is implementing a program to enrich the libraries with literary works for elementary-age children. With the assistance of the Organization for Security and Cooperation in Europe, a large-scale project that aims to teach Georgian to the non-Georgian population is underway. The School, Family, Community organization is especially active, having developed special programs to facilitate early literacy development. For example, there have been multiple opportunities for elementary school teachers to receive training on how to work with students to improve their reading skills.

Overview of the Education System

The Parliament of Georgia determines the fundamental direction of the education policy in Georgia and develops and approves all legal acts concerning the general education system. The Georgian government implements policy in the field of general education, determines the amount of financing, and, together with the Parliament, approves the national targets of general education. The Ministry of Education and Science implements the state policy in the field of general education and approves national curricula, professional standards for teachers, and criteria for evaluating textbooks. It also compiles statistical information about schools, approves criteria for the accreditation of the institutions of general education and education programs for the professional development of teachers, establishes schools, issues licenses for private schools, and determines the minimum salaries for teachers.

In 2005, the Parliament of Georgia adopted the Law on General Education. According to this law, general education is financed through a voucher (per capita) system. In this system, funds are given to schools in accordance with the number of students enrolled and its geographical location. The school administration and board of guardians, which consists of equal numbers of democratically elected teachers and parents and one high school student, determine how this budget will be spent.

In the 2006–07 school year, the new national curriculum was launched in Georgian schools, the first stage of which will be accomplished in the 2012–13 school year. The new curriculum is result-oriented and assesses the outcome of students' knowledge in conformity with each academic year and stage.

The Ministry of Education and Science carries out the state policy with the help of the following subsidiary organizations:

- The Teachers' Professional Training Center is responsible for teachers' professional development standards, carries out teachers' certification, and develops accreditation criteria for teachers' training and professional development courses.
- The Education Accreditation National Center carries out the accreditation of educational organizations and various professional courses.
- The National Examination Center carries out entrance examinations for various stages at the higher-education institutions, as well as international assessments.
- The National Curriculum and Assessment Center creates and develops national curricula, ensures the consistency of textbooks with the quality criteria, and carries out the assessment of student achievement nationally.

Structure of the Education System

The general education system has three levels: elementary education (grades 1–6), lowersecondary education (grades 7–9), and upper-secondary education (grades 10–12). Students enroll in school at age 6, with no preliminary competence level required for enrollment.

The general education system of Georgia includes 2,284 state and 257 private schools.⁴ In nearly 500 Georgian schools, instruction is in the minority languages of Russian, Azerbaijanian, or Armenian. There are approximately 150 Russian, 150 Armenian, and 150 Azeri schools in Georgia. Ossetian schools provide instruction in Ossetian in the first four classes and then instruction is in Russian.

Currently, there are approximately 600,000 students enrolled in Georgia.⁵ An academic year consists of at least 180 days, beginning in September and ending in June. The vast majority of schools teach 5 days a week.

Students are not assigned to classes according to ability. The national curriculum prohibits division of students according to their strengths. Teachers decide what teaching

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strategies to use and create syllabi that meet the requirements of the national curriculum. As of 2005, the national curriculum mandates that class size should not exceed 30 students in elementary classes. However, class size differs dramatically between rural schools in the high mountains and urban schools. In some urban schools, class size reaches 40 students.⁶ In contrast, some rural schools have so few students that first and second or third and fourth grade classes are often combined.

There is no **pre-elementary** education state curriculum available in Georgia. Preschool education organizations are nurseries and kindergartens (both governmental and private), which are attended by 25–50% of children.⁷

At the **elementary** level the main subjects are native language and literature, Georgian as a second language (for minority students), mathematics, natural sciences, foreign language, art, music, and physical culture. Social sciences are taught beginning in the fifth grade. At this level, students learn subjects in an integrated way (e.g., science is taught as a single subject instead of chemistry, biology, and physics separately).

At the **lower-secondary** level, the required disciplines are native language and literature, Georgian as a second language (for minority students), two foreign languages, mathematics, natural sciences (chemistry, physics, biology), social sciences (history, geography, and civic education), information communications technology (ICT), music, art, and physical culture.

The **upper-secondary** level includes the study of required and optional subjects. Native language and literature, Georgian as a second language for minority students, mathematics, history, geography, civic education, art, music, physical culture, two foreign languages, and natural sciences (chemistry, physics, biology) are required disciplines in the tenth grade. Eleventh- and twelfth-grade students also have to choose four of the optional subjects offered by the school. Students must choose at least one from the social sciences (e.g., state and law, economics, and global problems), one from the block of aesthetic education (e.g., art, theatre, and music), and one from the natural sciences.

Reading Curriculum in the Primary Grades

Reading Policy

The official reading policy was reflected in the *State Education Standard*, *Elementary School*, originally developed in 1997 and revised in 2005. In compliance with the 2005 standard, reading methods are reflected in the national Georgian language and literature curriculum. The elementary school goals for language instruction related to reading are listed below.

- Develop reading and comprehension skills for functionally and contextually versatile texts;
- Develop text analysis skills;
- Develop skills to use various dictionaries and other resources (e.g., library, Internet);
- Develop skills to formulate, provide arguments for, and express a personal position toward problems depicted in a literary work; and



• Develop an understanding of the relationship between universal literary topics in the Georgian and world literature processes.

Summary of National Curriculum

Teaching reading in the elementary grades is part of native language instruction. In compliance with the State Education Standard of 1997, after finishing elementary school, a student will be able to do the following:

- Read and understand a given text;
- Answer questions about the text;
- Recount the content of the text read;
- Complete a written task about the content of the text read; and
- Read extracurricular literature independently, in addition to the material given in the textbooks.

Since the 2005–06 school year, a newly developed standard has been piloted in 100 schools. In compliance with the new standard, the reading curriculum in the elementary, lower-secondary, and upper-secondary schools is an integral part of the curriculum for Georgian language and literature. The reading standards of this curriculum are in the form of achievable (anticipated) outcomes at the end of each academic year. The outcomes for what a student should be able to do by end of the elementary level are below.

- Read independently functional texts of various types and content;
- Read a literary text and express his or her impressions, connecting these expressions with his or her personal experience.
- Have the initial habits of working with a book;
- Observe and recognize linguistic peculiarities of different types of texts; and
- Use various reading strategies.

Reading Instruction in the Primary Grades

Instructional Time

As of the 2006–07 academic year, the total number of lessons for grades 1–12 ranges from 21 to 36 hours a week. Of these, the time allocated for native language and literature ranges from 4 to 10 hours. At the elementary level, more time is allocated for teaching native language and literature than at the lower-secondary or upper-secondary levels. At these higher levels, the emphasis shifts to intensive foreign language instruction.

Instructional Materials

There is a list of textbooks that are approved by the National Curriculum and Assessment Center for each subject. Schools select books from the list and use them for a minimum of 3 years.

In elementary school, students mainly use textbooks that include children's stories and poems. The texts are followed by various questions checking the student's understanding

and perception of the text. Extracurricular literature is given significant attention at the elementary level. Students either choose what to read on their own or read a book based on a teacher's advice. The textbooks for higher grades contain literary works of Georgian classical writers (both prose and poetry). Based on the new standard, new textbooks were published in 2005. These textbooks are being piloted in Georgian schools now.

Use of Technology

In Georgia, school use of ICT is being introduced, as evidenced by the implementation of the computerization program, Milky Way (Irmis Nakhtomi). The goal of this project is to equip all schools with computers and Internet infrastructure, train at least 70% of teachers in computer use, and develop software for use in Georgia.⁸

Second-language Instruction

In schools where instruction is primarily in another language (i.e., Azarian, Armenian, and Russian schools), Georgian is taught as a state language (i.e., as the second language). The principles of teaching the second language are different than the principles for teaching the native language. Hence, a curriculum (syllabus) for Georgian as a second language has been developed and a multilevel textbook for Georgian as a second language is being designed (textbooks for the first and second levels are ready and in use). It will be accompanied by a teacher's book with instructions on how to develop speaking skills (oral speech, reading, and writing) in the second language.

Reading Disabilities

Unfortunately, early detection of reading and learning disabilities is generally not available in Georgian schools. There are no standardized tests for assessing progress in reading or any special programs for reading enhancement in school settings. Diagnostic tests sometimes are used by special teachers and psychologists to diagnose reading difficulties among children with serious reading problems.

Teachers have no special training in modern reading theories and teaching strategies for children with reading disabilities. If a problem emerges in reading or in any other field of learning, teachers have to apply to specially trained psychologists or speech and language therapists that are available in the capital city. Recently, teachers have been introduced to an individualized approach and individual education plans for students with various learning difficulties, including those in reading. Hence, in the mainstream school setting, it is difficult to carry out a remediation program for poor readers. The problem is sometimes solved by organizing additional time for instruction and tutoring students with reading disabilities without changing the teaching strategy and methods.

Teachers and Teacher Education

In compliance with the Law on General Education of 2005, teachers are hired by individual schools. There are approximately 70,000 teachers in Georgia.⁹ The Ministry of Education and Science determines the formula used to calculate the minimum salary



for teachers. This formula takes into account the number of lessons taught by teachers, their background, job seniority, and average number of students at the lessons.

In accordance with the Conception of Teachers' Professional Development, adopted in 2006, only persons with an academic degree (bachelor's or master's) in the field of education who have successfully passed a 1-year probation period and a certification examination have the right to become a teacher. A certified teacher is required to update his or her certificate every 8 years.

In compliance with the Georgian legislation, the teaching profession is regulated by the state. The state establishes teachers' minimum competencies in compliance with teachers' professional standards. The training of teachers is the responsibility of the institutes of higher education. To become a teacher at the elementary level, one has to earn at least a bachelor's degree. In order to teach at the lower-secondary and upper-secondary levels, one has to have an academic degree of master of education to become certified. Currently, the content of teacher education programs varies at different universities. However, most bachelors' programs in education focus on psychology, pedagogy, and the school subjects to be taught, and master's programs are mainly concerned with psychology and pedagogy.

Teacher In-service Education

In-service training is organized by independent organizations, nongovernmental organizations, and universities. The state determines the weight of credits for each training program for accreditation purposes. These credits then are used to update teaching certification. In special cases, the state arranges training for the teachers. In-service guidelines are currently being developed by the Teacher Professional Development Center.

Examinations and Assessments

Before 2006, students in elementary and upper-secondary school were assessed using a system of marks. Marks from 2 to 5 were used to measure students' achievement, 3 being the minimal pass mark and 5 indicating excellence. Student achievement in reading was assessed as part of their overall achievement in their mother tongue. The assessments included oral examinations, short-answer questions, and extended-response or essay questions. Summative assessments were held at the end of each term, mainly in the form of written tests at all levels.

Since 2006, a scale from 1 to 10 has been used for assessing students' achievement. There are no marks used in grades 1 to 4, although students receive comments from the teacher at the end of each trimester. In upper grades, student promotion is evaluated based on grade point average, which should be more than 5. Teacher-made tests and locally developed tests also are used in classrooms.

National or Regional Examinations

As a part of the educational reform in Georgia, a state assessment of student achievement in native language was held in 2003. The results from this assessment were used during the design of the curriculum and the textbook development process.

While assessing native language achievement in grades 1 through 4, two communication skills (reading and writing) were examined, as well as language competencies (vocabulary and grammar). Centralized tests were prepared by the National Assessment and Examination Center and were administered across the country. Similar types of assessments are planned for every 4 years in the future. The reading test portion of the state assessment was published in 2005 and is used in the elementary grades as supplementary material.¹⁰

There are no national examinations at the elementary level. In the 2002–03 school year, national examinations were held in ninth grade. The examinations included standardized tests in the native language, mathematics, and a foreign language. The test in the native language contained a section that assessed students' reading skills. As part of the Unified University Entry Examinations (held in Georgia since 2005), reading skills are assessed as a large portion of the Georgian language and literature and general aptitude section. The organization of a unified examination for master's courses is planned for 2008. The verbal section of this examination will have substantial assessment of reading skills.

Standardized Tests

There are very few standardized tests published in Georgia. As mentioned above, standardized tests in the native language and mathematics used in a 2003 National Assessment have been published by the National Assessment and Examination Center.¹¹ These tests are used by schools to assess students' achievement levels.

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Germany

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Language and Literacy

In Germany, the official national language and language of instruction in most schools is German. However, various minority groups, composed of recent immigrants, speak Italian, Greek, Spanish, Portuguese, Russian, Turkish, Polish, and other languages. Among the minority languages commonly spoken, Turkish dominates. These languages are taught in some privately run schools, bilingual schools, or individual classes.

Emphasis on Literacy

Germany has a rich literary history. There is a great variety of nationwide daily newspapers, as well as regional or local newspapers in most towns. The circulation of daily newspapers is 291 per 1,000 inhabitants.¹ Of the public libraries, some are run by the individual federal states (university libraries) and others by municipalities (municipal and local libraries). In 2005, almost 8.6 million borrowers were registered at over 10,000 public libraries.² Several reading initiatives are run nationwide by organizations such as the German Society for Reading and Writing and by public libraries.

Overview of the Education System

Germany is a federal republic formed by 16 federal states (Länder), which have sole legislative and administrative power over educational policy within their geographical area. This includes regulation of curricula and time schedules, professional requirements, teacher recruitment, and quality development in schools, as well as international mobility and recognition of degrees. The states organize supervision of the school system in two or three tiers: the Ministry of Education, its school boards at the regional level, and sometimes its school administrators at the local level. They coordinate their educational policies through the Standing Conference of Ministers of Education and Cultural Affairs of the Länder in the Federal Republic of Germany. Resolutions and recommendations of the Standing Conference become legally binding only when these are adopted as state laws, decrees, or regulations of state authorities. The Standing Conference also deals with new developments requiring coordination between the states, such as recognition of examinations or education of immigrant students. The Federal Ministry of Education and Research is responsible for making decisions regarding apprentice-based workplace vocational training, admission to higher education institutions, higher education degrees, and education grants. Most students attend public school; only about 6% of school-age children attend private schools.³ These schools, subsidized and supervised by the states, must be accredited. Public expenditure on compulsory education in 2003 was about €68.8 billion (3.2% of GNP).⁴

Structure of the Education System

Compulsory schooling begins at the age of 6 and is mandatory until the age of 18. Parents also may apply for their child to start school earlier than the age of 6. Of the 12 years of compulsory schooling, 9 or 10 years (depending on the individual federal state's school system) must be spent in full-time schooling, with the following years spent either in full-time schooling or part-time vocational schools as part of an apprenticeship program.

Primary school (Grundschule) is the first level of the compulsory education system and generally includes grades 1 to 4 for students 6 to 10 years old, although in Berlin and Brandenburg primary school includes grades 1 to 6 for ages 6 to 12. Most primary schools are half-day schools, although all-day supervision is offered in some cases. In order to promote the expansion of all-day schooling, the federal government launched the program *Future Education and Care* from 2003 to 2007.⁵

Over the last 16 years, a new school-entry phase (Neue Schuleingangsstufe) covering the first 2 years of primary schooling, has been implemented in pilot projects in all federal states except the Saarland. Its main goal is to improve individual diagnostics and provide better support for the individual learning process. Children attending this phase may be taught in special, multi-age learning groups. Alternatively, additional teachers or specially trained educators provide support for teachers and the children in the classroom. The measures used to implement this project vary between the different states.

In primary school, children are taught German, mathematics, Sachunterricht (includes social, historical, scientific and geographical elements), physical education, music, art, and religious instruction. In 2006, the states of Berlin and Brandenburg replaced religious instruction with instruction in ethics (Ethikunterricht) for grades 7 to 10. Students may be taught in subject-specific or cross-disciplinary classes. Foreign language teaching (usually English, but sometimes French or several languages as a communicative approach) usually starts at grade 3, though in some Federal states at grade 1. German, as a subject, includes instruction in reading, spelling, and writing.

Primary school is followed by further compulsory schooling at the **lower-secondary** level (Sekundarbereich I). A characteristic feature of the lower-secondary education system of Germany is the "differentiated system" (gegliedertes Schulwesen). This offers students ages 10–12 until age 15 or 16 differentiated teaching compatible with their abilities and inclination. Students are usually placed in one of three types of schools (Hauptschule, Realschule, or Gymnasium), depending on their academic ability, though in some states parents, schools, and school supervisory authorities jointly decide which school a student will attend at secondary level I. Some federal states also offer

comprehensive schools. In the 2004–05 academic year, students attended different types of schools in the proportions listed below (these figures refer to the national average; there is great variation between the different states).⁶

- *Hauptschule*, grades 5 to 9 or 10, the basis for subsequent vocational training (19.6%);
- *Realschule*, grades 5 to 10, provides a more extensive general education (24.4%);
- *Gymnasium*, grades 5 to 10, preparation for higher education (30.8%);
- *Comprehensive schools*, grades 5 to 10, combine the *Hauptschule*, *Realschule* and *Gymnasium* but are not available in all states (6.9%);
- Schools with alternative syllabi (6.9%); and
- *Special schools* for children with disabilities (7.6%).

Upper-secondary general education (Sekundarbereich II), for students ages 15 or 16 through 18 or 19, offers a 3-year course concluding with a final examination (Abitur) that qualifies students to enter a university. Until the mid-1970s, the curriculum was organized along the lines of a grammar school (Gymnasium) education and included classical and modern languages, mathematics, and science. This has been replaced by a system of basic and intensive courses combined with compulsory and optional ones to ensure that all students receive a broad education. By 2007, 14 of the 16 federal states adopted a centralized higher education examination (Zentralabitur) and Schleswig-Holstein will adopt it by 2008. Alongside this development, in many states, the 3-year course leading to the university entrance qualification (Abitur) is gradually being introduced within an orientation phase at grade 10, thus leading to the Abitur after 12 years of schooling. Uppersecondary education also includes full-time vocational schools and combined vocational programs. This dual system of vocational training and education entails apprenticeship training and education at two sites—the school and the workplace. Apprentice-based vocational training and education is sponsored by two agencies: the state governments, which establish and finance vocational schools, and the businesses that finance and provide apprenticeships.

Role of Preprimary Education

Preprimary education, usually offered by a kindergarten, is neither part of the compulsory school system nor directly linked to it, and attendance is voluntary. Local public youth welfare services are responsible for providing kindergartens, but these also can be run by private organizations. Usually, children from 3 to 6 years old attend kindergarten. School-age children who do not demonstrate a sufficient level of development also may attend a school kindergarten (Schulkindergarten). Attendance is usually voluntary, although in most states the authorities can make it compulsory. The curriculum for all preprimary schools involves playing and social activities, some preparation in physical abilities, speech, creativity, music, social comportment, and daily routine. There is no special instruction in reading. In 2004, 70% of children age 3, 84% of children age 4, 85% of children age 5, and 37% of children age 6 attended a kindergarten.⁷



All federal states aim to improve the linguistic ability of children with migrant backgrounds before compulsory school. Many of the states have adopted measures to help parents foster their children's early language skills. In North-Rhine Westphalia, for example, the language abilities of 4-year-old children, irrespective of their linguistic background, were tested with a new language skills assessment program (Delfin 4) to develop supportive measurements.

Reading Curriculum in the Primary Grades

Reading Policy

The "three R's" (reading, writing, and arithmetic) are considered a priority for primary school children. Literacy is seen as the basis of general education, enabling individuals to participate in the culture and the democratic institutions of society. Introduction to reading starts at age 6 with compulsory schooling. There is a compulsory curriculum in each state, comprised of general instructions for teaching methods and specific instructions for subject content areas.

Reading instruction usually is divided into two phases. In the first phase, students are introduced to reading skills which, depending on the federal state, is taught in the first or second grade followed by further reading instruction through the end of primary schooling. During the first phase, children learn the alphabetic principle that words are composed of letters that correspond to sounds, allowing them to read and understand simple, unknown texts. In the second phase, the emphasis is on learning to read fluently and correctly. Some of the states also cite the development of interest and motivation in reading as an objective for the first phase, while others cite this as an objective for the second phase. The most frequent recommendation for motivating children is to choose a wide variety of texts that are adapted to children's interests and individual development. Because most guidelines for elementary reading instruction refer to the disadvantages of an exclusively synthetic or analytical method of learning to read, mixed analyticalsynthetic methods are compulsory. With these methods, children first become acquainted with simple, regular words that are analyzed as elements of letters and sounds using all senses by differentiating between letters visually, differentiating sounds by hearing and speaking, and copying and writing letters and words. The goal of almost every state is to achieve a balanced approach to learning reading and writing.8

Recognizing the function of a text is part of the primary school reading curriculum in several states, generally in the second phase. Some curricula emphasize the importance of children learning to read competently as early as possible. Other curricula consider it necessary for children to be able to choose among different subjects and learn at their own pace. In most curricula, there is a special section on differentiated teaching, which takes into account individual differences between children caused by a variety of factors (e.g., initial range in abilities before entering compulsory schooling, linguistic ability, motivation, interest in learning, and learning ability). Some curricula include special consideration of children whose first language is other than German.

Summary of Regional Curricula

The Ministries of Education in the different federal states are responsible for the school curricula, which are published as regulations by the respective Ministry of Education. These regulations are binding on teachers, and head teachers are responsible for ensuring compliance. The curricula are formulated in a general way, allowing teachers considerable freedom with regard to content, objectives, and teaching methods. To reach a degree of consensus on methods and assessment criteria at schools, teachers of a certain subject meet to agree on curricula.

Mandated Materials for Reading Instruction

Textbooks are provided by independent publishers. They are designed to correspond to the curriculum of the respective federal state and must be approved by the Minister of Education and Cultural Affairs of the state. Different publishing houses publish a range of textbooks that are usually revised every 5 years. Each school's teachers' conference selects textbooks from a regularly updated list. The great majority of teachers of first grade follow a basic reader or a learning-to-read program. In later classes, most of the teachers use textbooks that contain exercises for German lessons.

Reading Instruction in the Primary Grades

Instructional Time

A school year includes 38 weeks of instructional time (between 190 and 208 days). In grades 1 to 4, a school week can be divided into up to 20 to 25 class periods of 45 minutes each. Approximately 5 to 6 hours a week are devoted to German, which includes reading and writing. It is difficult to estimate the exact amount of teaching time devoted to reading because the states differ in the number of total instructional hours in primary schools, as well as in the number of hours devoted to languages. The exact amount of time designated for reading also varies according to the practices of teachers, since reading is embedded in German language activities (which also include writing, spelling, literature, and grammar).9

Instructional Materials

Teachers can choose from a list of approved textbooks, as long as these are consistent with the chosen teaching methods. Also, many teachers use worksheets for special exercises from existing materials or materials created by the teachers themselves. Most schools and classrooms have libraries, and children are free to choose reading material. Some teachers also make use of public libraries.

Use of Technology

Access to the Internet is provided in all schools. Moreover, new media (multimedia) is becoming increasingly important, both as a teaching aid and as a subject and skill. However, computers are not very widely used in primary schools. In PIRLS 2001, only 17% of German fourth graders reported using a computer at least weekly at school (compared to an international average of 29%).¹⁰



Role of Reading Specialists

Classroom teachers are in charge of teaching the initial stages of reading. In some schools, special teachers are available for remedial education, teaching groups of children with specific learning disabilities (e.g., difficulties in reading and/or spelling). Although there are no reading specialists, teachers are free to consult people who have special competencies concerning reading. PIRLS 2001 asked teachers about access to remedial or reading specialists or other professionals. In Germany, 62% of students had teachers who reported having no access to a reading specialist (compared to an international average of 46%).¹¹

Second-language Instruction

The growing number of immigrant children presents a challenge to teachers and schools in German language acquisition, since immigrant students may have difficulties learning to read and write in German. The average percentage of students from non-German speaking backgrounds is 11.2%, but in larger cities, the average rises to 23%, and in some inner-city classes, approximately 80% of students come from immigrant families.¹² Some students have difficulties not only in learning German but also in learning their mother tongue and, as a result, struggle with reading and writing in both languages. Regardless of their linguistic and cultural backgrounds, all children learn to read and write in German, though some schools may offer learning-to-read programs in two languages (bilingual alphabetization). There is a growing awareness that immigrant students need special courses in German, but until recently few schools offered special courses in German language instruction for these students.

Effective Practices

In recent years, many empirical studies have been carried out to measure the effects of different methods of teaching reading in first grade. Most of the studies show that the widely used analytic-synthetic approach is successful. In the first phase, children are confronted with regular single words, analyze the words in terms of letters and sounds, and synthesize the sounds and letters to a word again as a way of learning the alphabetic principle. From the beginning, the main emphasis is on comprehension. Studies have shown that children with lower socio-economic status and from a migrant background profit from a systematic approach. Successful programs foster spontaneous writing and spelling among children, thus balancing the teaching of reading and spelling.¹³

Reading Disabilities

Diagnostic Testing

All federal states have special regulations for the diagnosis and remedial education of children with specific reading and spelling difficulties. Since reading problems are nearly always connected with spelling difficulties, both areas are considered. If a student has difficulty in reading and spelling and the teacher wants to have the child diagnosed as "reading and spelling disabled", the child may be referred to a school psychologist who will administer reading, spelling, and intelligence tests. Screening tests are not used.

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Instruction for Children with Reading Disabilities

In the first year of school, it is the task of the classroom teacher to offer support for children with difficulties learning to read and write, such as providing individual help. If problems persist in subsequent school years, the children receive additional remedial instruction, as well as normal classroom instruction. According to the regulations in some states, specific courses for children with learning problems are offered, such as extra lessons in small groups during school hours. In practice, however, not all schools offer this type of remedial education, sometimes due to a shortage of teachers. Teachers are expected to carefully observe students' progress in reading and spelling, diagnose deficiencies, and give special support. Standardized tests are seldom used as a basis for diagnosis. Some curricula recommend using individual reading techniques to identify the problem and develop suitable remedial exercises.

Special Education

Children 6 or 7 years old who have not acquired the physical and mental maturity to follow regular instruction attend special schools where they receive special support (e.g., schools for children with learning, intellectual, or physical disabilities). In some states, there are integrated classes where children with and without special needs are taught together. In 2004, 4.4% of all children of primary school age attended special schools.¹⁴

Teachers and Teacher Education

Teachers are employed by the Ministries of Education in the individual states and are assigned by them to specific schools. Traditionally, schools do not have great influence on teacher recruitment. However, since the 1990s, school autonomy is actively supported and has lead to an increasing number of schools selecting their teachers in recent years.

Teachers may be employed on a full-time or part-time basis. The vast majority of teachers employed on a part-time basis in general education are women (85.6% in general education, 95.7% in primary schools).¹⁵ Teachers in Germany also tend to be older than those in other countries; in PIRLS 2001, fourth grade students in Germany had the highest number of teachers ages 50 years and older (53%, compared with an international average of 22%).16

Teacher Education and Training

In order to gain admission to a teacher training program, the prospective teacher must have the general higher education entrance qualification. Primary teacher training is divided into two phases. The first phase, lasting seven semesters (3¹/₂ years), is offered by universities, technical universities, colleges of education, and colleges of art and music. The program incorporates study of an elective or specialized subject and primary school education theory. Alternatively, areas of learning or several subjects can be studied, if subject-related elements of instruction are incorporated into the course. Subject options and specializations vary from one federal state to another. Passing the First State Examination (Erstes Staatsexamen) at the end of the first phase is required to enter the second phase, the preparatory service, during which practical preparatory training



is provided at teacher training schools. The preparatory service lasts 2 years, but in some states this has been reduced to 18, or even 12, months. At the end of the second phase, the student teacher must pass the Second State Examination (Zweites Staatsexamen).

In accordance with the Bologna Process and the intended harmonization in the field of education in Europe, some federal states have introduced bachelor's programs with the goal of reducing the length of time spent studying. After a 3-year bachelor's program, prospective primary school teachers have to take a masters program for two additional semesters.

In December 2004, the Standing Conference adopted the Standards for Teacher Training: Educational Sciences. These standards provide an additional basis for improving professionalism. They were introduced in order to improve teachers' diagnostic and methodological competence.

The curriculum for training primary teachers includes obligatory courses in German and mathematics, but the amount of time allocated varies. In some states, the amount of study time devoted to reading instruction is minimal and often related only to initial reading instruction.

Teachers in primary schools are expected to teach in all major subject areas (German, mathematics, and Sachunterricht), even if they were not specially trained for these subjects. There are no specific reading teachers, since reading is embedded in the teaching of German language. An agreement of the Standing Conference of Ministers guarantees mutual recognition of the university examinations for the teaching profession.

Teacher In-service Education

In-service training for teachers is compulsory but regulated differently by each federal state, with courses organized regionally or at the state level. In most states, the teachers decide on the content and quantity of in-service training they attend. In all states, there is ample opportunity for teachers to attend in-service training courses. This is intended to keep teachers up-to-date in the subjects they teach, as well as in the broader fields of psychology and sociology in education and teaching methods. Great importance is attached to in-service training for teachers at special schools, especially in relation to integration of students with special needs in mainstream schools.

Examinations and Assessments

National or Regional Examinations

There are no national examinations at the primary school level. However, in order to ensure quality development in schools, the traditional input-oriented control based on political and administrative regulation of primary schools is giving way to a more output-oriented control of the system. In this regard, the Standing Conference of the Ministers of Education and Cultural Affairs of the Länder in the Federal Republic of Germany released educational standards for the primary sector in German and mathematics in October 2004. The standards relate to general educational objectives and determine which skills and knowledge students should have attained by grade 4.

To be able to determine the extent to which the standards are being met, orientation and comparative tests, as well as centralized or decentralized examinations will be carried out in each state using pools of questions and exercises that will be developed on an ongoing basis to serve each state and its schools for internal and external evaluation. The observance of standards will be monitored both at the state and national level. In 2004, the Standing Conference set up the independent scientific Institute for Educational Progress—IQB (Institut zur Qualitätsentwicklung im Bildungswesen), which will examine whether the standards are being met and contribute towards improving comparability and permeability in the education system. Furthermore, in 2003, the first education report for Germany was published. Since 2004, the federal government and the states have jointly taken on responsibility for the publication of further reports. In 2006, the Standing Conference of the Ministers of Education and Cultural Affairs of the Länder in the Federal Republic of Germany and the Federal Ministry of Education and Research released the first joint report on education throughout life in Germany with a special focus on education and migration.¹⁷ Subsequent reports will be published every 2 years, focusing on different topics.

Standardized Tests

The use of standardized tests is not common in German schools. A variety of standardized reading and spelling tests exist, but they are used mainly for identifying reading difficulties or for research purposes. In very rare cases, teachers use tests on their own initiative.

Monitoring Individual Student Progress

Continuous assessment of students' performance is an important element of the professional role of a German teacher. In grades 1 and 2, the focus is on direct observation of the students; written class tests are gradually introduced from grade 2 in certain subjects (especially German, Sachunterricht, and mathematics). During the first grade, and in some states, in second grade, students receive a report with a detailed description of their progress and weaknesses in specific areas of learning. After this grade, children receive marks in whole numbers on a scale from 1 (very good) to 6 (insufficient) for their performance in oral and written tasks. In addition to the marks awarded in individual subjects, the reports also can contain comments or marks on class participation and on social conduct in school. Beginning in grade 2, progress to the next grade depends on meeting the minimum demands in all relevant subjects.

In the middle and at the end of a school year, children are given certificates with marks. The assessment criteria are established in the curricula of some states. In general, the same assessment standards apply to all students, including those with difficulties in reading and writing. Accommodations for disadvantaged students, which generally apply in primary schools, are reduced as students progress to the higher grades. Students from grade 2 on may have to repeat a school class if their progress is insufficient. In the 2003–04 school year, 1.5% of all students in primary education repeated a class.¹⁸



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Germany

Hong Kong SAR

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Language and Literacy

English and Chinese are Hong Kong's official languages and share equal status. Reports and publications of public interest issued by the government are available in both languages, while correspondence with the public is in the language most appropriate to the recipients. The Cantonese dialect of Chinese is the mother tongue of the majority of residents in Hong Kong. The written form of the language is Modern Standard Chinese.

Chinese has been the medium of instruction in 329 secondary schools since Hong Kong became a Special Administrative Region (SAR) of the People's Republic of China in 1997.¹ It is also the language of instruction in government-funded primary schools. The government, however, is aware of the need to preserve English-language learning and avoid weakening the English abilities of students.

The following languages are commonly spoken in Hong Kong: Cantonese (89%), English (2.8%), Putonghua (1%), and Chinese dialects (4.4%), including Hakka, Teochew (Chaozhou), Fukien, and Shanghaiese.² However, most people are able to speak multiple languages (e.g., 42% of people reported being able to speak English, though it may not be the language they use most often).

Emphasis on Literacy

The Education and Manpower Bureau (EMB) has implemented a series of literacy programs to promote reading for pleasure and for learning, which is one of the four key goals of curriculum reform. These include the 1999–2000 Reading Award Scheme for primary 5 and 6 classes and the establishment of classroom libraries and a central library in every primary school, managed by a teacher-librarian. In addition, a reading website for students, Book Works, has been launched and promoted.³ Talks on the promotion of reading books in the family have also been organized.⁴

The goal of the government-operated Extensive Reading Scheme over the past two decades has been to improve and extend students' reading habits and skills. Additional funding from the Quality Education Fund also has been set aside to help schools carry out reading projects.

Overview of the Education System

The education system in Hong Kong is decentralized. The EMB is responsible for formulating, developing, and reviewing education policies, programs, and legislation from kindergarten to the tertiary level. It oversees the efficient implementation of educational

programs, but also disseminates authority to schools and constantly encourages schoolbased curriculum development.⁵ This system requires the active support and participation from members of the community.⁶ Different modes of on-site support were provided for about 300 primary and 112 secondary schools in the 2005–06 academic year, including school-based curriculum development support services from the EMB.

In 2005, the total number of students enrolled in kindergarten, primary, and secondary education was approximately 1.05 million. Of the total enrollment across all educational levels, 14% of students were in kindergartens, 40% in primary schools, and 46% in secondary schools. In the age 17–20 cohort, 57% have access to post-secondary education.⁷

Structure of Education System

The goal of the **preprimary** curriculum is to foster children's physical, intellectual, linguistic, aesthetic, social, and emotional growth.⁸ The Preprimary Education Support Section was set up in September 2006 to extend on-site support services to the preprimary sector and assist in implementing different initiatives in education reform.

Preprimary education in Hong Kong consists of childcare for children ages 2 to 3 and kindergarten for children 3 to 6 years old. In September 2005, 149,141 children were enrolled in 1,062 kindergartens. All kindergartens in Hong Kong are privately run and can be categorized as nonprofit or private independent kindergartens, depending on their sponsoring organization. Kindergartens vary in the scale of their operation, with the number of classrooms per school ranging from 1 to 10 or more. The government has been working to improve the teacher-student ratio in kindergartens since September 2001 and adopted student-teacher ratio of 15:1 for all kindergarten classes since September 2004.⁹

There are 720 **primary** schools providing free and universal schooling for every child ages 6–11. Eighty percent of these schools provided whole-day schooling in the 2005 school year.¹⁰ The average class size in the primary school is about 32 students.¹¹ Admission to government and government-aided schools is through a centralized system. At the end of Primary 6, all students in schools that participate in the government's Secondary School Places Allocation System are provided with free Secondary 1 placement. Allocation is based on parental choice and internal school assessments. As of September 2007, a new system was implemented to increase the quota of discretionary places and give more choice to parents.

At the **secondary** level, the government provides free and universal schooling, with a student-teacher ratio of 18:1, for all classes at Secondary 1 to 3 and subsidized senior secondary education in 572 secondary schools. The average class size in secondary school (s1–s5) is 37.5, which decreases to 30 at the senior secondary level (s6–s7).¹² In September 2005, 482,273 children were enrolled in the different types of secondary schools. There are five types of secondary school curricula: grammar, technical, prevocational, practical, and skills. The first three types of curricula are offered in 5-year secondary courses that lead to the Hong Kong Certificate of Education Examination. A 2-year, sixth-form course leads to the Hong Kong Advanced Level Examination. The government developed a special technical curriculum for prevocational and secondary technical schools, implemented in 2000, to meet society's changing needs.

In the 2005-06 school year, the largest proportion (32.9%) of the \$49.1 billion education budget was spent on secondary education.

In 1999, the government introduced various measures to facilitate the development of Direct Subsidy Scheme (DSS) schools and nonprofit private independent schools, helping the school system to become more diversified and giving parents more choices. In September 2005, there were 48 DSS primary and 11 DSS secondary schools, offering about 5% of local school places.¹³

The first nonprofit, private independent school was opened in September 2004, and eight more are scheduled to open, in phases, by 2008. Dss provides funding to operate senior secondary schools and helps them design market-led, diversified, and practical courses. This provides an additional education option for those students leaving Secondary 3 who are interested in alternative curricula.

Fifty-six international schools, including 15 schools operated by the English Schools Foundation, operate in Hong Kong. These schools form an important social infrastructure aimed at maintaining Hong Kong's status as an international business center and a vibrant cosmopolitan city. They offer different non-local curricula, namely American, Australian, British, Canadian, French, German-Swiss, Japanese, Korean, and Singaporean, and provide a total of 36,900 student places.¹⁴

At the **tertiary** level, Hong Kong has 12 degree-awarding higher education institutions. They include seven universities and a teacher training institution funded by the University Grants Committee. Hong Kong Shue Yan University achieved university status as the first private tertiary institution at the end of 2006. Nine campuses under the Hong Kong Institute of Vocational Education offer skill-oriented programs. The Hong Kong Academy for Performing Arts offers professional programs in music, drama, film and television, dance, and technical arts. The Open University of Hong Kong offers open and distance learning opportunities to adults.

Reading Curriculum in the Primary Grades

Reading Policy

The main goal of the reading policy in Hong Kong is to enable all children to read with comprehension for learning and pleasure. A principal objective of education reform is for all students to develop proficiency in reading independently in both official languages, Chinese and English. Kindergarten teachers focus on children's language skills and draw attention to the literacy opportunities in children's daily lives and the world around them. Lower-primary school students are expected to master the basic skills of reading and writing and to develop an interest in and a habit of reading. Upper-primary school students are expected to be able to apply their reading and writing skills with increasing fluency, communicate effectively both orally and in writing, and use their reading as a vehicle for learning. Secondary school students are expected to be able to use their reading as a learning tool, go beyond the written word, grasp the writer's intentions, and



critically interrogate text. The promotion of a reading culture has been identified as one of the key components of lifelong learning in curriculum reform.¹⁵

Summary of National Curriculum

Children in Hong Kong are taught reading formally when they are 6 years old in primary school. However, many students begin learning to read in kindergarten, and some children already read when they begin schooling. Schools are encouraged to draw upon the support of parents and the community in promoting good reading habits in students and encouraging a culture of leisure reading for every child at home.

In 2000, the Curriculum Development Council (CDC) established clear reading goals for schools. The whole school is expected to be involved in the promotion of reading and to help build a culture of reading within the school. Language teachers are expected to focus specifically on the teaching of reading strategies and skills, while other teachers are expected to broaden and strengthen children's reading ability by having students read for information and learning in every subject area. The librarian plays a crucial role in developing students' information-seeking skills.

Schools have the power to adjust the curriculum and timetable in order to meet the literacy needs of students. Innovative teaching strategies may be introduced in order to motivate students and to teach them reading comprehension. The effective use of reading schemes and reading programs help sustain students' interest and efforts in reading. At the same time, the availability of quality reading materials both in schools and public libraries is crucial for attracting students to read in school and at home.

The CDC has set goals for the Chinese reading curriculum. For example, in primary 1–3, students should:^{16, 17}

- Acquire basic reading abilities;
- Read different types of reading materials;
- Acquire vocabulary and sentence structures;
- Have a basic knowledge of language;
- Understand and become knowledgeable of the Chinese culture; and
- Develop positive habits and attitudes towards reading.

In primary 4–6, students should:

- Develop their basic reading abilities;
- Read different types of reading materials;
- Develop independent reading ability;
- Acquire vocabulary and sentence structures;
- Improve basic knowledge of language;
- Improve understanding and knowledge of the Chinese culture; and
- Develop positive habits and attitudes towards reading.

The CDC also outlines the following reading strategies.¹⁸ Students should:

- Use appropriate language knowledge and experiences to understand reading materials;
- Identify and use key words, sentences, and paragraphs in specific language situations;
- Raise expectations and ask appropriate questions to guide reading, and use inference and verification skills;
- Select different reading strategies to suit different reading objectives;
- Develop an interest in reading, positive attitudes, and the habit of reading for pleasure;
- Read independently for information and for pleasure to acquire knowledge; and
- Use their reading skills to access a range of reading materials.

Reading Instruction in the Primary Grades

Principles of good reading instruction for teachers include:

- Giving equal importance to teaching reading, writing, listening, and speaking;
- Teaching the reading process and reading strategies;
- Organizing reading activities;
- Providing students with reading material beyond that encountered in the normal curriculum to extend students' reading;
- Utilizing all resources in the school and public libraries to ensure that students read widely;
- Designing diverse learning activities to encourage students to read and share their ideas;
- Using rote learning of reading material to help students understand the nature of text and to advance their linguistic ability as a foundation for independent reading, but going beyond this to encourage independent reading; and
- Selecting passages that illustrate how different types of text are organized, and encouraging students to memorize key features.

Instructional Time

For whole-day primary and junior secondary schools, the total number of school days in a school year is a minimum of 190 days. For half-day primary schools the total number of school days is a minimum of 209 days.^{19, 20} In primary school, the percentage of time allocated for Chinese language education instruction (Chinese language and Putonghua) is 25–30%; in English, the percentage of time is 17–21%. In junior secondary schools, Chinese and English language education each are allocated 17–21% of the total instructional time.





Instructional Materials

Before the 2000 Education Reform Act, the focus of teaching was on prescribed texts and most Chinese language teachers tended to rely on textbooks. About 6 to 7 periods per week were assigned for Chinese language teaching. Chinese teachers tended to use most of their class time explaining texts, providing background information about the authors of the texts, reviewing vocabulary, and discussing the theme of paragraphs and the use of rhetoric. Some researchers noted that students did not have enough time to practice and use their language in the classroom, and one survey reported that 93% of teachers relied too heavily on textbooks.^{21, 22}

Since 2000, the CDC has suggested the extension of teaching materials to include webbased and audio-visual materials. However, online reading has not yet become popular with teachers.

Use of Technology

The introduction of information communications technology (ICT) has enabled students to independently access information at a time of their choosing. Teachers are encouraged to help students develop relevant knowledge, skills, and attitudes towards various uses of ICT, the Internet, and educational software. Programs are used that are able to give instant feedback and record a learner's learning progress, enabling personal assessment and monitoring of progress and learning.²³ An example of how ICT is used in reading instruction can be found in the website HK Reading City, set up by Hong Kong Education City to promote a school reading culture. The website provides online reading service and experience to students and recommends books and other reading resources for teachers and school librarians. It cooperates with publishers and book authors to deliver the latest information on reading materials to the public.²⁴ In 2005, 272,200 kindergarten and primary students accessed the Internet in Hong Kong.²⁵

Role of Reading Specialists

Language teachers and teacher-librarians are chiefly responsible for teaching reading, having received special training during teacher-training courses. Other reading specialists play little or no role in reading instruction in schools.

Second-language Instruction

In the education system, developed by colonial Great Britain, most schools used English as the medium of instruction and as a subject area. Chinese was little more than an auxiliary language compared with the prestigious position of English in government circles. When Hong Kong became a SAR of the People's Republic of China in 1997, the new government raised the status of teaching the mother tongue without weakening support for English-language learning. Chinese is currently the medium of instruction in the vast majority of primary schools, with English taught as a core subject beginning the first year of primary school education. From 1998, Chinese has been adopted as the medium of instruction in the junior-secondary sections of 329 schools. Some 110 schools still use English as the medium of instruction, and heavy emphasis continues to be placed on teaching English in all schools, particularly in prestigious schools.²⁶

Although schools have officially been encouraged to adopt Chinese as the medium of instruction, many are reluctant to move away from using English because of some parents' preferences for their children learning English.

In December 2005, the Government accepted the Education Commission's *Report on Review of Medium of Instruction for Secondary Schools and Secondary School Places Allocation.* It decided that the revised medium of instruction arrangement for secondary schools will begin in September 2010, and that the mother tongue will be the primary medium of instruction for secondary schools. English proficiency among students will nonetheless continue to be emphasized. If individual schools want to adopt English as the medium of instruction, they are required to fulfill three prescribed criteria: students must be able to learn a new language, teachers must be capable and knowledgeable, and relevant support measures need to be in place. These are and will continue to be subject to review every 6 years for quality assurance. All schools, irrespective of their medium of instruction, are asked to ensure high levels of students' English proficiency as an integral part of educating the younger generation to become bilingual and trilingual.²⁷

Effective Practices

A 2-year pilot project, the *Primary Literacy Program—Reading for Key Stage 1*, was launched on a voluntary basis by the EMB in 104 primary schools in the 2004 school year. The goal of the project is to foster students' English-language proficiency through a suitable literacy program that focuses on reading and recruiting the experience and expertise of native English teachers in primary schools. The program also supports recruiting parents to encourage students to read at home. Building on the success of a pilot project, the EMB extended the program to another 67 primary schools in the 2006 school year.²⁸

The Standing Committee on Language Education and Research on Language Teacher Education and Qualifications has supported the *Reading Ambassador* and *Reading Contract* projects organized by the HKEdCity since 2004. In June 2006, 2,500 Reading Ambassadors had been trained to read and share their perspectives with students in over 150 secondary and primary schools. About 1,500 of these ambassadors are parents, and 900 of them are students from tertiary institutions and secondary schools. The rest include some teachers to be and community leaders. The number of participating students in the *Reading Contract* project, who commit to reading at least 10 books during summer holidays, increased dramatically from 43,000 in 2004 to over 300,000 in 2005.²⁹

Traditionally, students learn Chinese characters by repeatedly copying them until they can reproduce their form and pronunciation from memory—not an easy task. Most of the characters students are required to learn are selected on the basis of their frequency in adult written communications, rather than in everyday child usage. The process takes many years and is perceived by students as laborious and boring, thus



TIMSS & PIRLS International Study Center Lynch School of Education, Boston College hampering children's ability to read Chinese and acquire a love of reading and writing Chinese for pleasure.

An innovative approach to teaching Chinese characters, which serves as a foundation for subsequent learning, has been developed based on the "phenomenographic" approach to learning. Learning starts with the students' own language, and characters are introduced and used in contexts meaningful to the student, with attention being drawn systematically to similarities in structural features, written forms, and pronunciation. Characters are learned in relational clusters, and teachers use similarities and variations among related characters in the clusters to highlight and emphasize crucial aspects of Chinese characters and words in general. More than 200 primary schools in Hong Kong have adopted this approach to teaching Chinese characters, demonstrating the strength of support for the efficacy of the approach.

There also are many effective school-based reading systems and endeavors. For instance, many schools have trained Reading Mothers to help students read stories. Teachers allocate generous amounts of time to reading and ensure that children have every opportunity to read intensively, practice and apply reading strategies, and develop fluency. The most accomplished teachers focus on using meaning-based and student-centered approaches, but they do not neglect teaching children the essential knowledge, skills, and strategies required for decoding, using context, and developing fluency and comprehension. In addition, skillful teachers of reading expose children to a wide range of different print genres, ensuring that the children are not restricted to classroom textbooks. Having children select their own reading materials and books is constantly encouraged.

Reading Disabilities

The early identification of children with special educational needs and reading disorders is very important. The government provides assessment services to identify hearing, speech, and learning behavioral problems among school-age children. Children with special education needs are integrated into ordinary schools as much as possible. Special provision and services are provided for the children who have visual, hearing, mental and physical disabilities, and maladjusted children. More expertise is needed in schools to support children who find learning to read and write difficult and require remedial intervention. Individual schools use their own discretion to decide when to provide assistance for students with reading disabilities.

Teachers and Teacher Education

From kindergarten to the tertiary sector, there are a total of 70,654 teachers in Hong Kong's education system. Teachers are employed on either a full- or part-time basis, with most working full time. Primary and secondary schools have the largest pool of teachers. In the 2005–06 school year, 38.9% of teachers were working in secondary schools, 33.2% in primary schools, 16.1% in kindergartens, and 7.8% in tertiary institutions under University Grants Committee funding. The remaining 4% were working in special schools and other institutes.³⁰

Teacher Education and Training

Preservice and in-service teacher education programs, at both non-degree and degree levels, are provided by tertiary institutions and are funded through the University Grants Committee. Beginning in the 2004–05 school year, all new graduates from preservice teacher training programs for primary and secondary school teachers have been awarded degrees.

Since 1994, the government has been upgrading many teaching posts in government and government-aided primary schools to graduate-level positions. It was anticipated that graduate teachers would fill a target level of 35% of primary school posts by 2001–02. By the end of the 2004–05 school year, 89% of principals and 65% of teachers in primary schools, and nearly all principals and 90% of teachers in secondary schools held university degrees.³¹

As part of the government's comprehensive strategy to enhance students' language proficiency, proficiency levels have been specified, and benchmark requirements for English and Putonghua teachers have been established. From the 2004 school year, teachers wishing to teach English and/or Putonghua have been asked to demonstrate basic language proficiency before being permitted to take up any language teaching post.

Teacher In-service Education

In-service professional development courses for teachers are provided by the government's Education and Manpower Bureau, universities, and other professional organizations. Training programs also are provided in order to enhance teachers' professional knowledge and their ability to meet the learning needs of students. Such programs also help teachers keep abreast of new teaching techniques and curriculum innovations.

Examinations and Assessments

Reading comprehension is routinely tested as part of language instruction in the classroom. The Hong Kong Examinations and Assessment Authority (HKEAA) organizes public examinations yearly. In terms of external examinations, the Hong Kong Certificate of Education Examination (HKCEE) is a centralized public examination used for Secondary 5 graduates to test their eligibility to secure admission to Secondary 6 and 7 upon graduation. In 2005, 119,471 candidates took the examination.³² These candidates were eligible to apply for subsidized Secondary 6 places, but only 23,814 such places were allocated in 2000–2001.

The Hong Kong Advanced Level Examination (HKALE) is a public examination set for Secondary 7 graduates to test their eligibility to gain admission to tertiary education institutions. In 2001, 36,099 candidates took the examination.

The HKCEE Chinese and English Language examinations recently have been revised. Reading, writing, listening, speaking, and integrated language skills will be assessed in new examinations introduced in 2007. Standard-referenced reporting will be adopted for these subjects.

The HKEAA has reviewed the subjects in the HKCEE based on analyses of curriculum change and needs. Two new subjects, namely science and technology and integrated



humanities, and the merged subject of computer and information technology (from computer studies and information technology) were introduced in the 2005 HKCEE. Based on the CDC's proposal, the HKEAA has approved the removal of five HKCEE and three HKALE subjects in 2007.

Standardized Tests

The government is preparing three standardized tests: the Basic Competence Test, the English Language Proficiency Test, and the Chinese Language Proficiency Test.

The Basic Competence Test is comprised of the Student Assessment and the Territory System Assessment. The Student Assessment is an online assessment program to help teachers better understand the learning needs and problems of students in Chinese, English, and mathematics, so that timely assistance can be provided to enhance learning effectiveness. The Territory System Assessment provides school management with useful information on students' standards at the end of each key learning stage (Primary 3 and 6 and Secondary 3) in the three subjects mentioned above. Thus, the system assessment provides feedback to schools on learning and teaching, curriculum enrichment, and improvement of teaching. The Territory System Assessment framework. The government also provides support to schools in need of guidance.

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Hungary

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Language and Literacy

In the Republic of Hungary, the official language and language of instruction is Hungarian. However, some minorities, such as Croatians, Germans, Romanians, Serbians, Slovaks, and Slovenes have their own institutes within the system. In the 2005–06 school year, 4.5% of students attended minority-operated mother-tongue, bilingual, or languageteaching schools and kindergartens.¹ Since 1999, additional minority education classes have been organized when there are at least eight parents of the same minority group in a settlement whose mother tongue is not Hungarian. If the number of children is insufficient, parents may request that the local government organize mother-tongue and culture classes in connection with school education. These classes are operated as a department of the school, a separate language school, or traveling teachers can be hired. Since 2004, classes have existed in Bulgarian, Greek, Polish, Armenian, Ruthenian, and Ukrainian. The largest minority in Hungary is the Gypsy community; their institutions of cultural education cater to 3.2% of children.²

Emphasis on Literacy

A major literacy initiative in Hungary is *Book Week*, organized by the National Committee of the Hungarian Publishers and Circulators. Held annually in the first week of June, the primary goal of *Book Week* is the promotion of contemporary literature. Since its inception in 1927, this initiative has turned into a series of events nationwide.

Due to the fact that people spend less time reading now than in the past, along with the results of international evaluation studies, new literacy initiatives were developed. These include a series of events called *The Year of Reading*, held annually since 2001, as well as the annual event called the *Days of Children's Literature*, to encourage reading.

Overview of the Education System

The Public Education Act LXXXIX of 1993 specifies who can open and operate institutes of public education. These include state, regional, and national minority governments; registered religious legal entities; nationally founded economical organizations; foundations; fellowships; and native-born individuals.

The largest organizer of schools is the state itself, and most state-operated schools and student halls are maintained by the local governments. Some special vocational training institutions (e.g., police, military) are operated by ministries or budgeted organizations.

Religious institutions maintain another substantial proportion of schools, and foundation schools are the smallest group.

The state is responsible for financing the public education system and the institutions related to it. This is done primarily through a monthly subsidy, dependent on the number of children attending a school, which is distributed by the Ministry of Education to those responsible for school management. Other operational costs are paid by the organization responsible for the school. Religious institutions can obtain additional state financing if they perform duties in the public education system.

Structure of the Education System

In Hungary, compulsory education is for children up to 18 years of age and consists of three levels: kindergarten, elementary, and secondary. Figure 1 shows the structure of the education system from preprimary through higher education.

Although children are generally enrolled in kindergarten at age 3, mandatory enrollment is age 5. This education level provides for character development, preparation for integration into the community, differentiated development for socially disadvantaged children, directing children towards a healthy lifestyle, emotional education, and overall development of skills and competencies. Instructors are required to have a bachelor's degree. The Educational Program for Kindergarten contains the educational goals and tasks, as well as the pedagogical basics and methods published by the Ministry of Education.

Elementary education is mandatory for 8 years and is free. The Public Education Act divides the eight grades into four 2-year periods: introductory (1–2), beginner (3–4), basic (5–6), and developmental (7–8). Although elementary schooling does not have an exit examination, vocational schools and secondary grammar schools have the choice to require written entrance examinations in mathematics and language arts. These examinations use centrally published test booklets that contain common requirements.

Secondary education features three types of schools: vocational, grammar, and secondary vocational schools. In vocational schools, grades 9 and 10 devote up to 40% of instruction to career-oriented and vocational training, in addition to the basic subjects. Further vocational grades prepare students for vocational examinations listed in the National Vocational Qualification List; students leaving this school type do not take a final examination. Grammar schools teach basic subjects with a concentration on those included in the final examination and tertiary studies, as well as prepare students to enter the work force. About two thirds of these schools operate four grade levels (9–12), but the number of schools that enroll students for 6 or 8 years is increasing. Students can enter these schools after the fourth or sixth grade of elementary school.

Secondary vocational schools feature characteristics of both the grammar and the vocational schools, where the first 4 years are spent teaching the basic subjects and knowledge necessary for later training. At the end of the fourth year, students take the final examination and spend the next 1–3 years preparing for a technical examination. The secondary grammar and secondary vocational schools end with a two-level (intermediate and advanced) final examination that determines entrance to tertiary education.

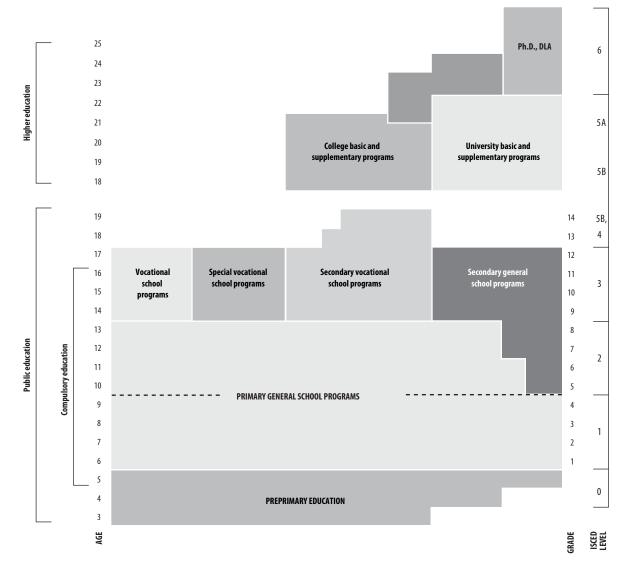


Figure 1 Structure of the Education System

In the 2005–06 school year, 23% of students studied in vocational schools and 77% studied in grammar schools or secondary vocational schools.³

Reading Curriculum in the Primary Grades

Reading Policy

Reading instruction is regulated by the National Core Curriculum, which includes the goals and tasks, and the Curriculum Framework, containing the actual educational components. According to these documents, the primary goal of reading instruction in the first four grades is to make reading a basic skill and enable students to comprehend the texts and instructions in school books using silent reading. Students should learn to retrieve information and use it in new tasks. In this stage of their education, students learn to read expressively aloud and form a basis for analytical, critical, and creative reading. In the curriculum, the first two grades are intended to serve developmental purposes, and there are no set goals for the end of the first year. At the end of this

introductory phase, students are expected to be able to read a known text aloud without breaks. By the end of grade 3, students are expected to be able to read and understand a half page of literary or expository text. By the end of grade 4, students are expected to be able to read a known text aloud after some preparation and read age-appropriate texts silently, understand their meaning, and communicate their central ideas.

Summary of National Curriculum

The National Core Curriculum and Curriculum Framework regulate the time and content framework for reaching the above-mentioned goals, methodology, and types of activities. Preparing students to read and write are the first tasks in the introductory phase. During this period, it is mandatory to practice speech recognition and comprehension, identify and name sounds and noises, role play, and imitate movements. Students starting school have to familiarize themselves with the usage of the terms sentence, word, voice, and letter. They have to be able to detect the sequence of sounds within a word, and develop hand-eye coordination. During this period, students also are asked to break words up into syllables and sounds and given synthesizing exercises to form syllables, words, and sentences and then break these up again.

To prepare for reading and writing, students clap, draw rhythmic lines, and develop gross and fine movements. In the final stage of preparing for learning to read, students learn to use words, reproduce stories, navigate a textbook, recognize similarities and differences between shapes, and get used to the right position required for reading and writing.

In first grade, 80 hours are allocated for teaching reading's system of signs. During this period, students learn grammatical terms such as vowel, consonant, sentence, word, long and short sounds, and the alphabet. They observe the usage of capital letters and punctuation. Other lessons include the proper articulation of vowels, learning small and big printed letters, combining letters, reading words, learning syntax, and saying sentences aloud and explaining their meaning. They also practice reading aloud and learn the basics for silent reading through exercises and texts. The goal of this phase is to prevent and correct any severe mistakes in the reading technique.

Although there are no set requirements that a student must possess before entering the next level, grade 2 implicitly assumes that students have acquired the reading skills taught in grade 1. During the phase of literary reading and comprehension development, students must prepare short oral presentations about what they have read. They must be able to name the topic, plot elements, identify characters, evaluate and summarize the story line, and observe the word usage of the texts they read. Grade 2 considers proper pronunciation, tone, beats, and rhythm to be the most basic elements in developing reading skills. The goal is to achieve the speed of reading aloud that matches the natural speed of students' speech and practice silent reading through exercises and increasingly self-sufficient work.

Reading comprehension and evaluating characters' actions and qualities are among the grade 3 requirements. Students start to familiarize themselves with the basics of creating outlines and highlighting central ideas. To advance to the next grade, students

Hungary

must also be able to differentiate between poetry and prose, respond to basic questions, and answer composition tasks pertaining to the texts.

Grade 4 is concentrated primarily on developing tools for general understanding. New elements include structure, space, and time; highlighting connections; and condensing and expanding sections. By the end of grade 4, students are expected to be able to compose their view of a story and their reading experiences.

Mandated Materials for Reading Instruction

The Ministry of Education creates a list of approved publications from which teachers can select their textbooks and teaching aids. In addition to textbooks, the Ministry of Education regulates, by law, the teaching aids to be used in reading instruction. Teachers have to use flash cards and play dough (to develop fine-motor skills), colorful letter cards, reading puzzles, and projected reading sheets to help students learn the system of signs for reading.

During grades 2 through 4, teachers are required to use recordings that show students how to practice breaks, rhythm, emphasis, and tone; demonstrate the use of phonetics; and break up compound sentences.

Reading Instruction in the Primary Grades

According to the National Core Curriculum, grades 1 to 4 should spend 32–42% of instructional time teaching literature and grammar, which is combined into the class period devoted to Hungarian. Schools decide on the number of class periods devoted to Hungarian based on their own local curriculum, which is prepared on the basis of one of the ministry-approved curriculum frameworks. This results in 7 to 10 Hungarian class periods each week, depending on whether the week's focus is on the development of mathematics or reading skills. Classroom teachers are responsible for all pedagogical tasks related to reading instruction, and reading specialists are not available. Students with special education needs, whose work is based on a specific curriculum, have 20 Hungarian classes each week in the first term, which drops to 9 in the second term. Specific reading instruction, practice, and developing reading skills take 40–64% of special education instructional time.

In addition to Hungarian classes, the National Core Curriculum allots 2–6% of total class time to the teaching of a modern foreign language, the most popular being English, followed by German and French.

Instructional Materials

The textbook series used in the first four grades consist mainly of alphabet books, practice books, workbooks and, in higher grades, storybooks. The Ministry of Education does not recommend one particular reading method over another, although the four most commonly used textbook series all use the sounding-analyzing method and focus on teaching the system of signs used for reading in early instruction. Some publishers provide differentiated workbooks for those students who progress faster or slower in



their reading, while others place great importance on developing a subset of skills and preventing dyslexia.

Use of Technology

Although the numbers of students using a personal computer and teachers using the Internet for teaching purposes have been increasing, information technology only appears as a supplemental tool in the process of reading instruction.

Reading Disabilities

In Hungary, the pedagogical expert service system supports parents and teachers of students with learning disabilities. The most notable of these are training/counseling centers and speech centers run by local governments. The counseling centers diagnose, give advice, and treat the educational and psychological impediments to learning. They also conduct school readiness examinations for children who are about to start schooling but have not attended kindergarten and offer family counseling.

Diagnostic Testing

There is no national diagnostic study assessing reading or learning disabilities. However, pediatricians are required to examine 5-year-old children in order to assess school readiness, and parents are required to note if any of their family members had learning disabilities. The pediatrician can suggest further testing or developmental training, if deemed necessary. Kindergarten and elementary school teachers have evaluation devices to assess subsets of abilities (e.g., speech, hearing, fine motor skills). Use of these devices is becoming more widespread but is not mandatory.

Special Education

Should parents suspect that their child suffers from dyslexia or dysgraphia, they can ask for an expert examination; schools or child-protection institutions also can call for these examinations after notifying the parents. Once dyslexia is identified, a small percentage of parents choose speech correction courses offered by training or speech centers. Fewer than 10,000 children attended these in 2005–06. Another possibility is choosing an institute of public education that offers an integrated or special education needs-based curriculum to prioritize the training of students with speech impediments or dyslexia. The ministerial act regarding students with special education needs recommends institutes with integrated teaching. Special education schools or classes are recommended only when there is a need for intensive rehabilitation.

In 2005–06, 1,450 public education institutes provided integrated training and 41 used intensive rehabilitation based on a curriculum prepared for students with special education needs. Education policy seeks to improve the chances of students with dyslexia entering tertiary education by allowing for exemptions from the written part of the final examination if an expert vouched for the necessity of this in the previous 2 years.

Teachers and Teacher Education

In Hungarian elementary schools, one teacher teaches all subjects to the students and works with them through the end of grade 4. The overwhelming majority (87%) of primary school teachers are female. Teachers working at state-financed institutions are public servants; their salaries are regulated by the public servants' pay grades. Teaching on a lower-elementary level requires a bachelor's degree from a tertiary educational institution, which can be earned in eight terms (240 credits). Classroom teachers can teach specific domains in grades 5 and 6, in addition to their work at the lower-elementary level.

Training classroom teachers takes place at teacher training colleges that are independent institutions or parts of universities. The courses for classroom teachers fall into five basic domains:

- Basic knowledge: Social sciences, pedagogy, psychology, and information technology;
- *Professional subject modules*: Hungarian grammar and literature, mathematics, science, music, visual arts and crafts, life skills, physical education, and the methodology for each;
- *Differentiated professional knowledge*: Foreign language; special needs education; child safety; domain-specific knowledge; family, child, and youth protection; and public communication;
- *Compulsory specialization module*: Hungarian grammar and literature, mathematics, science, music, visual arts, crafts and life skills, physical education, foreign language, people and society, nature/science, and information technology skills; and
- *Student teaching*: Internship, microteaching, camping, and 8–10 weeks of professional practice outside the institution.

Classroom teachers' training ends with an in-classroom teaching examination and a state examination.

Teacher In-service Education

The Public Education Act requires all teachers to participate in regular in-service training. Schools must create an in-service education plan for every 5-year period, and teachers can apply for courses listed in these plans. Teachers are required to take at least 120 hours of in-service training every 7 years. Teachers that participate in the training receive a financial reward, while those who do not risk losing their jobs.

If a teacher attends courses for in-service training, the number of classes he or she is responsible for can be reduced. Furthermore, the employer may cover the total costs of training. Generally, the school covers 80% of training costs; coverage of the additional costs (e.g., travel, accommodations) is different in each case.

Subject examination preparatory courses have the highest rank in in-service training. These are usually education management, pedagogical, and professional services-related courses. However, assessment and evaluation courses also are becoming more popular.



After completing a subject examination preparatory course, teachers advance a step on the pay grade, can request to be included in the national listing of experts, and can undertake specialized public education tasks.

Examinations and Assessments

Since 2001–02, Hungary has administered its National Assessment of Basic Competencies (NABC) four times to examine student performance in mathematics and reading. Since 2004, all students in grades 6, 8, and 10 take part in the testing. The assessment measures whether students can use their skills and knowledge to solve everyday situations, and does not focus on textbook knowledge. The NABC benchmarks student performance along four levels of competency. Schools, and the organizations responsible for them, receive a report and data analysis software that enables them to study their students' performance and locate their school on these benchmarks. Parallel to the NABC study, the testing of fourth-grade students' basic reading, math, problem-solving, and writing skills began in 2005–06. The Public Education Act guarantees the annual administration of these tests. The same law requires that schools observe the performance of their school as part of their quality-control programs.

Mandatory testing of crucial basic competencies started in the first grade of elementary school in 2006–07, in order to reduce the disadvantages caused by the differential developmental rate of students. The Ministry of Education provides an evaluating kit, called the Diagnostic Development System, without a fee to all institutes.

Monitoring Individual Student Progress

The performance and progress of students is regularly evaluated through grading. Teachers use these grades to form midterm and end-of-term grades. The head-of-class teacher notes a grade for the student's conduct and diligence after consulting with the other teachers also working with that student.

The school informs parents about student performance on a regular basis. Students keep a booklet with their grades and school notices that parents and their head-of-class teacher sign every month. Additionally, the school sends notices to parents via the students at the midterm and the end of the school year.

Grading is as follows in higher elementary and secondary education: excellent, 5; good, 4; mediocre, 3; sufficient, 2; and insufficient, 1. When evaluating conduct and diligence, 5 refers to exemplary and 2 to bad (insufficient cannot be given).

In grades 1–3 and at the midterm in grade 4, teachers have to present a written evaluation of whether the student's progress is excellent, good, adequate, or if the student requires tutoring. Additionally, teachers must give a detailed evaluation of the student's speech, oral expressiveness, and performance on the basic domains of culture and the student's attitudes.

Should a student need tutoring, schools have to evaluate student performance with the parents, note the factors impeding progress, and suggest further measures. Schools do not usually suggest repetition of a school year in the lower-elementary level, although parents can ask that their child repeat the year.

Suggested Reading

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Нипдагу



Iceland

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Language and Literacy

Icelandic is the official language of the Republic of Iceland and has been spoken in Iceland since the country was settled in the latter part of the 9th century. The language evolved from Old Norse and belongs to the northern branch of Germanic languages within the Indo-European family of languages. Icelandic is used in all aspects of daily life, including the government, schools, business, and mass media. English and Danish also are used as second languages in primary schools.

Emphasis on Literacy

Iceland has a rich literary history that includes written poetry and prose dating back to the Middle Ages. The country currently has four daily newspapers, two of which are free of charge and delivered to all homes. In 2003, there were three newspapers, with a combined circulation of 579 per 1,000 inhabitants.¹ The public library system had 128 branches with 102,500 registered users in 2001. In that year, a total of 2,173,500 volumes were loaned, averaging 7.59 volumes per inhabitant, and a total of 81,500 volumes were added to the public library book collection.² In 2000, 154 children's books were published in Iceland, along with 1,813 books for adults.³

In Iceland, there is a special emphasis on literacy. On Icelandic Language Day, held annually in autumn, all compulsory schools are encouraged to celebrate the Icelandic language and literary heritage. This day initiates a collective reading program for all seventh-grade students that continues through March of the following year, during which teachers focus on reading and verbal presentations. The program ends with a ceremony in each district where the participating students are given the opportunity to read aloud for a crowd.

Overview of the Education System

In 1996, the structure of the education system became decentralized, giving financial and professional independence to compulsory schools. Since that time, local authorities have been primarily responsible for operating schools and implementing the Compulsory School Act. In spite of this structural change, the role of the Ministry of Education, Science, and Culture in educational affairs is still crucial to the operations of the country's schools. The Ministry defines schools' goals and monitors outcomes and oversees the

collection and distribution of statistical information, student enrollment, and teaching staff. The Ministry also monitors the quality of the schools and reviews schools' self-evaluations. Another primary function of the Ministry is to provide and maintain the *National Curriculum Guide*, which outlines the content and structure of compulsory school study.

In 2005, Iceland's total public expenditure on education amounted to 7.7% of its total gross domestic product, with 5.2% spent on primary, secondary, and post-secondary non-tertiary education.⁴

Structure of the Education System

Education in Iceland has been compulsory for children since 1907, when it applied to children ages 10–14. At present, the Compulsory School Act mandates that local authorities provide schooling for all children and youths between the ages of 6 and 16. The act also mandates a 9-month school year that runs from late August to the beginning of June, during which students must have a minimum of 170 days of instruction.

As shown in Figure 1, the Icelandic education system consists of four major levels: preschool, compulsory, upper-secondary, and higher education. The compulsory level refers to grades 1 to 10. Of these, grades 1 to 7 are considered primary, and grades 8 to 10 are considered lower secondary. The upper-secondary level begins the year a student turns 16 years of age and is typically completed when the student is 20 years old.

In 2007, there were 173 compulsory schools in Iceland, the majority of which were state run. Of these, there were only four specialized schools for students with developmental problems and/or mental disabilities. There also were seven private schools approved by the Ministry, attended by approximately 1% of compulsory school students.⁵

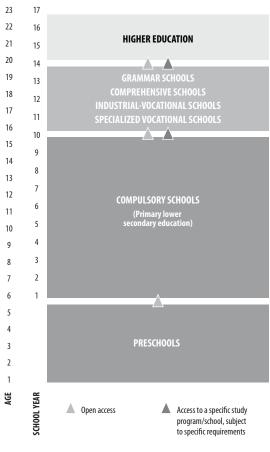
The *National Curriculum Guide* contains content specifications for nine areas of study that apply to all grades in the primary and lower-secondary levels. All students in grades 1 to 10 receive instruction in Icelandic, mathematics, home economics, physical education, arts, crafts, natural sciences, and social and Christian studies. Reading and writing are taught as part of Icelandic. Training in reading and writing is continued throughout the primary and lower-secondary levels. Foreign-language instruction begins in grade 5 (English) and grade 7 (Danish).⁶

Upper-secondary education begins at the end of compulsory school and extends up to the university level. There are four main types of upper-secondary schools in Iceland. These include the following:

- Grammar schools that have academic courses only;
- Industrial-vocational schools that have vocational courses to prepare students for skilled trades and other vocations;
- Comprehensive schools that have academic courses comparable to those offered by grammar schools and vocational training comparable to that offered by industrial-vocational schools; and
- Specialized vocational schools that provide training for specific vocations.

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Figure 1 The Education System of Iceland



SOURCE: Ministry of Education, Science, and Culture (2002). The educational system in Iceland. Reykjavik: Oddi

Role of Preprimary Education

The Ministry of Education, Science, and Culture formulates education policy for preschools, and the majority of preschool institutions are public. Though preschool is available for children as young as 18 months, only a small proportion (15%) under the age of 2 was enrolled in the 2005–06 school year. This increases dramatically for children ages 2 to 5, with 92% enrolled in preschool the same year.

Reading Curriculum in the Primary Grades

Reading Policy

The *National Curriculum Guide*, published in 1999 (a draft of a new curriculum guide was published in March 2006) and issued by the Ministry, defines and describes the common study objectives for compulsory schools and specifies the minimum number of instructional hours for individual subjects, including reading and writing. The curriculum for the first 4 years of instruction in primary school emphasizes the importance of basic literacy and numeric skills.

Summary of National Curriculum

The *National Curriculum Guide* for Icelandic outlines final objectives in reading and writing that should be reached by the end of compulsory school. The final objectives are



further divided into intermediate objectives that should be reached by the end of grades 4, 7, and 10. These intermediate objectives are used as the basis of instruction and are tested in the mandatory national examinations. The intermediate objectives are broken down into enabling objectives that are used as guidelines for the implementation of language instruction by teachers, parents, and students. A school may decide to modify these guidelines for its individual school curriculum.

In the first four grades of primary school, the main emphasis is on basic training in reading and writing. A substantial part of the 6 hours of Icelandic language instruction each week is devoted to teaching the students to form letters, recognize the direction of writing, and develop fine motor skills. Attempts also are made to find suitable material for those students who are already able to read when they start school.

The goals related to mastering basic reading skills by the end of grade 4 are the following:

- Reading aloud and in silence at reasonable speed;
- Reading and understanding simple stories and poetry;
- Understanding and using basic punctuation; and
- Reading Icelandic subtitles accompanying foreign material.

The student will use reading skills for educational and entertainment purposes, including:

- Reading and understanding texts appropriate for their level;
- Using books to gather information for assignments and projects; and
- Reading and following simple instructions.

The student will have acquired a positive attitude towards reading, including:

- Becoming immersed in books;
- Reading texts appropriate for their level as entertainment; and
- Reading books of their own choosing.⁷

The goals related to reading for students at the completion of compulsory school (grade 10) include the following:

- Acquiring a good command of reading various types of text presented in various ways;
- Knowing necessary concepts and symbols regarding reading and grasping various types of reading (e.g., reading in depth, skimming, and searching);
- Being interested in reading and having a positive attitude towards reading;
- Realizing the importance of literacy in today's information-based society;
- Using reading skills to acquire information;
- Being familiar with reading texts on a computer monitor and on the Internet;
- Reading texts critically; and
- Reading texts from various historical periods.⁸

Mandated Materials for Reading Instruction

Compulsory schools are generally provided with course materials and teaching aids from The National Centre for Educational Materials (NCEM). The NCEM is a member of two international associations, the International Group of Educational Publishers and the International Council for Educational Media.¹⁰ The NCEM publishes and provides a wide variety of educational material consistent with the national curriculum, such as books, online material, videos, and CDS. Textbooks and workbooks form a major part of these publications, most of them written in Icelandic, though some are translated from other languages. Educational videos are either produced in the country or imported. The publication of online educational material increases each year with the growing emphasis on information technology in schools. The NCEM also collaborates with teachers and principals on individual academic programs.

Reading Instruction in the Primary Grades

Instructional Time

There is a minimum of 170 school days per year in Icelandic schools. Under the Compulsory School Act, students in grades 1 to 4 are entitled to a total of 30 lessons per week, each 40 minutes long, over the 9 months of the school year. This includes six lessons per week in Icelandic-language arts, consisting of reading and writing, verbal presentation, audio and visual comprehension, literature, and grammar. Students in grades 5 to 7 are entitled to 35 lessons per week and in grades 7 to 10, 37 lessons per week. At these levels, five lessons each week are devoted to Icelandic language arts.

The *National Curriculum Guide* for Icelandic is divided into four areas: general mother-tongue instruction, Icelandic instruction for immigrant children whose mother tongue is not Icelandic, Icelandic for the deaf, and sign language for the deaf. In total, 19% of school time is spent on Icelandic at the conclusion of 10 years of compulsory education. This reflects the policy of education authorities that good reading skills are essential in order to participate in a democratic society and that literacy is the basis of general education.

Icelandic	19%	Arts and crafts	11%
Mathematics	17%	Modern languages	11%
Natural sciences	9%	Home economics	4%
Social and religious studies	10%	Information communications technology (ICT)	6%
Physical education	10%	Life skills	2%11

Table 1Approximate Division of Total School Time Between Subjects at the Conclusion of Ten Years
of Compulsory Education



Use of Technology

The *National Curriculum Guide* emphasizes the importance of information communications technology (ICT) as the basis for lifelong learning. It maintains that each student should become independent in his or her search for information in all kinds of media. In general reading education, ICT is used as a supplement to other methods. The ICT policy concerning reading and writing skills assumes that by the end of fourth grade students should be able to:

- Use computers to write their own text;
- Read text on a screen with the same result as when reading a book;
- Read hypertext;
- Use educational software as a supplement in all subjects;
- Make simple web pages;
- Differentiate between literary text and informational text; and
- Search the Internet and a simple encyclopedia.¹²

Role of Reading Specialists

In Iceland, reading specialists play a small role in the reading instruction in primary schools. General class teachers receive some training in reading instruction during their education and are in charge of teaching literacy in primary schools. There are special education teachers in most schools who are responsible for special instruction in all subjects, including teaching children with reading difficulties. Special education teachers also supervise the general class teachers when it is necessary.

Second-language Instruction

Icelandic as a second language is a subject for those students who do not have sufficient command of Icelandic to be able to pursue their studies. According to the *National Curriculum Guide*, special Icelandic instruction for immigrants should be adapted to the student's educational situation, as well as to their linguistic and cultural background. For this reason, students can be exempted from studying specific subjects and from taking national examinations. A special syllabus applies to these students, in which a final goal, intermediate goals, and subgoals in reading and writing are defined.

Reading Disabilities

Diagnostic Testing

A small number of diagnostic tests are in use for students of compulsory school age. They are used almost exclusively by special education teachers to diagnose reading difficulties and identify areas of teaching emphasis for individual students with serious reading problems. It is fairly common for students, starting in first grade, to be given a general screening test to identify which of them are likely to have learning difficulties. Most of these tests are translated adaptations of foreign tests. Additionally, the national standardized examinations in reading and orthography at the beginning of the fourth grade are sometimes used to identify students with reading disabilities that have not already been diagnosed.

Special Education

Icelandic students' reading abilities are assessed regularly by the classroom teacher. Those who have reading difficulties are given support or special teaching starting in first grade, for various lengths of time. If they fail to make normal progress, their reading difficulties are assessed by a special teacher and a psychologist. Students who are diagnosed as having dyslexia receive regular, individualized teaching, which generally continues throughout their schooling and is given either by special education teachers or under their guidance. In most cases, students with dyslexia are given private lessons during school hours or taught in small groups of three or four students outside the classroom.

Teachers and Teacher Education

Teacher Education and Training

Compulsory school teachers are hired by local municipalities and work either full time or part time. In 2005, female teachers comprised around 78% of the total teaching force at compulsory schools, and 13% of teachers were not fully licensed.¹³

There are three ways to become a fully licensed teacher. Having completed the Matriculation Examination or its equivalent, one can be trained as a general teacher at the University of Education (Kennaraháskóli Íslands) or the University of Akureyri in a 3-year program. It also is possible to receive the same training in a distance-learning course, which lasts 4 years. Finally, to become a teacher at the lower-secondary level special training is provided at the University of Iceland. In this case, a bachelor's degree (3 or 4 years of study) is a prerequisite for teacher training, which lasts 1 year, or one semester if applicants have a degree beyond a bachelor's. Courses are both academic and practical and lead to the awarding of teaching qualifications.

At the primary level, the same teacher instructs a class in most subjects. At the lowersecondary level, teachers generally teach one or more subjects to a number of different classes. Teachers may or may not continue with the same group of students from one year to another.¹⁴

Teacher In-service Education

Each year, teacher training institutions offer a variety of courses for in-service training of teachers. These courses include training in the use of new material or teaching aids or enhancement of skills in computer science, syntax, grammar, music, and classroom management. Participation in in-service training or continuing education is not compulsory.



Examinations or Assessments

National or Regional Examinations

Standardized national examinations are held in grades 4, 7, and 10. These examinations are held in October in grades 4 and 7 and at the end of the school year in grade 10. They are intended to do the following:

- Evaluate to what extent the goals of the *National Curriculum Guide* have been reached;
- Provide a guideline to determine which students need special education support;
- Provide an overview of educational accomplishments for individual students, parents and schools; and
- Show how individual schools stand in relation to each other.¹⁵

Icelandic (reading, spelling, writing, vocabulary comprehension, and grammar) and mathematics are tested in grades 4 and 7. The national coordinated examinations at the end of compulsory education at grade 10 are optional. Students can choose if and how many nationally coordinated examinations to take. Since the 2002–03 school year, students have been able to choose between six subjects: Icelandic (including reading comprehension and spelling), mathematics, English, Danish (or Swedish or Norwegian), natural sciences, and social sciences. These examinations are developed, marked, and organized by the Educational Testing Institute. Marks ranging from 1 to 10 are awarded (10 being the highest), based on predetermined criteria. The purpose of these examinations is similar to those at the lower grades. In addition, students' scores on these examinations are used when applying for upper-secondary education. At the end of compulsory schooling, all students receive a certificate stating their marks on both the nationally coordinated examinations and all other courses completed in their final year at school.¹⁶

Standardized Tests

Very few standardized reading tests have been published in Iceland for children in compulsory school. These tests are used mainly for identifying reading difficulties, and are generally administered to whole classes in grades 1 and 2. In 2006, the Icelandic translation and standardization of the Weschler Intelligence Scale for Children, Fourth Edition, (WISC-IV) was published and is used in special cases for general intelligence screening of students 6 to 16 years of age.

Monitoring Individual Student Progress

Examinations and assessments, other than the national examinations, are usually written and carried out by individual teachers and schools. The way in which reports on students' progress are compiled varies greatly. The assessment can be in the form of a numerical or letter grade or an oral or written commentary. Reports are given at regular intervals throughout the school year and at the end of each year to monitor progress and identify if interventions are needed. In primary school, students are promoted automatically to the next grade.

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Indonesia

Burhanuddin Tola Ministry of National Education

Language and Literacy

Bahasa Indonesia is the official language of Indonesia, although English and Dutch are also widely understood among the educated population. Bahasa Indonesia is also the primary language of instruction in schools. However, primary teachers in some districts provide mixed instruction in Bahasa Indonesia and children's mother-tongue language. There are over 700 regional languages in Indonesia, such as Minangkabau, Acehenese, and Javanese.¹ In some international schools (for children of diplomats) and Islamic schools, English and Arabic are common languages.

Emphasis on Literacy

According to the national education policy, students in grades 1–4 should achieve reading competencies such as understanding text, comparing one text to another, understanding the implicit meaning of a text, and reading various specific texts (e.g., the dictionary, encyclopedia, schedules, and telephone guidebook).

Overview of the Education System

The Indonesian education system has traditionally been highly centralized. However, since 1999, the Ministry of Education has begun implementing a decentralized system through the 33 provinces. This system is shifting gradually towards management and curriculum decisions at the school level.

Structure of the Education System

Education is mandatory for students beginning at age 7 through the completion of grade 9. Formal education includes primary, secondary, and higher education and has various types of education, including general, vocational, academic (i.e., university preparation), professional, and religious (usually Islamic) education.

The education system in Indonesia also includes nonformal education. Nonformal education is provided for community members as a replacement, complement, and/or supplement to formal education to support lifelong learning. The goals are to develop students' potential with emphasis on acquiring knowledge and functional skills and personal and professional attitudes. Nonformal education includes life skills, early childhood, youth, female empowerment, and literacy education; vocational training and internships; equivalency programs; and other kinds of education that are directed at developing students' abilities.

Finally, in place of formal education, families and communities also can provide informal education to students (i.e., home schooling). Upon completion of informal education, students can try to pass an assessment measuring the national education standards. If students are successful, informal education is recognized as equivalent to formal and nonformal education.

Role of Preprimary Education

Primary education is student centered and mandatory beginning at age 7. The goal of this educational level is to achieve optimal growth for children, recognizing that each child has different talents, culture, religion, environment, and background.

According to a law passed in 2003, preprimary education is for children from birth through 6 years old to prepare them for primary school.² Ultimately, the goal is to increase the quality of life as an Indonesian.

Philosophically, preprimary education uses the concepts of learning by playing, doing, and stimulating. Conducive environmental stimulation is necessary and playing builds children's mental development and potential. The content of the curriculum is intended to develop children's potential for art, beauty, and harmony to help children enjoy their individual culture.

Reading Curriculum in the Primary Grades

Reading Policy

The study of Bahasa Indonesia is intended to develop children's abilities to communicate properly in spoken and written language. The policies for reading instruction are the following:

- Government Law PP No. 19 Tahun 2005, which outlines the competencies of Bahasa Indonesia (i.e., reading and writing).³
- Minister Law No. 23 Tahun 2006, which mandates that elementary graduates should be able to read aloud and understand the substance of a text.⁴
- Minister Law No. 22 Tahun 2006, which mandates that, as a prerequisite for grade 4, students must be able to read and understand a 150–200 word text in grade 3.⁵

Summary of National Curriculum

The *Standard Content for Reading Matter of Elementary School* states that students graduating from primary school should be able to read a text with 150–200 words, understand the content of a text, compare one text to another, understand implicit ideas of the text, and read other special types of text (e.g., the telephone guidebook, dictionary, encyclopedia, travel schedule).

Reading Instruction in the Primary Grades

There are different approaches to reading instruction depending on the grade level. Full reading instruction, which occurs in grades 1–3, uses a communicative approach. For grades 1–3 of elementary school, Bahasa Indonesia instruction uses a language across the curriculum approach. Beginning in the fourth grade, reading becomes part of instruction in Bahasa Indonesia and uses a contextual teaching and learning approach.

Instructional Time

Reading instruction is an interactive process between students and the teacher. Each class is considered a study hour unit, which lasts 35 minutes. There are 26 to 32 study hours per week in primary school, depending on the grade. Students in each grade are in school for 34 to 38 weeks. Therefore, each school year includes a range of 884 to 1216 study hours, which is equivalent to 516 to 709 hours per year devoted to instruction. Please see the table below for more information.

Table 1 Details of Class Attendance

Unit of Education	Class	One Study Hour (Minutes)	Total Study Hours per Week	Weeks per Year	Study Hours per Year	Total Hours of Instruction per Year
Elementary School	1 to 3	35	26–28	34–38	884–1064	516–621
	4 to 6	35	32	34–38	1088-1216	635–709

Instructional Materials

Instructional materials are used to enrich and explain the curriculum. Since Bahasa Indonesia includes the components of linguistic ability, the aspects of Bahasa Indonesia are listening, speaking, reading, and writing. To develop these skills, resources such as telephone guidebooks, fictional texts, nonfiction texts, and poetry are used in reading instruction. The Ministry of Education chooses the textbooks used in reading instruction.

Use of Technology

Some schools are well equipped with computer laboratories that have Internet access. The Ministry of Education is working to provide these facilities in all schools.

Role of Reading Specialists

Indonesia is in the process of having teachers obtain teaching licenses or certificates.

Second-language Instruction

In international schools, Bahasa Indonesia is taught as a second language. In Islamic schools, Arabic is taught as a second language. For schools that are located in urban or suburban areas, each school has its own second-language instruction based on their local language, since few students speak Bahasa Indonesia as their mother tongue.

Effective Practices

The practices that are used to help students within each grade develop Indonesian language skills begin with reading aloud with correct intonation. Spelling also is emphasized. Next, students are expected to draw a conclusion from a short text or poem.



After that, students are taught how to retell a story and then to read a poem aloud with correct intonation and expression. Eventually, students are taught to find the ideas, meanings, or information that is explicitly or implicitly mentioned in the text.

Reading Disabilities

Diagnostic testing for reading disabilities is commonly used in Indonesia, especially in the best urban schools. However, instruction for students with reading disabilities is usually handled by the classroom teacher in the form of a remedial program. There are no special education programs available for students with reading disabilities, although special education is provided for students with other disabilities.

Teachers and Teacher Education

Teacher Education and Training

Teachers must have a 3-year university diploma in to order to become primary teachers. In urban areas, most teachers have a university degree. There are no specific requirements in order to teach reading. In general, teachers have a formal education and receive training provided by the Institute for Educational Quality Assurances, which is part of the Ministry of Education. The training is not only in reading but also in Bahasa Indonesia as a whole.

Teacher In-service Education

Most teachers receive in-service education in their province, although it is not mandatory. It is usually held by the Ministry of Education as a regional or national program.

Examinations and Assessments

National or Regional Examinations

There is no national examination for students in grades 1–6. Examinations developed by a team of teachers are conducted at the district level. In these examinations, reading skills are tested as part of the Bahasa Indonesia language.

Monitoring Individual Student Progress

Teachers and schools monitor the progress of individual students through marks and report books. Every 6 months (i.e., each semester), parents receive school reports about their child's progress to be signed by them and returned to school. Promotion to the next grade is automatic in primary school.

Suggested Readings

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Islamic Republic of Iran

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Language and Literacy

According to the 2007 census, the population of Iran is approximately 67.7 million with a literacy rate of 77% and life expectancy of 71 years.¹ The official language of Iran and language used most often in Iran is Farsi (Persian). The population of Iran includes Persian, as well as Turk, Kurd, Lor, and Arab ethnic groups. Therefore, Turkish, Kurdish, Lori, and Arabic also are spoken in some parts of the country. Persian and Persian dialects are spoken by 58% of the population, Turkic and Turkic dialects by 26%, Kurdish by 9%, and Lori, Balochi, or Arabic by the remaining 7% of the population.

All instruction and textbooks are in Farsi, and children with a different mother tongue begin learning Farsi when they enter school. However, the use of tribal and local languages in the local press, mass media, and when teaching about their heritage is permitted.² The Constitution of the Islamic Republic of Iran is inspired by Islamic principles and precepts and attributes great importance to education.³

Emphasis on Literacy

The Literacy Movement Organization, established in 1979, is an organization affiliated with the Ministry of Education. The tasks and goals of this organization are to teach reading, writing, and simple calculation skills to those who are illiterate in the country and to promote Islamic culture among students.⁴ To attain these goals, the Literacy Movement Organization organizes activities that strengthen literacy skills, promote cultural standards, increase the knowledge of new readers, expand the writing culture among different groups of society, produce textbooks for those who are learning to read, and train teachers for adult education. More specifically, the activities of the organization include the following.⁵

- Providing continuous, instructional programs in the form of in-class and/or long distance education through multimedia;
- Furnishing books to rural and urban public libraries and prisons;
- Holding book fairs and supplying books for them;
- Furnishing books to more than 20 mobile libraries;
- Conducting reading games for individuals, ages 10-49 (since the year 2000);

- Publishing monthly magazines for new readers;
- Providing community learning centers with posters, bulletins, and magazines;
- Developing and preparing multimedia packages to empower rural mothers so that they can foster creative children (Research Institute for Children of the World in cooperation with UNICEF); and
- Creating a continuing education literacy program.

With these activities, the Literacy Movement Organization has been able to:

- Increase the literacy rate;
- Decrease the gender disparity in the literate population;
- Decrease the literacy rate disparity between rural and urban areas;
- Promote learners into the formal system of education; and
- Introduce continued educational activities.

It is notable that the Literacy Movement Organization has received international prizes such as the UNESCO Honor Medal in 1998, the Noma Literacy Prize in 1999, and ISESCO'S literacy award in 2003 for its achievements.⁶

Overview of the Education System

According to Article 3 of the Constitution, the government is responsible for providing free education and strengthening the spirit of inquiry and investigation in all areas of science, technology, culture, and Islamic studies through secondary school. Regarding religious education, Christians, Jews, and Zoroastrians, the religious minority groups in Iran, are free to teach and perform their religious rites and act according their own canon in matters of personal affairs and religious education.

The Ministry of Education administers and finances schools at the primary and secondary levels. The Supreme Educational Council, as an autonomous and legislative body, approves all policies and regulations related to formal pre-university education, and the Ministry of Science, Research and Technology is responsible for tertiary education.

Structure of the Education System

The structure of education up to the pre-university level is highly centralized. The goals of education at these lower levels are set according to Islamic principles by the Higher Council of Education. The Ministry of Education is composed of several deputy ministries, each having specific responsibilities related to educational administration. These include development and planning, conducting and supervision of educational activities, curriculum and textbook development, publishing and distributing educational materials, planning and conducting in-service training for teachers, and making policies regarding human resources within the Ministry of Education.

The formal education system in Iran starts with 1 year of preprimary education, which children begin when they are 5 years old, followed by 5 years of primary education. When children are 11 years old, they begin 3 years of lower-secondary education, which leads

to 3 years of upper-secondary education and 1 year of pre-university education. Education is only compulsory through the first year of upper-secondary school. After this period, students are able to choose the direction of their studies.

In the **preprimary** year, children are prepared for the formal primary stage. Though this stage is not mandatory for all children, it is required in bilingual areas where Farsi is not children's mother tongue. In these cases, Farsi will be taught to children in addition to regular preprimary activities. The main objectives of this stage are to:

- Contribute to the physical, mental, emotional, and social growth of children;
- Develop children's abilities and talents;
- Prepare children to comprehend scientific concepts;
- Promote the Farsi language; and
- Prepare children for social relationships and cooperation.

The Organization for Educational Research and Planning is responsible for the supervision and physical preparation of preschool centers. Preschools may be public or private and may cater to only boys or girls, although many admit both. There is an average of 18 students per teacher.⁷ With no examination at the end of this stage, children are automatically promoted to the next stage.

Primary education is the first stage of formal education. It lasts 5 years and enrolls students ages 6–10. The average student-teacher ratio is 20:1. The main objectives of this stage are to:

- Create an atmosphere for the moral and religious development of students;
- Help students read, write, and improve their numeracy and literacy skills, and provide necessary training on proper social behavior;
- Deliver instruction on individual hygiene, and provide necessary advice on how to behave at home, as well as in society; and
- Develop students' talents, abilities, and physical strength.

The subjects that are taught in primary schools are Holy Quran, Farsi (reading, writing, and dictation), mathematics, science, religious education, social studies (e.g., history, geography), art, and physical education. One teacher typically is responsible for teaching all subjects except religious and physical education. Recently, some private schools have begun using different teachers to teach different subjects such as mathematics and science.

The **lower-secondary** stage of education lasts 3 years for children 11–13 years old, with an average student-teacher ratio of 19:1. At this stage, students become familiar with various subjects in the experimental and social sciences, as well as humanities and art. The main goals of this stage are to:

- Develop students' moral and intellectual abilities;
- Increase students' experiences and general knowledge;



- Strengthen the habits of discipline and scientific imagination among students; and
- Identify individual preferences and talents in students to direct them towards a suitable study program.

In addition to the subjects taught at the primary level, students learn a second language of their choice (English, French, German, or Arabic), vocational education, and defense education (for boys only).

Upper-secondary education is 3 years for students ages 14–16. On average, there are 20 students per teacher at this level. The first year of this stage is the same for all programs of study. In the second year, students choose to pursue an academic, technical and vocational, or Kar-Danesh program. These programs have different objectives and are intended for students with different abilities and interests. Students who go through academic programs choose an orientation in mathematics, natural science, or human science, based on their further education interests. The goal of technical and vocational and Kar-danesh programs is to prepare skilled and semi-skilled students for participating in the job market after they finish high school. Students who go through these programs do not need to pass the pre-university stage but have the opportunity to continue their education through vocational colleges.

There are three components in the curriculum of each program. These include common subjects, which are common courses for all programs of study (i.e., Holy Quran, religious education, Farsi literature, statistics, Arabic, foreign language, and physical education), elective subjects (e.g., art of problem solving, mathematics, physics), and specialized subjects that are program specific.⁸

The **pre-university** year is for high school graduates who would like to take the university entrance examination in order to attain further education. At the end of this stage, there is a national final examination on the subjects covered. These include specialized courses that vary according to the student's program in upper-secondary school. All students holding an upper-secondary graduate certificate who would like to go to a university can participate in this period.

Reading Curriculum in the Primary Grades

The current national curriculum for the Farsi language at the primary school level was introduced in 2000. This curriculum, which includes reading instruction, is fully centralized. The main objective of reading is the development of accuracy, reflection, reasoning, and judgment skills. By the end of the fifth year, students should:

- Be able to read and understand texts in Farsi;
- Enjoy reading and view it as a way to acquire knowledge and information;
- Have specific purposes for reading; and
- Appreciate reading and what they learn through reading.

The Organization for Educational Research and Planning developed this curriculum with the cooperation of school districts and teachers. The curriculum guide prescribes

goals and objectives, processes, methods, and materials for all students. The curriculum and any changes within it are available in the official publication of the curriculum guide, ministry notes, mandated text books, and recommended instructional activities. Parents are informed about the reading curriculum through teacher-parent meetings, school administration, public awareness campaigns, the Ministry website, and parents' associations and organizations. The implementation of the curriculum is evaluated by visiting inspectors, research programs, and national and regional assessments. The reading curriculum focuses primarily on:

- Identifying ideas and definitions of words;
- Developing skills in generalizing, summarizing, and evaluating text components; and
- Developing, interpreting, and integrating ideas.

In the first grade, these skills are developed by reading simple sentences about subjects such as family members, daily activities, body organs, health and nutrition, animals and pets, religion, and the environment, as well as children's poetry. By the end of third grade, stories about families, animals, social and historical events and ceremonies, religion, jobs and occupations, and simple scientific texts are introduced, as well as simple poetry about nature and animals. Principles of grammar such as understanding punctuation, sentences, verbs, and different tenses and knowing the subject and object of a sentence, singular and plural nouns, synonyms and antonyms, and adjectives also are discussed.

By the end of the fifth year, reading materials include stories about family and society, human endeavors, rural life, biographies of famous men and women, and great inventions and inventors.9

Reading Instruction in the Primary Grades

Instructional Time

The school year for all levels of schooling is approximately 9 months, beginning in September and ending in June. Schools operate from Saturday through Thursday. Total instructional time at the primary level is 24 periods per week that are 40-45 minutes each. Reading and other language instruction receives 12 periods per week in grades 1–3 and 11 periods per week in grades 4–5. The total instructional time in lower-secondary grades 6, 7, and 8, are 28, 29, and 30 periods per week, respectively, with 5 periods allocated for language instruction.¹⁰

Instructional Materials

Textbooks, developed by the Organization for Educational Research and Planning, are the main materials used for teaching and are distributed to primary schools free of charge. The books provided for primary school are Let Us Read and Let Us Write. There also are two monthly children's magazines aimed at primary school students published by the Office of Instructional Aid Materials within the Ministry of Education, as well as magazines for primary school teachers, although these are not compulsory.





Teachers also are provided with videotaped teachers' guides that include teaching notes and explanations, audiocassettes of songs and music used for teaching different concepts and developing listening skills in students, and tables to be posted in the classroom as supplementary educational resources. In addition, videotapes of exemplary lessons are provided for students and their parents.

The use of information communications technology for instruction is not compulsory, although some private and public schools integrate it into the teaching process.

Reading Disabilities

Before beginning primary school, all children take an assessment of school readiness intended to diagnose learning disabilities. If a disability is recognized and the student is still able to participate in regular school, they will be integrated into regular classrooms. If the disability is more severe, then students are placed in special education schools, which have their own program of study.

Teachers and Teacher Education

There are 24,820 teachers in preprimary public and private centers, 89% of whom are female. In primary schools, 58% of the 365,235 teachers are female. In lower- and upper-secondary schools, the percentage of female teachers drops to 49% of 242,708 and 46% of 283,154, respectively.¹¹

Teacher Education and Training

There are several institutions that train teachers in Iran. These include teacher training centers that are affiliated with the Ministry of Education, technical and vocational colleges, and teacher training programs at universities.

Teacher training centers affiliated with the Ministry of Education are post-secondary institutions available to high school graduates who have passed the national entrance examination. Students are enrolled at these centers for 2 years, during which they are provided with housing. After completing the courses, students are awarded an associate's degree and can teach in primary or lower-secondary schools. The programs offered in these centers include mathematics, experimental science, physical education, social studies, primary education, Persian language and literature, fostering affairs (graduates of this program provide pedagogic advice, plan for leisure time and school activities, and work in student affairs), Islamic and Arabic language, art, and exceptional education (i.e., education for students with mental or physical disabilities). There are 90 teacher training centers, all of which are public.

Technical and vocational colleges fall under the jurisdiction of the Bureau of Higher Technical and Vocational Education. These colleges select their students from the graduates of secondary Technical and Vocational and Kar-Danesh schools. These centers offer about 40 fields of study, such as construction, electronics, computers, food industries, wood industries, ceramics, and industrial design.

Secondary education teachers are trained by universities and higher education institutes at universities. Students in these programs take national higher education

entrance examinations and are required to take courses in pedagogy and education psychology along with specialized courses for their subject area.

Teacher In-service Education

In order to update teachers' knowledge and skills, the Bureau for Scientific Promotion of Human Resources develops short-term and long-term courses and workshops provided in different institutes for all Ministry staff including teachers. Long-term courses lead to higher degrees and are offered at the associate's, bachelor's, and master's degree levels. The goal of short-term training courses is to improve specific competencies of teachers and educational staff. Some of these courses are compulsory, such as those in pre-employment training, training for promotion, and teacher training when new policies are implemented. The educational content of short-term courses can be general or specific.¹² Teachers are not required to take a certain amount of in-service training every year.

Examinations and Assessments

Educational evaluation includes formative and summative assessment. Formative assessment is done through continuous assessment of students' in-class activities and several in-class oral or written tests, as well as homework.

At the primary level, grade promotion is determined by examinations developed by teachers that are administered twice each year. At the end of the fifth year, students take a regional provincial examination that is developed by the office for assessment in the Ministry of Education in each province. Those who pass the examinations are issued an elementary school-leaving certificate, and those who fail are given the opportunity to retake the examination the following year. The grading system at this stage uses points that are earned through continuous assessment and criteria-based written and oral examinations. Ten points (out of 20) are required for promotion. The system of promotion for lower-secondary school is similar to that used in the primary stage. At the end of this stage, a regional provincial examination is taken, and students who pass are awarded a certificate of general education. At the end of upper-secondary education, there is a national final examination on the subjects covered in this period, which leads to a high school diploma.

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Israel

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Language and Literacy

Hebrew and Arabic are the two official languages in Israel. However, since Israel has been a land of Jewish immigration since its establishment, a great variety of languages are spoken. For example, in the last two decades, a large number of immigrants came to Israel from Russian-speaking countries, making Russian a language spoken in many areas of daily life. English is the major foreign language used for wider communication.

Most Jews use Hebrew for all purposes including education, business, and culture. Arabic is studied in schools after Hebrew and English (alternating with French or another language in a small number of schools). New immigrants can sometimes choose to continue learning their mother tongue instead of Arabic. For the Arab population, Arabic is the first language and the language of instruction in the school system. Hebrew is the second language and is studied usually from third grade on. English is the third language, the language of wider communication. The reading policy and recommended approach presented by the Ministry of Education applies to both languages, Hebrew and Arabic, when acquired as first languages.

Overview of the Education System

The education system in Israel, as in many other countries worldwide, is going through cyclical movements between a centralized and decentralized model of policymaking. During the 1990s, Israel shifted to a more decentralized model, and schools were officially authorized by the Ministry of Education to take full responsibility for all school resources and for student achievement. The Ministry of Education limited its role to long-term planning and decisions concerning budget and budgetary criteria, a national curriculum (including a compulsory core curriculum), national achievement benchmarks, and monitoring student performance in the education system.

The growing percentage of the budget transferred from the Ministry of Education to local authorities is evidence of the move toward decentralization. From 1995 to 2007, the percentage of the Ministry of Education's budget that was transferred to local authorities rose from 22.3% (about 13.8 billion NIS) to 28.6% (about 25.9 billion NIS).^{1,2} Despite these tendencies, the present education system is still very centralized with all administrative units directly under the direction of the Minister of Education.

Structure of the Education System

The formal education system, described in Figure 1, consists of the following levels: preprimary education (ages 2–6), primary education (ages 6–12), and secondary education, which includes lower-secondary education (ages 12–15) and upper-secondary education (ages 15–18).³ Free and compulsory education extends over 13 years to grade 12. In the 2002–03 school year, 1,675,000⁴ students were enrolled in the formal education system from the preprimary level to the end of the secondary school.

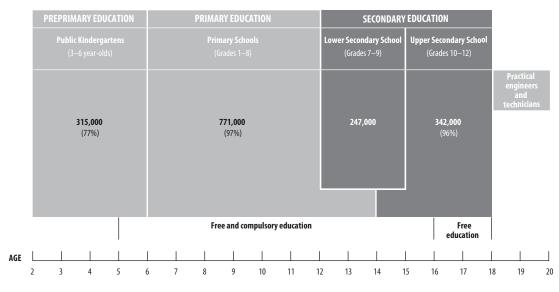


Figure 1 Structure of the Education System, 2002–03

SOURCE: Ministry of Education, Culture, and Sport, The Central Bureau of Statistics (CBS)

In addition, the education system includes postsecondary and higher education institutions. Postsecondary education is nonacademic and includes institutions that provide knowledge and training in a variety of areas such as technology, administration, and art, as well as some non-academic teachers' colleges. Higher education institutions include universities, teacher-training colleges, and other academic colleges. In 2002, there were 290,000 students enrolled in various postsecondary and academic frameworks, and less than half were attending universities.⁵

Most schools in the education system are public schools, with the government contributing to more than half of their budgets either directly or via local authorities and nonprofit educational institutes. There are a very small number of private schools. Schools are divided by their language of instruction: Hebrew in the Jewish sector and Arabic in the Arab sector. A small percentage of the schools, particularly at the primary level, are special education schools.

Most primary schools educate students for 6 years (ages 6–12), although about 25% include 8 years of schooling. At the secondary level, there are 3-year lower-secondary schools (junior high), followed by 3-year upper-secondary schools, as well as some 6-year comprehensive high schools. Secondary schools are further divided into two main types: general and technological-vocational. One-track secondary schools provide either one

of these types of education, while both tracks are offered in multitrack schools. The numbers of each type of school in the 2005 school year are provided in the table below.

	Arabic Speaking	Hebrew Speaking
Primary Schools	716	1250
Junior High Schools	135	365
One-Track Secondary Schools	145	857
Multitrack Secondary Schools	61	311
General Secondary Schools	122	748
Vocational Secondary Schools	23	109

Table 1 Number of Schools in 2005-06 School Year

SOURCE: CBS—Central Bureau of Statistics (2006). *Statistical abstract of Israel*, no. 57. Retrieved June 11, 2007, from http://www1.cbs.gov.il/reader/shnatonenew_site.htm

Schools operate under different supervision frameworks with autonomous organizational bodies. The education system caters to the needs of different populations from different ethnic backgrounds and different degrees of religious observance. Thus, these populations study in separate schools supervised by different inspectorate bodies. In Hebrew education, these include state-secular supervision, state-religious supervision, and ultra-orthodox supervision. In Arab education, there are separate supervisory bodies for the Arab and Druze populations, which are two Arabic-speaking ethnic minorities.

While all these inspectorate bodies are under the supervision of the Ministry of Education, the ultra-orthodox stream is the most autonomous, with its own curriculum that includes a large proportion of religious studies. These schools are usually not open to outside intervention and evaluation. Since 1990, there has been a huge growth in the percentage of Jewish students under ultra-orthodox supervision. This is mainly due to their inclusion in the student census and financial support by the government.

Role of Preprimary Education

Preprimary education encompasses educational services for children from birth to age 6. In the 2005–06 school year, there were 405,000 children enrolled in municipal, public, private kindergartens, or day-care institutions, ranging in age from 2 to 6 years. Of these, 315,000 were in Hebrew-speaking institutions, and 90,000 were in Arabic-speaking schools.⁶ The goal of early childhood education is to provide an educational foundation that includes developing language and cognitive skills, promoting learning and creative abilities, and nurturing social and motor skills.

Reading Curriculum in the Primary Grades

Reading Policy

The reading curriculum in Israel is part of the Language Education Curriculum in the mother tongue, either Hebrew or Arabic. In September 2000, the Director General of the Ministry of Education published basic guidelines for curriculum implementation in



the school system in Israel. The guidelines place special emphasis on the development of "language and literacy skills which will enable every student to use these skills in spoken interaction, as well as in reading and writing, in order to derive meaning, interpretation, and critical thinking in all subject areas."⁷ These guidelines present the teaching of the mother tongue as a core program within the basic curriculum.

Initial reading instruction is based on a phoneme-grapheme correspondence approach, accompanied by a rich language environment to enable language development in all areas of use and communication. Evaluation is an integral part of the reading program, and each first grade teacher can use the nationally developed reading test for diagnostic purposes and for developing individually adjusted remedial programs for students who face difficulties. Based on these results, schools may decide to divide large classes into two smaller classes to facilitate individual work with students.

The Reading and Writing Readiness curriculum for kindergarten (the first year of compulsory education in Israel) is based on a number of underlying assumptions.⁸

- Reading readiness is one of the important goals of the kindergarten curriculum.
- The ability to read and write is based on mastery of the orthographic code, language knowledge, world knowledge, and cognitive skills.
- The development of literacy and the readiness for reading and writing require intervention and the mediation of an adult.
- The development of literacy is viewed as a continuum beginning in early childhood that can lead to success in later grades at school.
- The promotion of reading readiness should include phonological awareness, knowing the letters of the alphabet, early emergence of reading and writing, skills for oral communication, vocabulary knowledge, morphological and syntactic awareness, and exposure to book reading.
- Ongoing evaluation and assessment are important elements of learning and teaching at this level.

The Language Education Curriculum in elementary school stipulates that language is the vehicle for communication in students' social and cultural context.⁹ Therefore, language education is presented as the core of student learning. The ability to read and understand and the ability to express one's ideas are viewed as central to learning in all subject areas. The main objective of the Language Education Curriculum is to enable students to become literate. The curriculum emphasizes the importance of reading and writing a variety of texts to expand the types of discourse that students are exposed to and within which they can function. The curriculum also encourages schools and classes to become "reading communities" to enhance reading for personal growth and enjoyment.

The benchmarks for reading comprehension are presented within the context of different text types for different purposes. These include texts intended to provide the reader with information and knowledge, literature from different periods, and texts from traditional and national sources. The benchmarks are defined for the ends of grades 2, 4, and 6. At each level, students are expected to be able to do the following within the selected texts for their level:

- Read fluently and accurately;
- Comprehend explicitly stated ideas and facts;
- Make appropriate inferences; and
- Connect what is presented in the text with general and personal knowledge of the world to evaluate the text critically.

The curriculum places major importance on five types of discourse:

- The expository/academic world of discourse;
- Interpersonal communication;
- Mass communication;
- Literature; and
- Traditional, heritage resources.

The curriculum specifies the different text types that students should encounter:

- Texts intended to provide information and knowledge;
- Texts intended to persuade or present arguments;
- Procedural texts; and
- Narratives.

The curriculum has been in use since 2003, and in 2007, the benchmarks are being evaluated in light of its implementation so far.¹⁰ As part of the curriculum implementation process, schools have been encouraged to tailor a school-based curriculum that fits the needs of their specific student populations. A curriculum intended for Arabic instruction for Arabic-speaking students that takes into account the diglossia existing in Arabic is currently being developed, as well as a curriculum to teach Hebrew as a second language for new immigrants. English is learned as a foreign language in all schools in Israel beginning in third grade or earlier, with an emphasis on reading comprehension.

Reading Instruction in the Primary Grades

Instructional Time

Reading is viewed both as an integral part of the Language Education Curriculum and as an integral part of teaching the different school subjects. Approximately 10 hours per week are devoted to reading activities in the language classroom and across the curriculum. The activities include reading comprehension, reading strategies, writing activities, and other language skills. In the language lessons, there is a focus on linguistic and textual features, while in other subject areas the focus is on language and reading comprehension as vehicles for learning.

Instructional Materials

Teaching materials in Israel are produced and published by commercial agencies and publishers but are approved by the Ministry. The Ministry of Education established a special unit of anonymous experts who read prepublication versions of instructional materials to check for policy compatibility. The Ministry then publishes the list of approved teaching materials.¹¹ In order to help teachers and principals make choices suitable for their classes and particular student populations, the Ministry conducts special in-service sessions throughout the country at centers for professional development.

As part of implementing the new curricula, the Department of Curriculum Development prepared materials for reading instruction in elementary schools in Israel. The main objective of these materials is to provide teachers with samples of texts and accompanying activities that are compatible with the goals of the Language Education Curriculum. A variety of types of text and discourse are demonstrated in these materials. In addition, each text deals with the expected levels of understanding outlined in the curriculum. For each of these levels of understanding, the teacher is provided with suitable activities that lead the students to develop relevant reading strategies. Special focus is placed on meta-language and meta-textual knowledge. These materials are sent to schools and are available on the web for use by teachers throughout the country. The purpose of these materials is to help teachers become more proficient and self-confident in teaching literacy at the elementary level and in choosing suitable instructional materials for their classes.

Use of Technology

Most schools have computer rooms and most students are computer literate. The typical learning environment is computer supported, and students tend to hand in many of their assignments in computer-printed versions. However, the use of computers in the teaching of reading is not yet systematic.

Role of Reading Specialists

Reading specialists from the various universities in Israel are active in curriculum committees and teams developing and defining standards and benchmarks. They also act as consultants for new programs and material development. The Ministry employs over 30 reading instructors who provide in-service training for all elementary school teachers throughout the country and make sure that teachers are kept abreast of the latest changes and innovations in the reading and writing instruction. These reading instructors receive professional development from the leading specialists in the country.

Second-language Instruction

Israel is a country of immigration, and therefore, Hebrew as a second language plays an important role in the education system. Every new immigrant child receives special instruction in Hebrew as a second language for approximately 4 years. Beyond this period of time, further assistance is provided according to students' individual needs with a focus on their integration into the normal curriculum.

Israel

Hebrew also is taught as a second language in Arabic-speaking schools, starting from third grade. The Hebrew as a second language curriculum for Arabic speakers was published in its experimental version in 2006.¹² The underlying approach in this curriculum is the need to teach a second language for purposes of oral and written communication. This curriculum, similar to the Language Education Curriculum, is based on the presentation of types of discourse: interpersonal communication, mass media, expository or academic discourse, and literature. The emphasis is on the four language skills: listening, speaking, reading, and writing. In the area of reading, students are expected to be able to comprehend a variety of text types within their areas of interest.

The curriculum for new immigrants is currently being rewritten. The emphasis in the new version is on the need to facilitate the immigrant student's acquisition of the new language and his or her gradual integration into the regular classroom. It is important to allow for carefully planned interaction between the first- and second-language curricula. In this curriculum, as in the ones mentioned earlier, the focus remains on types of discourse and text. These two features form the common basis for the three Hebrew curricula.

Reading Disabilities

Special diagnostic tests have been developed according to the benchmarks defined in the curriculum and are used by teachers to identify reading difficulties among their students. In addition, teachers have various qualitative measures to help recognize reading disabilities. The emphasis in the last few years has been on early identification of reading disabilities both in Hebrew and Arabic, so that special treatment can be given to these students. A special kit is available for teachers to use for diagnostic purposes. The regular classroom teacher carries out the diagnostic process and develops individual activities for each student within a planned remedial program. The teacher receives special training for this process and sample materials with a focus on inclusion of all students in the classroom reading program.

The policy is to create a sequence of stages that enable the teacher to retain a student in the regular class. Students are directed to special education only as a last resort. Currently, special courses are given to future reading evaluators who will work with the classroom teacher in an attempt to ensure that any student who can benefit from remedial work in the regular class will not be placed in a special education program.

Teachers and Teacher Education

Teacher Education and Training

Initial teacher education takes place in colleges of education (formerly teachers' seminars) and teacher education departments in schools of education within universities.

For intending teachers who have either completed their undergraduate degree or are in the final stages of obtaining their degree, a teaching certificate can be obtained through a graduate program at a university. This model is called the consecutive model and operates in six universities. Typically, these programs extend over 2 years.



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Since 2003, an induction year has been added as a new requirement for obtaining the teaching license.¹³

Teacher education at colleges of education takes place at more than 50 institutions, both secular and religious, of which only 27 are academic colleges. Teacher education in colleges follows the concurrent model, which combines disciplinary and pedagogical contents. The three possible routes of study in teacher education colleges are described below.

- Regular academic studies: A 4-year program (110–115 hours annually), which grants a bachelor's degree in education, including a 1-year induction program. This program follows the guidelines of the Commission of Higher Education.
- Retraining programs for university graduates: A 1- or 2-year course with an additional induction year, intended for university graduates in various disciplines who wish to acquire a teaching certificate from a teachers college.
- Regular non-academic studies: A 2- or 3-year program for certified teachers and advanced-certified teachers, currently operating only in the ultra-orthodox colleges.

In 2006, a new outline for teacher education programs was proposed for universities and colleges of education. According to these guidelines, the basic pedagogical component in the program extends over 24–30 hours annually and contains education studies, research methodology, and pedagogical studies, including a supervised practicum. This component complements 60 hours per year of disciplinary studies, taught either as part of university undergraduate studies or in a concurrent model at the colleges of education.

Since 2000, a new license for all levels of education has been required both from university graduates and teachers college graduates. The prerequisite for obtaining this license is having a teaching certificate, an academic degree, and the successful completion of the induction year. This induction year is defined as the first year of a teacher's work in the profession. Teachers are required to work under the supervision of a mentor, for at least a third of a full teaching position, for at least 6 months. During this period, teachers are regarded as advanced certified teachers, and they gain credit for 1 year of teaching experience.

Teacher In-service Education

The organizational bodies responsible for in-service training are located primarily at institutions of higher education, universities, and teachers' colleges, and some are located in special in-service teacher centers created for this purpose. All in-service training courses currently offer teachers credits that translate into salary increases. One credit unit equals about 112 hours of study, and the maximum credits a teacher can gain is 24.75.

There are four types of in-service frameworks:

- Group in-service training intended to facilitate policy implementation, planned and organized by the Ministry of Education;
- Task-oriented in-service training, also initiated by the Ministry of Education, which prepares staff for certain functions (e.g., principals, coordinators, and leaders);

Israel

- School-based in-service training, aimed at responding to school needs and organized by the schools themselves; and
- Personal in-service training, chosen by the individual participant that provides professional enrichment and further education.

With the establishment of sabbatical funds in 1963 and the policy of rewarding teachers for participation in in-service courses, the demand for the personal route of professional development increased. The school-based in-service courses increased during the 1990s with the new move towards school autonomy.

Even though in-service and preservice training in teacher education are presently perceived to be on the same continuum, they are managed by separate bodies and not necessarily coordinated. Since 2002, there has been an attempt to merge all teacher centers under one organizational umbrella called "professional development of educationa teams".

Examinations and Assessments

National or Regional Examinations

In 2005, a new National Authority for Measurement and Evaluation in Education replaced an internal body in the Ministry, and was granted a governmental independent status accountable directly to the Minister of Education. As a result, many changes were introduced to the examination and evaluation systems in Israel. The main shift introduced is the move from measuring for accountability purposes toward measurement and evaluation in the service of learning and policymaking.

Assessment activities that flourished in the past, such as regional examinations, local authorities examinations, or examinations held by different intervening bodies, are being replaced by a coordinated system of assessment activities that are standards based. These activities, aimed at a wider student population, are cyclical and linked over years; created by external experts, as well as school-level experts; and summative as well as formative in nature. Currently, these are carried out mostly on samples of schools.¹⁴

Among the national assessment activities, there is a national feedback monitoring mechanism that conducts regular external examinations on national samples testing different subject areas of the curriculum in depth, and mainly is aimed at policymaking. There also is a school feedback mechanism that focuses on growth and effectiveness measures for schools called GEMS (Meytzav). Rotational testing is conducted in four subjects: the mother-tongue language, mathematics, science and technology, and English. These tests are administered at grades 2, 4, 6, and 8 in clusters of Hebrew-speaking schools, along with questionnaires concerning school climate and the teaching environment. GEMS includes an external examination in schools each year in two of the four subject areas, as well as an internal examination in those subjects not covered by the external examinations. Schools will not report on the results of the internal testing. Support will be given to schools to use the information gathered for the purpose of students' evaluation and for monitoring progress at the school level.¹⁵



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The matriculation examinations are regarded as the official test to measure the results of the 12 years of compulsory schooling in Israel. They are high-stakes examinations, usually used to determine access to higher education and covering all subject areas taught in secondary school. The depth of studies, as well as the hours invested in learning, dictates the difficulty of the tests, which is measured by units of learning. These range from 1 to 5, with each unit representing 90 hours of study. In order to obtain a matriculation certificate, students must master a combination of tests in different subject areas (some mandatory, some elective) that yield at least 20 units of learning. The final score in each subject is a combined measure of the matriculation score and an internal evaluation done by the school. A cut-off score determines whether a student has passed the examination. The percentage of twelfth-grade students entitled to a matriculation certification is a measure of the effectiveness of the education system. In 2004, only 55% of twelfth-grade students in Israel were entitled to a certificate. Most of the certificates issued (85%) met the entrance requirement of the universities.¹⁶

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Language and Literacy

Italian, the official language of Italy, is derived from written classical Latin and is the language used for education. In some regions, French, German, Ladin, and Slovenian also are taught as native tongues. For historical reasons, the use of the local dialects in public acts, administration offices, and in education is officially acknowledged.

Linguistic minorities, composed of immigrants from Northern Africa, Asia, and Eastern European countries, have recently acquired official recognition in order to promote the linguistic and cultural heritage of their citizens. These groups also use their mother tongues in private contexts. The increasing immigration rate has encouraged local authorities and schools to facilitate the linguistic integration of these newcomers.

Emphasis on Literacy

Italy's literary heritage is maintained by the 46 state-run historical libraries, as well as specialized libraries and a network of municipal, district, school, and business libraries. According to the Italian National Registry of Libraries, there are currently 15,805 libraries in Italy.¹ The Italian Library Association promotes the organization and development of libraries and related services, with great attention to users' needs. In addition to the 29 daily newspapers that are read by 59% of the population in print or online, there are many local newspapers.² School libraries play a very important role, especially in secondary school. They receive newspapers free of charge, which then are distributed to students. Their function is to encourage and develop students' abilities to do personal research in order to integrate and expand personal knowledge, transforming this into a lifelong learning process.

The Ministry of Education promotes various projects for reading. The most important of these activities, on a national scale, was the 2005 founding of the Institute for Books, whose principle goal is to promote and publicize books and Italian writers in cooperation with the Ministry of Cultural Activities and Heritage. The institute is innovative because it bases its activities on the coordination of all the energies and initiatives proposed by local governments, cultural institutions, the social environment, and the editing world. Moreover, the institute's activities are based on the coordination of state institutions and on the participation of local and territorial authorities. One of its tasks is to create a Book and Reading Observatory to support the initiatives promoted by libraries, schools, private or state-run institutions, and, above all, initiatives involving young people. Since 1995, the Ministry of Education has lead the *National Plan for Reading Education* to encourage reading at all school levels, highlighting the importance of school initiatives in cooperation with external organizations. The aim of this project is to promote reading as an activity beyond specific areas of linguistic education, thus becoming an integral part of the individual's cultural background. Furthermore, its goal is to enhance the individual's awareness and ability to interact with the mass media according to their personal cultural interests and aspirations. In addition, since 2006, the Ministry of Education, in cooperation with the Institute for Books, has promoted research, reading, and writing workshops nationally. In these workshops, students, under teachers' guidance, participate in debates or meetings with authors and journalists. Over 30% of Italian schools participate in projects involving reading and writing workshops where teachers and students take active part in formative and informative activities.

Overview of the Education System

A 1999 law decentralized the education system by giving each school administration the right to make autonomous decisions in certain areas to simplify administrative procedures. Each school can use its own discretion in determining the curriculum, timetables, classes or learning groups, and, to some extent, in managing its staff.

Structure of the Education System

In Italy, school attendance is compulsory for all children ages 6–11. Besides state schools, attended by 80% of the school population, there are accredited non-state schools, the majority of which are partly state-funded Catholic schools and private schools.³ Since 2000, these schools must conform to the regulations governing the state school system to gain accreditation. The national government provides funds for non-state schools and the students attending them. In Italy, there are over 42,000 primary schools, many of which also include middle school grades.⁴ The number of classes within schools is steadily increasing due to increased numbers of immigrant students.

The Ministry of Education defines the essential attainment targets, while regional governments are responsible for their implementation. A reform in 2003 modified the didactic framework and educational goals but did not alter school organization.

The school system is divided into four levels:

- Preprimary education, for children ages 3-5, is 3 years and not compulsory;
- Primary education is 5 years, consisting of a first year for students to acquire basic skills followed by two 2-year cycles;
- Middle school is 3 years, with a school-leaving examination required for entry into secondary school; and
- Secondary school.

Within secondary school, there are several branches of education:

• Lycées are divided into classical, scientific, foreign languages, technological, economic social-pedagogical, and artistic;

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- Technical Institutes offer different courses such as commercial, industrial, building construction, tourism, agriculture, social activities, nautical, and aeronautics; and
- Vocational Schools have agriculture, environment, industries, and handicraft services.

The course of studies in lycées and technical schools are 5 years, and students must take a state examination to receive a secondary school diploma. Vocational school courses are divided into two cycles: a 3-year qualification cycle and a subsequent 2-year course. After examinations at the end of the 3-year cycle, students obtain a qualification certificate that permits them to apply for employment. Students then may choose to attend the 2-year post-qualification cycle to obtain a secondary school diploma after taking the state examination.

Higher educational institutions such as universities and academies are authorized to establish their own curriculum within the limits and respect of state legislation. All types of secondary school diplomas provide access to university studies, although the number of accepted students is limited.

There also is post-secondary school training planned by regional governments to provide highly specialized professionals. This consists of a second level qualification and integrated courses established by the Istruzione e Formazione Tecnica Superiore and carried out by school institutions, training agencies, universities, and firms.

Role of Preprimary Education

Preprimary education, reformed in 2003, involves about 1,655,000 students in state and private schools. Preprimary education is responsible for the overall education of children ages 3–6, and respects their gradual development and recognizes the social and economic barriers they face. It is conceived as an educational environment where the child develops his or her own personality through practical activities, experiences, and reflective learning. Preprimary schools' main goals are to strengthen personal identity and develop autonomy and competencies through the consolidation of sensorial, perceptive, movement, social, and linguistic abilities of children in order to facilitate their passage to primary school. Lessons are organized into modules, and the hours spent each year differ according to children's needs.

Reading Curriculum in the Primary Grades

Reading Policy

At the meeting held in Lisbon in March 2000, the Council of Europe established the strategic objective of creating "...an economy based on knowledge, more competitive and dynamic worldwide, capable of sustaining a growing economy, providing new and better employment and major social cohesion" for the European Union.⁵ Consequently, the Council of Europe agreed upon a global strategy to reach this objective that includes the promotion of scientific research, education, and professional training. The 26 country members of the European Union, including Italy, that took part in this study, defined



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16 concrete objectives concerning the quality of the learning process. Among these, the highest priority was attributed to reading comprehension as "...the basis for the development of knowledge, of the personality and social integration of the individual." ⁶

Summary of National Curriculum

The primary school curriculum includes the following compulsory subjects: Italian, English language, history, geography, mathematics, information communications technology, music, art, and physical education. According to the objectives stated in the 2003 School Reform, the main goals of primary school are to:

- Promote the development of individual personality, respecting individual differences;
- Allow for the acquisition and development of basic knowledge and skills;
- Encourage the acquisition of communicative skills in Italian and in (at least) one European Union language (English);
- Provide the basic skills in applying a scientific approach during the observation of the world of nature, its laws, and phenomena;
- Enhance interpersonal and orientation skills; and
- Educate young citizens in respecting social conventions.⁷

The educational goal of primary school is stated in the *Student's Educational, Cultural, and Professional Outline,* a document decreed by the Ministry of Education that specifies the professional, educational, and cultural competencies that students should possess at the end of this cycle.⁸ In order to reach the established goals, schools must comply with the content of the *National Framework for Personalized Curriculum.* The framework includes a list of skills and knowledge that comprise learning targets that students should reach and is a reference point for teachers when planning instruction.

The framework establishes the basic attainment levels and quality standards that all schools must provide for students. Consequently, the task of each school and its teachers is to adapt, interpret, and organize the targets according to the social and environmental context, transforming them into formative objectives, with appropriate content, methodology, and evaluation of learning units. These objectives should be reached by all students regardless of their performance level. Therefore, reading activities usually are intended for the whole class and are rarely organized according to group levels or personalized according to students' needs.

At the end of the second 2-year cycle (grades 4 and 5) of primary school, specific objectives are grouped according to four abilities–listening, speaking, reading, and writing. Regarding reading, students must acquire knowledge about the following content by the end of primary school.

- A variety of texts of different literary genres;
- Structural elements such as sequence, primary and secondary information, characters, time, place, and setting in narrative, descriptive, information, and normative texts;

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- Figures of speech such as onomatopoeia, similes, and metaphors;
- Multimedia texts; and
- Correspondence of meaning between words (e.g., synonyms, antonyms, metonyms, paraphrases), according to variations in language such as dialect, form (i.e., written, oral), and degree of formality.

Students are expected to:

- Employ silent reading skills for precise purposes;
- Read aloud in an expressive manner and form different text genres, identifying the main structural characteristics;
- Comprehend and use the appropriate intonation (tone, stress, and pause) for different text genres and musical devices (rhyme, assonance, and rhythm) for poetry;
- Locate and extrapolate data and meaningful parts of texts regarding fields of study, projects, and research (use of dictionaries, encyclopedias, historical or geographical atlases, and multimedia texts);
- Search for general information for summary purposes;
- Transform discursive texts into graphs, tables, summaries, and vice versa;
- Memorize and recite texts, data, and information (poems, passages, and dialogues); and
- Identify lexical correspondences between dialect and official language.

The knowledge teachers acquire during training, in-service, and classroom working experience is central to instruction. However, teachers adapt methodology and content to the context in which they operate, according to their sensitivity to the instructional needs of students. This results in the use of diverging strategies in teaching reading as a subject in the first 2 years of primary school and as an activity involving all subjects beginning in the third-year class.

In general, all teachers use the four basic strategies for teaching reading indicated by IEA research. At first, reading activities are aimed at training students to obtain and identify main and subordinate information, either through the use of worksheets planned by teachers or by reading aloud with follow-up questions. Since the majority of the texts used and analyzed are narrative texts, less importance is given to the complete understanding of the inferences. Instead, teachers prefer to concentrate on the identification of time, space, and cause during these activities. The use of reading to evoke emotions is not widely employed even if teachers do indicate it as an important goal when planning a syllabus. On the contrary, much attention is given to both the grammatical and lexical features of the text and to the analysis of narrative categories. The focus has not been on the cognitive processes that lead to evaluation and the appreciation of the text.



Reading Instruction in the Primary Grades

Instructional Time

There are 891 compulsory instructional hours per year in primary school, averaging 27 each week. Instruction may extend to 36 hours per week if parents request adding optional subjects and activities to their children's curriculum. Attendance at these additional activities is free, and the goal is to achieve a personalized curriculum. About a third of the teaching hours are generally dedicated to linguistic education (including English as a second language), and one fourth of the teaching time is dedicated to reading strategies. It is not possible to estimate exactly how much time is dedicated to the teaching of reading abilities since only about one fifth of the reading activities are explicitly referred to in the syllabi.

The national curriculum defines the annual teaching time, leaving schools free to decide how to organize it. Schools arrange their own timetable according to their Plan of Formative Activities and the available structures and services. Schools are free to decide the number of class units, the number of students per class (the average is approximately 18 students in primary schools), and the foreign language to be taught in addition to English, provided that this is done in compliance with the national curriculum.⁹

Instructional Materials

Course books are still the most common instructional tools. They are free for all students, regardless of their parents' income, and are chosen by panels of teachers. There are many specialized publishers that offer a great variety of good quality products and are very competitive.

The primary textbook is divided into learning units, which can also be interdisciplinary, with self-check tests, extra learning sections, and reading and writing worksheets to reinforce linguistic competencies and skills. Along with the textbook, other materials are used such as anthologies concerning different topics, which are enriched by worksheets, fiction texts, and workbooks. Videos and audiocassettes, among other materials, also are used both for writing and reading instruction or to enhance learning in different school subjects.

Other tools used by teachers to teach reading are posters, charts (mind maps), readymade illustrations, or illustrations created by students that are hung in the classroom. All schools have a library, and in some cases also a class library, managed by teachers, volunteers, and librarians employed by municipalities, clubs, or institutions. The website of the Istituto Nazionale di Documentazione per l'Innovazione e la Ricerca Educativa is an Internet database of the most innovative experiences carried out in schools.

Use of Technology

In the last 10 years, there have been two different phases of new technologies in schools. In 1997–2000, there was a large investment in computers and software. In the years following, efforts were aimed at the technological training of 200,000 teachers through the ForTIC.¹⁰ Recently, the use of didactic software for teaching different subjects, including Italian, has been widespread. The Ministry of Education, in cooperation with RAI Educational, a state-run educational channel, has set up a website, DivertiPC, which offers learning objects and educational games created for didactic use in primary school.¹¹ A research group, National Center for Research, also has been programming didactic software and is the center of the only Italian library of educational software.¹² Regardless of the relevant initiatives carried out on a national basis, more students acquire computer competencies on their own rather than at school.¹³

Role of Reading Specialists

Reading specialists do not play an important role in ordinary instructional activities. They are employed when students with disabilities need help, in reading laboratories, or in projects specifically concerned with reading, although these activities do not occur very often.

Second-language Instruction

There are many foreign students who attend Italian schools. The number of students without Italian citizenship has been increasing. In the 2005–06 school year, foreign students comprised 5% of the total school population, although they were not distributed evenly across the country. Sixty-four percent of Italian schools have foreign students, most of whom attend primary school. The fact that 10% of foreign students show learning difficulties since the first year of primary school has made teachers' intercultural training a priority in order to effectively integrate immigrant students into the schools.¹⁴

Reading Disabilities

Diagnostic Testing

The great variety of reading disabilities present in Italy makes screening difficult and results unreliable. In particular, 8% of the student population shows reading comprehension and writing difficulties. In primary schools, the rate of dyslexia has risen to 10%, according to a survey done by the Italian Dyslexia Association. Since 2005, the Ministry of Education requests a certified diagnosis in cases of dyslexia to adopt special learning and evaluation strategies for the entire course of studies. In addition, rehabilitation treatment is arranged with the National Health Service.

Instruction for Children with Reading Disabilities

A 1992 law guaranteed the right of all the students with disabilities to receive an education and instruction in state-run schools. The policy of the Italian school system is to include students with disabilities in the mainstream school system, with the goal of complete integration. Students with disabilities are placed in classes that have a maximum of 20 students. A special needs teacher is assigned to one or two students with disabilities who follow a personalized educational syllabus.¹⁵ Particular didactic criteria and differential testing material is used for evaluation. Students that have been diagnosed with specific learning disabilities can, by law, benefit from exemption from



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assessment and compensatory educational measures based on a personalized syllabus, the use of alternative tools, and appropriate information communications technology for the entire course of studies.

Special Education

In order to define support strategies for special education, the central administration has relied on local specialized bodies, including the Institute for Didactic Technologies and the National Research Center for the integration of new technologies into schools. The Institute for Didactic Technologies has two areas of focus: specialized documentation and experimental research. In addition, the institute is responsible for numerous experimental research projects aimed at identifying strategies in the application of special technology for students with disabilities in different school contexts.

Teachers and Teacher Education

Teacher Education and Training

Prior to 1990, preprimary and primary school teachers became qualified by attending upper-secondary school courses in teacher-training schools and teacher-training institutes. From 1990, primary school teacher training has been assigned to universities. In order to become a preprimary or primary school teacher, one must obtain a degree in primary education sciences and pass a state examination. Admission to university courses requires passing an entry examination, since the number of candidates accepted is limited to the number of new teachers required in schools.

The degree course lasts 4 years and consists of a common 2-year course and two branches of specialization in preprimary school or primary school. Professional training begins in the first year. The branch of specialization is chosen at the end of the common 2-year course. Each university can establish the minimum content level necessary to reach requirements, the didactic activities, and respective credits in the following four areas.

- Area 1: Teacher training to acquire competence in the pedagogical, methodological-didactic, psychological, sociological-anthropological, and medical hygiene fields;
- Area 2: Content of primary education;
- Area 3: Workshops for didactic planning and simulations of didactic activities; and
- Area 4: Professional training in the classroom under the supervision of a practicing teacher.

In order to be qualified to teach courses for students with disabilities, 400 hours of specific teaching activities are necessary. Universities offer specific pedagogical and didactic courses on reading education, but no specific qualification is required to become a professional teacher. In schools that use modular teaching (three teachers for two classes), one teacher is responsible for humanities.

There are two different types of teacher contracts: permanent and temporary. Teachers can be recruited through a state examination that includes an assessment of

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qualifications or on the basis of professional qualifications only. National examinations of the first type for preprimary and primary schools can be taken by teachers who have a university degree in primary education, and for secondary schools, by teachers who have a specific degree in the subject they want to teach. Since the degree in primary education recently has been established, prior legislation that qualified anyone with a diploma for teacher training schools for preprimary and primary education still applies in this transitional phase. Candidates who pass the state examination do not automatically receive a permanent teaching post, but are put on a permanent roster. To be included on this roster, one must pass the state examination with the necessary qualifications and have previous teaching experience with a temporary contract. After acquiring a permanent teacher contract, teachers must complete a 1-year trial period during which they must attend training courses in addition to everyday teaching activities.

Teacher In-service Education

In-service education is considered a right and duty for each teacher, but is not compulsory. In-service education courses are organized by institutions or organizations such as universities, teacher unions, or directly by schools on a local basis, either individually or online. Teachers can receive a maximum of 5 days leave without pay per year granted by the school headmaster for in-service education. No precise guidelines for in-service education have been established by the central administration. The courses offered are quite diverse, although a great number of them concern management, innovations, and special education needs. Recently, most courses focus on information communications technology as part of the national project to update and improve teachers' skills in this field.¹⁶ At present, in-service education methodology is still based on lecture classes followed by workshops.

Examinations and Assessments

National or Regional Examinations

The National State Examination for secondary school consists of three written examinations in Italian, a subject specific to the type of school attended, and a multidisciplinary examination. The first two examinations are prepared by the Ministry of Education. The third examination is prepared by each school's examination board. In addition, a multidisciplinary oral examination is mandatory. Successful candidates are issued a secondary school diploma that permits enrollment to all university faculties. Secondary schools provide a certification in compliance with European Union standards.

Standardized Tests

Norm-referenced tests are not widespread in Italian schools. Standardized tests are widely used as diagnostic tests for screening and treating dyslexia. These tests are currently used from primary to middle school.

However, standardized tests are employed for screening students' learning attainments. In 1999, the National Service for the Evaluation of the Educational System was established to improve and evaluate the efficiency and efficacy of the Italian school



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system compared to European and international standards, focusing on the basic subjects of Italian, mathematics, and science.

Monitoring Individual Student Progress

The Ministry of Education establishes general guidelines for student evaluation. Each school may choose the mode, time schedule, and criteria for student evaluation, means of communication with students' parents, and layout of report cards and diplomas within the limits of national legislation. Student evaluation, at all school levels, is conducted through oral, written, graphical, and practical testing (depending on the subject). Every teacher has a register where students' attainment levels and absences are recorded.

In primary and middle school, according to the deadlines established by each school, teachers assemble in a teacher class committee to discuss and ratify attainment levels assigned to each student. Each level includes attainment and behavior assessment. At the end of the school year, results are copied onto a report card. The Student's Portfolio, introduced by the 2003 school reform, records the individual competencies and personal and educational history of the student and contains a section for the evaluation and orientation in future studies. The use of the Student's Portfolio is optional. In cases where the learning process has been extensively impaired, the committee may decide not to pass the student.

In secondary school, the teacher class committee is responsible for periodic student evaluation expressed by a mark ranging from o to 10 assigned for each subject. Student behavior also is assessed and evaluated by a mark. The teacher class committee discusses and ratifies all marks, giving the student credits based on his or her academic average and extracurricular activities. These marks are consistent with the student's course of studies that contribute to his or her overall education. A student who has not reached a threshold level in a subject is assigned a pass with reserve. Final marks are recorded on report cards and given to parents. At the end of the school year, a student with one or more failing marks may be promoted with reserve. The school administration must require remedial courses for students in this situation. Good students can receive extra points for their academic average, behavior, or extracurricular course certificates, which contribute to their final assessment mark. At the end of secondary school and after passing the national state examination, final marks are expressed out of 100 in order to permit a wider scale for evaluation.

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Kuwait

Abdulghani Albazzaz National Education Development Center Ayeshah Alroudhan Abdelazim Ali Mohamed Ministry of Education

Language and Literacy

Standard Arabic is the official language in Kuwait. It is used for printed matter as well as for official and formal purposes and occasions. The Kuwaiti dialect, which is a low variety of Arabic, is often used instead of standard Arabic for everyday communication. The language of instruction at general education stages (κ -12) is Arabic. However, different dialects are used in teaching most school subjects (except the Arabic language), depending on the teacher's own dialect. English is used in areas such as science, engineering, and medicine in higher education, as well as the mode of instruction at private schools. Further, English is frequently used in the oil sector and in some parts of the private sector, such as banks and travel agencies.

In the first grade of public school, children are taught English five periods per week.¹ English is taught as a foreign language throughout the general education stages. At higher education levels, students continue to learn English as a foreign language, in addition to some English for Specific Purposes, if required.

Teaching English as a foreign language at the elementary stage has very little effect on learning Arabic. However, students often confuse the alphabets of the two languages, especially in writing. Some children also are confused about the mechanism of writing since Arabic is written from right to left and English is written from left to right. This problem tends to disappear as children grow older and their learning competencies develop.

Emphasis on Literacy

Kuwait attaches special importance to education in general and to reading literacy in particular. An example of this is adult education (evening classes for adults), which not only promotes reading and literacy but also provides a good opportunity to receive an education for those who did not finish high school or did not attend school. Adult education is one kind of public education that uses the national curriculum where students attend evening classes and are offered basic education at the elementary stage using books specially designed for them. At the intermediate and secondary stages, the same curriculum and books are used as in regular schools. At the secondary stage, students can choose to continue evening classes or study at home. Adult students take the same final examination as regular students at grade 12, and all high school graduation requirements apply to them.

Overview of the Education System

The education system in Kuwait is centralized. The Ministry of Education determines education policies, rules, and regulations. Public schools, in particular, receive their direction from the Ministry through the education areas in the country and have to abide by the Ministry's instructions and directions with respect to all pedagogical issues such as course planning, teaching methods, course syllabi, and teachers' work loads. Furthermore, Ministry of Education officials recruit teachers and have the power to terminate contracts with teachers from other (usually Arabic) countries when necessary. Training programs and educational research projects also are coordinated by the ministry.

Structure of the Education System

General education in Kuwait consists of three stages, elementary, intermediate, and secondary, in addition to a 2-year kindergarten stage. The elementary stage, which children begin at the age of 6, lasts 5 years. The intermediate stage is 4 years, and the secondary stage is 3 years. Education is mandatory for the 9 years of elementary and intermediate education. This system was implemented in the 2004–05 school year.² In addition to public schools, there are a small number of private schools and schools for students with special needs.

Role of Preprimary Education

Kindergarten is part of the general education provided by the Ministry of Education but is not mandatory. There are some private kindergartens in the country as well. Children typically start kindergarten at the age of 4, though some may start at the age of 3½. Most Kuwaiti children (about 90%) attend this stage, and it receives more funding per child than any other level of education. There are approximately 41,000 Kuwaiti children at the kindergarten stage.³

The goal of kindergarten is to use education techniques that are fun, as well as spontaneous, self-initiated activities to help children acquire skills that cannot be acquired by playing alone. Kindergarten also provides for the development of children's linguistic and cognitive competencies. Self-confidence and creativity, among other concepts, are emphasized at the preprimary education stage.

Reading Curriculum in the Primary Grades

Reading Policy

Teaching reading begins at the first grade, when students are prepared to read through the use of pictures and by linking pictures to linguistic symbols. The goal of this technique is to develop children's observation skills and awareness of relationships and emphasize the accurate pronunciation of sounds and words. The goals of teaching at this stage are the following:

- Transfer the child's oral linguistic skills acquired through their preschool activities into written language;
- Teach children in grades 1-2 to construct new words and use them in meaningful contexts, as well as to learn new words by listening and speaking;
- Teach children to read different phonemes accurately;
- Teach children to recognize the functions of punctuation marks and read clearly with a natural rhythm; and
- Teach children to comprehend and analyze texts so that they are able to extract facts, information, and values.

Summary of National Curriculum

The reading curriculum is part of an integrated curriculum that includes other language skills, such as listening, speaking, and writing. This integrated curriculum is based on graded skills developed throughout the 5 years of the elementary stage. Textbooks are used to help students acquire these skills. One goal of reading practice is to link the reading material included in the textbooks to reading text outside of the classroom, such as signs, banners, and posters.

Children begin to read two-word sentences in the first grade. As their pronunciation and understanding abilities develop, they begin to read more complex sentences. This leads to reading a paragraph that addresses a single idea, which students are subsequently encouraged to discuss. By the fifth grade, children are expected to be able to read passages up to three paragraphs long. They also are encouraged to read short stories and simple scientific texts suitable to their linguistic and cognitive levels. Reading skills are developed throughout the elementary stage. Silent reading begins at the fourth grade and is strongly emphasized in the fifth grade so that students are able to:

- Distinguish between the main idea in a text and other minor ideas;
- Relate events to sentences;
- Think and criticize;
- Solve problems; and
- Express what has been read.

Reading Instruction in the Primary Grades

Reading instruction emphasizes a variety of skills. These include mechanical reading (i.e., teaching children to distinguish between words, reading aloud skills, and silent reading skills), reading a whole topic and recognizing its main idea and other minor ideas, understanding the relationships and events involved in a text, and critiquing texts.

There are two stages of reading instruction in the elementary grades. In grades 1–2, practice focuses on abstraction and construction of phonemes, words, and sentences. Vocabulary is introduced in contexts relating to students' reading experience. In grades 3–5, reading practice follows another track where children are trained to spell and



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read words and sentences accurately, with more emphasis placed on cognitive abilities and comprehension. At the secondary stage, reading instruction serves other purposes, such as criticism, research, skimming, fun, communication, and support.

Instructional Time

Instruction in the Arabic language is assigned nine 45-minute teaching periods per week in each grade.⁴ Language skills are practiced in these lessons as inseparable components, including reading. While there is no instructional time explicitly specified for reading instruction, teachers devote approximately 15 minutes of each teaching period to it.

Use of Technology

Overhead projectors and transparencies are used frequently to attract students' attention during reading instruction. Computers are available in all elementary schools and are used to develop students' reading skills or to expose students to supplementary reading material. However, children do not have access to the Internet.

Role of Reading Specialists

Arabic language teachers in Kuwait teach all language skills at all stages and grades. There are no reading specialists at schools. However, if a child has reading difficulties, parents can send him or her to the Center for Child Evaluation and Teaching, a nonprofit education association.

Reading Disabilities

Diagnostic Testing

Observational diagnostic tests are used as a tool to measure phonetic and comprehension skills in the first grades of the elementary stage. Other tools, such as written examinations (i.e., reading, spelling, and composition examinations) and worksheets, are used in the upper grades of elementary school. While it is recognized that these tests are important, it is difficult to implement them regularly on an individual basis.

Instruction for Children with Reading Disabilities

Reading disabilities related to hearing or speaking problems, such as dyslexia, are treated by specialists in special education schools. There also are reading disabilities that may result from the child's learning environment and circumstances including absence from school, lack of ability to pay attention during reading practice, or a disadvantaged family background. For these students, the following techniques are used:

- Conduct surveys to classify students' levels and identify reading skills problems;
- Group children according to their reading difficulties;
- Develop appropriate reading exercises to improve students' reading skills; and
- Measure students' progress by conducting the survey again.

As part of the Elementary Education Development Project, one teaching period per week with the entire class has been devoted to helping children with reading problems. Such teaching periods are known as "allied lessons" and are currently under evaluation.

Teachers and Teacher Education

Teacher Education and Training

Teachers must hold a university degree in order to be eligible to teach. There are a number of education programs that qualify teachers, including those offered by Kuwait University; the College of Basic Education, affiliated with the Public Authority for Applied Education and Training; and the Education Department at the Open University in Kuwait. Students study different courses depending on their major. However, all teacher education students within a college take the same education, psychology, and practical courses. Students majoring in Arabic study both linguistics and literature courses as part of their course of study. How to teach reading is practiced through teaching methods courses. No particular courses are assigned to teach or train students how to teach reading. Therefore, there are no special requirements for teaching reading at schools. Teaching practice is also part of teacher education programs. Prospective teachers practice teaching for 1 year at the end of their college program. They teach students in different grades, and their performance is assessed and evaluated by supervisors from the school and their college.

Teacher In-service Education

Following their certification, teachers are required to attend in-service training courses that focus on the teachers' professional needs. These are particularly important for new teachers at the beginning of the school year. There is a special training center affiliated with the Ministry of Education in Kuwait where in-service training is administered. Trainers come from the ministry itself, as well as from other academic establishments such as universities and colleges. Most courses are concerned with teaching methods and techniques, though not all teachers have the opportunity to participate due to limited space and training staff. In addition, teachers can be nominated to participate in training courses abroad.

Examinations or Assessments

National or Regional Examinations

National or regional examinations are not administered at the elementary level. At the intermediate and secondary stages, students take local examinations set by their schools that they must pass in order to be promoted to the next level. At grade 12, all students, including adult students, take national tests known as High School Examinions at the end of the academic year. The subject inspectors at the Ministry of Education develop these tests, which students must pass in order to finish secondary education and be awarded their High School Certificates. Those who do not pass the tests must take them again at the beginning of the following academic year or repeat the year (grade 12). If students fail to pass more than three school subject final examinations, they are not allowed to take the examinations again and must repeat the grade.



Standardized Tests

Standardized tests are not administered at the elementary level. PIRLS 2001 and PIRLS 2006 have been the only standardized tests administered to fourth-grade students.

Monitoring Individual Student Progress

In elementary school, students are promoted automatically to the next grade, although they must pass grade 5 school subjects to enter the intermediate stage of education. In addition to final examinations, subject teachers carry out continuous assessment (oral and written) throughout the year. Recently, a portfolio assessment system was implemented. A student's total score is divided into sections according to the skills and subject areas taught. This system has been subject to criticism by many parents and teachers for several reasons. Critics argue that the system tries to assess too many items and skills, adds another burden to teachers, and does not provide the exact level of the student's achievement. Rather, it describes the student's achievement using terms such as "fair", "good", "very good", and "excellent". The Ministry of Education is now investigating the strengths and weaknesses of the system's form, content, and implementation.

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Latvia

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Language and Literacy

Latvian is the official language of Latvia and the primary language of instruction, although instruction also is provided in eight minority languages. In the 2006 school year, Latvian was the language of instruction in 727 schools, Russian was used in 148 schools, and 92 schools had both Latvian- and Russian-speaking classes. There also are small numbers of schools that provide all or some instruction in Polish, Ukrainian, Byelorussian, Estonian, and Lithuanian.¹

In 2006–07, Latvia's population was 59% Latvian, 29% Russian, 4% Byelorussian, 3% Ukrainian, and 3% Polish. Five percent of the population is Lithuanian, Israeli, Gypsy, German, and Estonian.²

Emphasis on Literacy

In 2005, 2,371 books and booklets were published in Latvia, 1,932 of them in Latvian. Of these, 234 were children's books. There also were 366 magazines and 261 newspapers published. In Latvia, there are 877 public libraries with 12.3 million reading items. In 2005, Latvian public libraries attracted 514,000 registered users who borrowed 19.9 million books. Of these users, 68% live in urban areas.³

The National Library of Latvia has developed a reading promotion program called *Children's Jury*. A committee of experts selects a collection of the newest children's books, and the National Library of Latvia sends this collection to participating libraries. The collection of books is divided into four age groups (grades 1–2, grades 3–4, grades 5–7, and grades 8–9), with six books for each age group. Children who wish to participate in this program read all the books intended for their age group and complete a survey to evaluate each book. At the end of the year, the top three books in each age group are chosen, and there are several award ceremonies for the best and most active readers around the country.

Overview of the Education System

The education system in Latvia is administered at three levels: national, municipal, and institutional. The Parliament (Saeima), the Cabinet of Ministers, and the Ministry of Education and Science are the main decision-making bodies at the national level. The Ministry of Education and Science is the education policymaking institution, issues

licenses for opening comprehensive education institutions, and sets education standards along with the content and procedures for teacher training.

The following laws and regulations are the basis of education policy in Latvia:

- Law on Education (1998) contains the definitions of all types and levels of education and sets the general principles and competences of governing bodies;
- Law on General Education (1999) stipulates in detail the main organizational principles and procedures of general education services;
- Law on Professional Education (1999); and
- Law on Higher Education Establishments (1995).⁴

In addition, education policy is shaped by regulations issued by the Cabinet of Ministers and decrees, instruction, and methodology guidelines issued by the Ministry of Education and Science.

Structure of the Education System

The major levels of education are preprimary education, including compulsory education for 5- and 6-year-old children, compulsory general basic education (grades 1–9), general secondary education (grades 10–12), and higher education.

General basic education in Latvia can be acquired in vocational schools, special education institutions, night (part-time) secondary schools, education institutions, or classes of social or pedagogic correction.⁵ These programs are provided in primary schools and basic schools, depending on the structure of the education institution and how the teaching and learning process is organized.⁶

General secondary education in Latvia is acquired in 3 years (grades 10–12). This level of education can take place in secondary schools, night (part-time) secondary schools, and gymnasiums.⁷

In the 2006-07 school year, there were 33 private general education schools in Latvia. There also were 58 primary schools, 483 basic education schools, 378 secondary education schools, and 64 special education schools.⁸

Role of Preprimary Education

Preprimary education focuses on comprehensive child development, health education, and preparation for basic education.⁹ It is meant to encompass a child's mental, physical, and social development up to the age of 7 (children enter the first grade in the calendar year they turn 7). It is provided in preschool education institutions, special preschool education institutions, and preparatory groups of general education institutions, as well as in family settings.¹⁰ The length of the school day for children, ages 5–7, may not exceed 120 minutes.¹¹

According to the Ministry of Education and Science, the primary goal of preschool education is to develop the abilities of each child, stimulate their willingness to learn about the surrounding world, develop their social skills, perceptions, and memory, and prepare them for basic education programs by developing their speech and preparing them for reading and writing.

Reading Curriculum in the Primary Grades

Reading Policy

Before entering grade 1, children begin reading simple words (1–2 syllables) and understanding what they have read. There is no formal requirement for children to be able to read or write before entering school at this stage, although an interest in books, printed text, and letters is expected.¹²

The National Standards for General Basic Education state that one of the main tasks of general basic education is to provide an opportunity for students to acquire basic knowledge and skills in language.¹³ The language domain is formed by three main subjects: Latvian language, minority language (in minority programs of education), and literature.

Summary of National Curriculum

Reading instruction in the primary grades mainly takes place as part of Latvian language instruction (minority language if applicable). For grades 1–9, the goal of this subject is to develop a student's competence in language, self-expression skills, communication in the language, understanding of the role of language in his or her personality development, retention of national identity, and development of intercultural dialogue.¹⁴

The objectives of this subject are to provide each student with the opportunity to:

- Develop language communication skills;
- Acquire the rules and specifics of language function;
- Develop an understanding of a language as a part of a nation's culture and national identity;
- Apply language skills in the learning process and self-expression; and
- Develop skills to improve his or her speech culture, rhetoric, and etiquette.

Within these objectives, the skills of listening, speaking, reading, and writing are developed.

The language competencies do not explicitly include reading but do contain basic elements such as issues of general linguistics, texts, and sentences. Within the text competency, students are expected to learn about the characteristics of texts (e.g., purposefulness, entirety, coherency, completeness), themes, main ideas, titles, paragraphs, text types, language styles, and text editing.

To meet the reading requirements for grade 3, students should be able to do the following:

• Read a text that is appropriate to his or her learning needs and interests correctly and with understanding;



- Comprehend the idea expressed in a given text, identify the theme, and understand the connection between the title and theme;
- Recognize lines and paragraphs in a given text;
- Find concrete information in a text, and use it in his or her activities; and
- Recognize the significance of word choice, sentence types, and the use of punctuation marks in the comprehension and creation of a text.

To meet the reading requirements for grade 6, students should be able to do the following:

- Read correctly, consciously, quickly, and with expression;
- Identify the theme, main idea, and parts (e.g., introduction, conclusion) of a given text, and understand their roles;
- Understand the organizational structure of a given text and the meaning of paragraphs in the creation of a text;
- Evaluate the information given in a text, and use it in his or her activities;
- Develop his or her reading skill purposefully;
- Know the features of functional language styles; and
- Recognize the role of the use of words, syntactic constructions, and punctuation marks in the comprehension and creation of a text.

Reading Instruction in the Primary Grades

Instructional Time

The school year is from September to the end of May and consists of two semesters. The length of a school year in grade 1 is 34 weeks and in grades 2–8, it is 35 weeks.¹⁵ In grades 1–9, lessons are 40–45 minutes each, with the maximum weekly study load ranging from 22–26 lessons, depending on the grade.¹⁶ The maximum number of lessons in grades 1–3 is five per day; in grades 4–5, it is six lessons.¹⁷ In grade 4, six native language lessons per week are recommended.

Instructional Materials

There are several textbooks, workbooks, and other instructional materials developed for language instruction for Latvian and minority languages. There is a list of recommended instructional literature for general education institutions prepared by the Center for Curriculum Development and Examinations and distributed to all schools. The list includes experimental books, textbooks, teaching aids, workbooks, and methods handbooks.

Use of Technology

In the 2005-06 school year, there was an average of 16 students per computer in institutions of general education. However, the use of technology in reading instruction depends on the teacher. The use of various audio materials is quite popular.

Role of Reading Specialists

In each school, there are recommended staff positions for a reading specialist and speech therapist. Schools usually have a speech therapist available for students who have speaking, reading, or writing problems in preprimary and primary grades.

Second-language Instruction

The state provides general basic education in Latvian, as well as Russian, Polish, Hebrew, Ukrainian, Estonian, Lithuanian, Roma (Gypsy), and Byelorussian. For these minority education programs, Latvian is taught as a separate subject beginning in grade 1. Beginning in grade 4, an increasing number of subjects are taught in Latvian. The first foreign language (usually English) is introduced in grade 3.

Reading Disabilities

There is no single program, or common method, or test for diagnosing students' reading problems. Diagnosis is usually the responsibility of the teacher and if there is a student with reading, writing, or speech problems there is often a speech therapist available to help. Throughout the primary grades, it is very common to have extra time for instruction after formal lessons. This makes it relatively easy for teachers to provide extra reading help or attention if students need it.

Special Education

There are three special types of programs within general education: special education programs, programs for ethnic minorities, and social and pedagogical correctional education programs.

Pedagogical correction programs are intended for students who have difficulty learning the curriculum due to developmental or social behavioral problems (excluding medical problems). The program lasts up to 3 years and can be implemented in an education institution founded by state, municipality, or any legal entity or person. The decision to enroll students in this program is the responsibility of the school or pedagogical board, with agreement from the student's parents. The program provides a day-care center, and uses study and instructional correction work to reduce students' emotional, mental, or physical stress and develop new models of behavior. After completing this program, a student should be able to follow mainstream education successfully.

Teachers and Teacher Education

To ensure high quality in education, specific requirements have been stipulated by the state for teacher training and qualifications.¹⁸ Since 2004, a teacher must have a higher education degree and relevant qualifications in compliance with the procedure set by Ministry of Education and Science. Thirty-six hours of in-service training are required in a 3-year period. There are nine state higher education institutions that provide full-time professional teacher-training programs.

A first or second degree in education results in a bachelor's (3-4 years) or master's (1-2 years) degree. A bachelor's degree in a scientific discipline corresponding to the subject



is allowed if a teacher starts his or her studies in a teacher education program within 2 years of beginning employment. Designed for teachers who already have a bachelor's degree in education, a teacher qualification for an additional subject area can be acquired in 1–2 years. Qualification for preprimary teachers, household teachers at the general basic and secondary level, hobby education teachers, librarians, and sport instructors can be acquired in 2–3 years.

Examinations and Assessments

There is a single assessment system, introduced in 1992, based on a 10-point scale (10 being the highest mark) together with a nongraded description. The system has been established in order to assess the scope, quality, and level of the acquired learning in the content areas. It also assesses skills, such as the acquisition of supplementary information, initiative, independent learning, cooperation and communication skills. The assessment system is intended to encourage the development of positive attitudes towards learning, oneself, and the surrounding community as well as the development of accuracy, diligence, goal directedness, self control, and motivation.

- In grade 1, a brief, evaluative written or oral description of the student's learning activities, style of work, communication and cooperation skills, attitudes, and the development of learning dynamics is made.
- In grades 2 and 3, a 10-point scale is used in Latvian language, mathematics, and the ethnic minority language. In other subject areas, the evaluation is descriptive.¹⁹
- In grade 4, a 10-point scale is used in Latvian language, mathematics, natural sciences and the ethnic minority language. In other subject areas, the evaluation is descriptive.
- In grades 5–9, a 10–point scale is used in all core subject areas. In special subjects (e.g., ethics, health education), students are designated as "complete" or "incomplete."

The purpose of introducing this system was to attain international recognition of the education provided in Latvia, compare students' achievements in the courses of study, and organize students' assessment at the school level.

Tests at the end of grades 3 and 6 and centralized examinations at the end of the general basic education level (grade 9) are organized on the national level. The content and procedure for 13 national tests, 3 examinations, 1 centralized examination, and 1-2 diagnostic tests are devised nationally at the level of general basic education.

- In grade 3, a combined cross-curricular test and a test in Latvian language (for ethnic minorities' education programs) are administered;
- In grade 6, tests are administered in the language of instruction, mathematics, and Latvian language (for ethnic minorities' education programs); and

In grade 9, tests are administered in a foreign language, natural sciences, sports, ٠ language of instruction, Latvian language (for ethnic minorities' education programs), mathematics, and history.

Monitoring Individual Student Progress

Students' achievement in general basic education is provided in a school report in each grade at the end of each semester and a certificate of basic education. After being assessed in all the subjects set by the general basic education program and state examinations, grade 9 students receive a certificate of general basic education and an achievement sheet.²⁰

Suggested Readings

Central Statistical Bureau of Latvia, homepage http://www.csb.gov.lv.

Latvia Human Development Report 2004/2005 http://hdr.undp.org/docs/reports/national/ LAT_Latvia/Latvia_2005_en.pdf

- The Information Network on Education in Europe. The Education System in Latvia. (2004/05) http://194.78.211.243/Eurybase/ Application/frameset.asp?country= LV&language=EN
- The Centre for Curriculum Development and Examinations. Basic educational standards. http://isec.gov.lv/en/standards.shtml
- Ministry of Education and Science Republic of Latvia, homepage http://www.izm.gov.lv
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Lithuania

Aiste Elijio Ministry of Education and Science

Language and Literacy

Lithuania's official state language is Lithuanian, which together with Latvian forms the Baltic branch of the Indo-European family of languages. It is considered to be one of the world's oldest living languages, having similar grammatical structures to Sanskrit. The main languages used by minorities in Lithuania are Russian and Polish. In most schools, the language of instruction is Lithuanian, but there is still a considerable number of schools with a language of instruction other than Lithuanian, mainly Russian or Polish. Russian also is taught as one of the four most popular foreign languages, together with English, German, and French.

Overview of the Education System

The parliament defines the basic principles, structure, and objectives of education in Lithuania, while the Ministry of Education and Science, with its institutions, devises and implements education policy. The Ministry of Education and Science plays an important role in the education system, defining the curriculum that is used throughout the country, determining teachers' salaries, and assigning educational staff. Although the administration and financing of vocational and special schools is the direct responsibility of the Ministry, the administration and financing of general education schools is the responsibility of local municipalities.

Structure of the Education System

Preprimary education in Lithuania is intended for children aged 1 to 6 and is not compulsory. At present, it mainly consists of public and some private kindergartens. After a decline in enrollment from 1991 to 1999, enrollment has been increasing since 1999, with about two thirds of the relevant age group attending in 2004.¹

Education is compulsory for all students up to the age of 16. **Primary** school consists of grades 1 to 4. Parents are allowed to choose whether their children begin grade 1 at age 6 or 7. Although, age 6 is the suggested age for starting primary education, there is an increasing tendency for parents to wait until their child is 7 years old before beginning school. Enrollment in the primary school is 98% of the total age group.²

Lower-secondary (basic) school consists of grades 5 to 10. Primary and basic schools follow a national curriculum that is the same throughout Lithuania. The schools and teachers, however, are expected to adapt it to their own particular needs. The curriculum

at the primary and basic levels includes the mother tongue (mainly Lithuanian, but in some schools Russian, Polish, and Belorussian), mathematics, foreign languages, history, geography, sciences, civil education, music, art, physical training, crafts, informatics, technologies, and moral education (either religion or ethics). In addition to these subjects, the language minority schools also teach Lithuanian as a state language. Reading and writing are taught as part of the mother tongue.

Upper-secondary school consists of grades 11 and 12. Beginning in 2000, a system of "profiles" was introduced in upper-secondary schools, where upper-grade students chose one of four profiles—humanities, mathematics and science, technology, or art— and their curriculum was arranged according to that profile. Since the 2006–07 school year, the concept of profiles was revised and a system of "individualized learning" has been adopted, where students no longer are required to commit to any one profile, thus broadening their choices.

In parallel, gymnasiums offer general education at a more advanced level than that of ordinary secondary schools. Education in gymnasiums lasts 4 years and corresponds to grades 9 to 12 of the secondary school system.

In 1991, the Education Law authorized the creation of alternative, privately owned educational institutions. However, the number of private schools is still minimal (about 1.7% of all schools). The proportion of schools that are private is largest among primary schools (7%).³

Reading Curriculum in the Primary Grades

Reading Policy

The official reading policy is reflected in the *General Curriculum and Standards of Education* for preprimary, primary, and basic education.⁴ The main goals for language instruction in primary schools related to reading include the education of a reader who:

- Enjoys reading;
- Has aesthetic insight and comprehends the spiritual values presented in the text, as well as the beauty of the language;
- Understands the importance of scientific, journalistic, and other sources of information and constantly experiences the need to draw knowledge from these sources; and
- Is able to independently find needed information and use it consciously.

The need to preserve and foster cultural traditions is emphasized in all levels of education.

Summary of National Curriculum

Reading is taught as part of the mother-tongue curriculum in primary schools. Various aspects of reading literacy (as understood in the *PIRLS 2006 Framework and Specifications,* 2^{nd} *Edition*) are subtopics within the mother-tongue curriculum. However, "reading" often refers to reading ability, without attention to the processes of comprehension.

Currently, there are plans to amend the national curriculum to include a more comprehensive approach to reading abilities.

The curriculum includes the following goals for reading in the primary grades:

- Develop the feeling of the aesthetical and ethical value of a text;
- Understand the differences between prose and poetry;
- Understand the topic and main idea of a text;
- Understand the use of synonyms, antonyms, and comparisons in texts;
- Express one's opinion about a book that was read;
- Read prose (e.g., recognize events, persons, time and place, and identify the most attractive part of a text);
- Read and recite poetry (e.g., recognizes images, sounds, colors, and mood);
- Present an elementary understanding of drama and performance of a play;
- Read an informative text (including dictionaries, encyclopedias, textbooks, etc.) and find needed information (e.g., topic, main and secondary aspects, conclusions, etc.); and
- Can purposefully read media.

Related to these aspects are the standards for a student at the end of primary school (grade 4):

- Read various texts with understanding, fluently and at the right pace;
- Read handwritten texts:
- Independently find needed information in textbooks, dictionaries, or encyclopedias to understand and purposefully use it;
- Read children's newspapers and magazines, locate an article on an interesting topic, and express his or her opinion about it;
- Locate parts of a book (e.g., author's name, title, artist or designer, text, illustrations, publishing company, year of the issue, etc.), using content cues to find needed text;
- Understand the beauty of a literary text and orally express his or her impressions;
- Understand the content and elements of a simple narrative text (e.g., topic, main idea, events, place, time, and characters);
- Distinguish between prose, poetry, and drama; and
- Use electronic information (when available)

Mandated Materials for Reading Instruction

The national curriculum does not prescribe any mandated materials for reading instruction. However, the Ministry of Education approves a number of textbooks and other reading materials.





Reading Instruction in the Primary Grades

Instructional Time

The school year in Lithuania starts at the beginning of September and typically ends at the end of May in primary schools and around the middle of June in lower- and uppersecondary schools. The school year is divided into three 3-month terms or two 4- or 5-month semesters. Schools close for 1 week at the beginning of November, for 2 weeks at the end of December, and for 1 week in March or April.

Generally, schools in Lithuania are 5 days a week. The instructional time usually is divided into subject lessons, each lesson lasting 45 minutes (or a slightly shorter time in the primary school). At the fourth grade, in a typical week, the total amount of instructional time is slightly more than 17 hours. The maximum number of compulsory lessons per week varies from 22 lessons in grade 1 to 32 lessons in grades 9–12. This does not include additional lessons that students are free to choose, depending on their availability, at a particular school. The number of compulsory lessons remains relatively constant throughout primary school, increasing to 23 in subsequent primary grades. On average, there are eight lessons allocated for the mother-tongue instruction in each of the primary grades. This number drops to 5 to 6 lessons in later grades.⁵

Most schools divide the allocated mother-tongue lessons into language (writing and grammar) and literature (or reading in primary school). However, the exact number of lessons allocated for reading instruction might vary depending on a particular teacher.

Instructional Materials

In primary and lower-secondary schools, students mainly use textbooks that include children's stories, excerpts from various books, as well as exercises that focus on reading comprehension. Independent reading is practiced regularly in Lithuanian schools. Students read children's books of their own choice and sometimes are asked to present, either orally or in writing, about what they have read. In addition to textbooks, in the higher grades, readers are introduced. The textbooks include information that supplement the stories, such as discussions of reading theory or information on the authors. The readers provide plain texts (excerpts) from a variety of literary works.

Use of Technology

Although, to some extent, there has been an increase in the availability of some literacy-related computer programs, their use is still almost nonexistent in the Lithuanian schools. However, in general, students have greater computer access for writing and reading than they had in 2001.

Second-language Instruction

In schools with a language of instruction other than Lithuanian (mainly Russian, Polish, and some Belorussian), Lithuanian is taught as a state language in addition to the mothertongue language. The syllabus for Lithuanian as a state language differs from the syllabus for Lithuanian as a mother tongue. Nevertheless, it includes a wide range of goals for speaking, writing, and reading in Lithuanian.

Reading Disabilities

Diagnostic Testing

No special attention is given to students with reading disabilities in Lithuania. Although diagnostic tests might be used to identify children with mental disabilities or those with exceptional talents, there are no diagnostic measures developed to identify students with major problems in reading. As a result, there are no special materials or programs to help students with reading disabilities reach the desired level of reading.

Teachers and Teacher Education

Teacher Education and Training

Primary school teachers are trained either at one of Lithuania's three pedagogical universities (earlier called pedagogical institutes) or one of two teacher training colleges. Training lasts 4 years at a university and 3 years at a teacher training college. Courses include those subject areas that are taught in the primary schools, as well as general courses such as pedagogy and psychology. There are no specific requirements to teach reading. As reading itself is integrated within general language instruction, so is the training for teaching reading.

The majority of teachers in the general education schools (about 87%) have a university-level education, about 9% have a college-level pedagogical education, and another 4% have a college-level non-pedagogical or secondary-level education.⁶ Presently, there is no process of licensing or certification for primary school teachers, although there are plans to introduce a teacher license or certificate in the near future.

Teacher In-service Education

The Teachers Professional Development Center and in-service training centers provide qualification and further teacher education. Since 1993, professional development of Lithuania's teachers has been encouraged through the assignment of the following qualification categories: junior teacher, teacher, senior teacher, teacher-methodologist, and teacher-expert. Teachers' salaries in public schools depend on their qualification category and length of service. Teachers must be recertified every 5 years, either to confirm their present category or to receive the higher one. Presently, the majority of teachers have achieved the senior teacher category, while only about 1% have achieved the highest category of teacher-expert.

Examinations or Assessments

National or Regional Examinations

There are no national examinations at the primary level. Students take examinations at the end of basic school (grade 10) and at the end of the secondary school (grade 12). There are two separate examinations at the end of basic school: mother tongue and mathematics. In addition to these, students attending language minority schools also take a Lithuanian language examination. A portion of the language examination is devoted to reading comprehension. The examinations at the end of basic school are not high-stakes examinations, since their results are not used for placement in secondary school.



Students who do not pass the examinations still receive their basic school-leaving certificates, provided their school marks are "positive".

At the end of secondary school (grade 12), a range of final examinations (called Matura or Brandos) are offered. Lithuanian language (either as a mother-tongue or as a state language) is the only compulsory examination. A student is free to choose other subject area examinations from a large list including mathematics, biology, physics, chemistry, geography, history, foreign languages, art, music, informatics, and mother tongue (for language minorities). In order to receive the secondary school-leaving certificate (Matura), students must pass at least four examinations.

Most examinations can be taken as school or state examinations. The tests and marking instructions for school examinations are prepared centrally by the National Examinations Center but are marked at schools using the marks "not passed" and from 4 to 10 in order of increasing achievement. State examinations are prepared and marked centrally. The state examinations are norm based and use marks "not passed" and from 1 to 100 (corresponding to the student's percentile ranking based on the population of students who have passed the examination). The secondary school-leaving examinations are high stakes, since their results are used for selection into higher-level educational institutions, such as universities and colleges. The state examinations that are usually the more difficult ones and that are marked centrally are relied upon more, and their results get priority over the results of the school examinations. The secondary school-leaving examination in Lithuanian language includes a series of items on reading comprehension.

Standardized Tests and Diagnostic Testing

In Lithuania, the area of standardized tests is yet undeveloped. Currently, there are virtually no standardized tests used for assessing reading achievement. Some test booklets may be available in the bookstores, but their quality is not verified.

Monitoring Individual Student Progress

Students in the primary schools do not receive marks, but instead receive written detailed explanations of their achievements based on teachers' observations. Beginning in grade 5, marks 1 to 10 are used to measure the attainment of students, with 4 being the minimal "pass" mark and 10 being the "excellent" mark. There are general directions for what mark should be assigned for a particular level of attainments, however, generally, the marks are determined by the professional opinion of a teacher. Students' achievement in reading is assessed as a part of their overall assessment in their mother-tongue subject area.

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Luxembourg

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Language and Literacy

Luxembourg is one of the few countries where several languages are spoken and written in the whole territory and in the different areas of life. Luxembourg has three official languages by law. Luxembourgish, which has its origins in Franconian German from the Mosel region and has strong French influences, is an official national language and the main language of everyday communication among Luxembourgers. French and German also are official languages of the country, although French is most widely spoken and also functions as the language of administration.

Because Luxembourg is a multilingual country and 40% of its residents are immigrants, a high value is placed on language instruction in primary school.¹ Luxembourgish is taught as early as the preschool level and continues into primary school. German, as well as mathematics and general knowledge, is introduced at the start of primary school and is the language in which reading and writing are taught. French is introduced in the second half of the second school year.

The languages of immigrant groups include Portuguese (13%) and Italian (4%).² However, the frequency with which these languages are used depends on the situation and context. There are many situations in which the residents of Luxembourg speak several languages simultaneously, since there are no regional linguistic boundaries within Luxembourg. Because of Luxembourg's development as a financial center and as the seat of European institutions, English and other languages also play a significant role.

Several major daily newspapers, as well as numerous weekly magazines, are published in Luxembourg. Newspapers appear in multilingual editions in German, French, and Luxembourgish, although most articles tend to be in German. In recent years, Frenchonly daily newspapers and magazines also have appeared. Luxembourgers tend to be multilingual in their reading habits. Literature published in Luxembourgish—particularly children's literature—has increased greatly in the last 15 years.

Overview of the Education System

Luxembourg's school system is centralized, and the Ministry for Education and Vocational Training is responsible for course content. At the preschool and primary school levels, inspectors employed by the Ministry monitor schools in terms of educational competence. Budget and staffing issues are mainly dealt with by local authorities and the Ministry. At the secondary level, the state government is directly responsible for all educational and financial matters.

Stucture of the Education System

The majority of institutions in preprimary and primary education are publicly owned; less than 1% of students are enrolled in private schools. This type of school is more widespread in lower- and upper-secondary education where it accounts for 13% and 8% of all students, respectively.³ These private institutions are usually controlled by nongovernmental bodies, but follow the national curriculum and receive public funding. Independent private schools in Luxembourg include the European School and international schools. These schools follow their own curriculum which, in the case of some international schools, originates in specific countries. Some residents who live close to the border or who are not satisfied with the Luxembourgish school prefer to send their children to schools in neighboring countries.

Preprimary education begins with an optional year of public nursery education (éducation précoce) for 3-year-old children. During the 2004 school year, more than half of all eligible children in this age group were enrolled. Preschool education (éducation préscolaire), for all children between the ages of 4 and 6, marks the beginning of compulsory education in Luxembourg. The number of children enrolled has remained constant in recent years, with 10,441 children attending preschool education in the 2004 school year. The curriculum in preprimary education puts emphasis on physical, musical, and artistic activities and the development of mathematical logic and linguistic skills. Children also are introduced to topics relating to nature and the environment.

Primary education (enseignement primaire) is open to all 6-year-old children who have reached that age by September 1 and covers schooling for the next 6 years.⁴ Subjects in primary education include languages (i.e., Luxembourgish, German, and French), mathematics, natural and social sciences, art, music, physical education, and religious or moral education.

The primary education system also includes special education classes for students with learning difficulties. The number of students enrolled in primary education rose slightly during recent years, from 31,751 students in 2002 to 32,586 students in 2004. The proportion of students in special classes decreased slightly from 2002 to 2004. In both school years, this proportion was less than 1%.⁵

Of the two branches of **secondary** education, a total of 10,571 students attended general secondary education (Enseignement secondaire),⁶ while 22,460 attended technical secondary education (Enseignement secondaire technique) in the 2004–05 school year.⁷ General secondary education is divided into junior grades (3 years) and upper grades (4 years). In the last 2 years, students choose one of seven priority subjects, which include languages, mathematics, natural sciences, humanities and social sciences, and art. On successfully completing the upper grades, students can study at universities and technical colleges. In the 2004–05 school year, 1,092 students received the general school-leaving

qualification, the majority in humanities and social science (300 students) and natural science (217 students).⁸

Technical secondary education consists of lower, middle, and upper grades and lasts between 6 and 8 years, depending on the subjects chosen. The middle and upper grades are divided into practical vocational (régime professionnel) and specialist technical training (régime technique), as well as technician's training (régime de technicien). All three courses of training provide for technical specialization. Practical vocational tuition takes place parallel to, or in rotation with, practical on-site training at the training center. All other courses of training involve full-time schooling. The practical vocational course ends after the middle grades with a final examination, while the specialist technical training and technician's training end after the higher grades and qualify those who successfully complete their courses to study at a third level or technical college. In the 2004–05 school year, 2,297 students received the general school-leaving qualification. Of these, 1,064 were in practical vocational training, 779 in specialist technical training, and 454 in technician's training.⁹

Role of Preprimary Education

Preprimary education plays an important role in the national education system and is considered the first opportunity to develop a child's social and affective behavior and communication skills. It starts at 3 years old and is compulsory for all 4-year-old children. Particular focus is given to the child's language, motor, and social development in order to prepare him or her for entry into primary education. The goal of preprimary education is to develop children's personality, social integration, and acquisition of basic skills to prepare them for learning reading and writing, arithmetic, and geometry. A further goal is the early identification of learning disabilities. Preprimary schooling is conducted by professional teaching staff.

Reading Curriculum in the Primary Grades

The subject matter and goals of reading instruction were specified in the 1989 national curriculum for primary education. The methodology for reading instruction is part of language instruction as children first learn to read and write in German and mainly defined within the curriculum for German and French language instruction. Reading is not restricted to language learning but is seen as a transversal skill that is also trained in areas such as maths, geography, and history.

Reading Policy

The syllabus, developed by the Ministry for Education and Vocational Training, is regularly assessed and updated and specifies teaching objectives and methods for each year of primary school that all teachers must follow. In addition, it issues recommendations for offering differentiated instruction to students and evaluating performance in the area of reading.

In all three language subjects (Luxembourgish, German, and French), priority is given to reading and the development of reading skills and reading comprehension.



In Luxembourgish classes, oral use of the language for communication purposes is encouraged, as is the expansion of vocabulary. The curriculum in French language classes focuses on teaching both oral and written communication.

Learning to Read in German Language Classes

Learning to read lays the foundation for written language acquisition and is one of four pillars of German language instruction, alongside speaking, listening comprehension, and writing. Grammar and vocabulary should be taught as ancillary functions. Reading lessons are intended to motivate students and awaken their interest in reading. It is intended that students discover the entertaining and beneficial nature of reading, further develop their language skills through reading lessons, and get a general idea of how books and texts are composed.

Reading lessons in German begin in the first year of school and pursue the following four priorities within the first 2 years of school:

- Intensive development of spoken language (a prerequisite for acquiring written language) is developed by encouraging auditory and articulatory perception.
- Encouraging students to read through intensive exposure to printed reading materials and by reading texts that relate to students' own experiences.
- Introducing students to the alphabet so that they can recognize the letters and understand the relationship between letters and phonetic characters. Students should learn to recognize the way words and sentences convey meaning, and to understand language from a phonetic point of view.
- Developing specific learning processes for reading literacy, such as arranging (structuring) words into units of written language, combining these words to form sentences, explaining word meanings in terms of other passages in the text or word fields (related words), and recognizing simple word and sentence structures. Also, students should be able to critically examine the content of texts.

After the first 2 years of school, students should read fluently and glean information from texts in German, their first second language. Throughout primary school, the goal of reading lessons is to familiarize students with texts and make them aware of text and language structures. The traditional spectrum of literary texts is extended by introducing many different texts (e.g., literature, letters, operating instructions, magazine articles, plans, lists, and posters).

By working with a variety of texts and developing language skills, the goal of reading lessons is to enrich students' vocabularies, enable them to express complex ideas, and increase language awareness and language reflection. An understanding of texts is continually encouraged through intensive development of the reading processes and techniques mentioned in the syllabus. The overall goal is to guide students towards a pragmatic, productive, and creative approach to texts and help them learn to critically engage with texts on an intellectual and linguistic level. Furthermore, students should be guided towards continued independent development of their language skills. The teacher presents correct language models, and linguistic errors are redressed in targeted exercises, which include analytical and grammar assignments.

Reading in Other Lessons

The process of learning to read also should be supported in the other areas of German language class, such as through exercises that encourage reading or through the way language is used. Instruction in writing during the first 2 years of school focuses on using writing materials, as well as developing a willingness to learn to write and learning specific processes for writing. In later years, students learn to record and communicate ideas through writing, expressing facts clearly, and using language playfully.

Grammar lessons are indirectly related to reading, since understanding grammar should lead to a better understanding of linguistic and textual structures. Basic concepts of grammar are mostly taught through a practical approach. The goal is to awaken in students a readiness to reflect about language and develop awareness of the formal side of language.

Although the current curriculum makes few explicit references to the transdisciplinary role of reading, the process of learning to read is nonetheless supported in the teaching of non-language subjects. For example, students learn to deal with work assignments, selectively looking for information, developing and communicating their own perceptions, feelings, and opinions. Overall, however, the present curriculum makes little reference to the transdisciplinary role of reading.

Differentiation in Reading Lessons

In light of students' heterogeneous cognitive and extremely heterogeneous social backgrounds and their varying knowledge of German, differentiated learning plays a significant role in reading lessons. Students with little knowledge of German should be individually supported by the use of compensatory exercises.

For slower learners, the range and difficulty level of exercises also may be reduced by using texts and subject matter that have pictures, varied repetition, or additional explanation. The students who learn faster are encouraged to help slower learners. The latter group also may be given differentiated support, such as assignments of larger volumes of text or more difficult subject matter. In special cases, a personalized curriculum and support plan may be developed for a student in order to meet his or her abilities and needs in learning to read.

Mandated Materials for Reading Instruction

The Ministry for Education and Vocational Training produces all teaching materials for reading lessons, as well as all other reading material used in primary schools in Luxembourg. In the area of reading or language teaching, readers, workbooks, and classroom audio-visual materials are produced, as well as teachers' notes and information brochures with reading suggestions for parents.

All materials intended for reading classes are developed by working groups made up of Ministry officials, school inspectors, external experts, and teachers. Most teaching



materials are developed by the Ministry to meet students' needs and learning processes. In certain cases, materials from abroad are used as a model. These are evaluated by the Ministry and adapted to the requirements of the national curriculum.

Before publication, all teaching materials must be approved by the Education Committee. All teachers in Luxembourg are required by law to use the teaching materials stipulated by the Ministry.

Reading Instruction in the Primary Grades

Instructional Time

Language instruction in Luxembourgish, German, and French plays an important role and accounts for up to 46% of all lessons in a school week.¹⁰ Reading is first taught as a part of German instruction in grade 1 with eight weekly lessons. This number of lessons remains constant until the beginning of grade 3, when instruction time in German is reduced due to second-language instruction in French. French instruction begins in the second term of grade 2 and increases to 7 hours per week in grade 3.

Instructional Materials

Readers, language books, and workbooks are the materials predominantly used in German lessons. Grammar books are introduced in grades 5 and 6. In the first 2 years of primary schooling, teachers also make particular use of audio-visual media, such as CDS, posters, overhead projection, and picture cards or picture dictionaries.

Use of Technology

The national curriculum provides several guidelines for the use of technology in teaching. Teachers are encouraged to use audio-visual materials in German language lessons to support and develop students' reading skills, since German is not the mother tongue of most students. In order to familiarize students with communication technology and interactive sources of information such as the Internet, the curriculum requires schools to teach basic skills for the use of computers and software tools, develop students' creativity, and train their problem-solving skills in this domain.

The Ministry for Education and Vocational Training has launched several initiatives to promote the use of information technology in primary education, such as setting up websites for the communication and exchange of information. Instructional materials and guidelines are provided to teachers via the Internet, and the use of computers and Internet during lessons has become frequent, such as researching information or communicating with other schools or classes. The computer equipment in all schools is provided by the local town and city councils.

Role of Reading Specialists

The classroom teacher is generally in charge of language and reading instruction. His or her duties include teaching the grade-specific reading skills required by the curriculum, while considering the individual capacities of the students. Every primary teacher receives a specific qualification in reading instruction as part of their university training. Reading specialists are involved in the case of children with special needs.

Second-language Instruction

French is the second written foreign language to be introduced into primary education and at least the third language that students learn during compulsory education. Instruction starts with three lessons per week in grade 2 and is taught until the end of primary school with up to seven lessons per week.¹¹

Instruction in French consists of practicing oral communication and follows a practical approach to reading. Instruction focuses on reading comprehension and teaches techniques for decoding words and sentences. Students should be able to understand the meaning of a text and to communicate the information they retrieve from the different passages.

Effective Practices

In order to motivate students to read, most schools have libraries or reading corners in each classroom. Students are encouraged to choose books to read on their own or to other students. These activities help to broaden students' reading experience and develop their interest in reading and literature. It is also recommended that teachers encourage the exchange of individual reading experiences between students. These measures are accompanied by projects, such as reading nights or reading competitions.

Reading Disabilities

Diagnostic Testing

Compulsory tests for speech and hearing disabilities are conducted during early childhood and twice during preschool. Although not directly aimed at reading, they facilitate the early discovery of problems that might lead to reading difficulties in later years. In primary education, each class teacher may conduct a test of reading abilities and possible reading difficulties.

Instruction for Children with Reading Disabilities

The teacher's role is to support students with difficulties by adapting teaching methods and workload to the needs and capacities of these students. Teachers may refer to external specialists in order to help students with reading difficulties. These specialists, either specially qualified teaching staff, education specialists, or psychologists, assist the teacher in class during lessons or provide extra instruction after school for small groups of students.

Special Education

The parents of children with special education needs can choose between special education schools or integrating their children in regular classes. The primary education system has been integrating children with special education needs in regular classes since the early 1990s.¹² Classes that have students with significant learning difficulties receive in-class support in the form of an increased number of teachers or, alternatively,



the number of children in these classes is reduced. Another common form of support is additional instruction in certain subjects to support children with learning difficulties.

Some schools run special classes as a part of primary education. These classes also may accommodate students from abroad who have little or no knowledge of German and French. Another approach is to teach children with learning disabilities or slow learners in small groups, but also allow these students to attend regular classes for certain subjects. However, in general, measures to integrate students with learning disabilities have involved replacing special classes with integrated forms of education.

Teachers and Teacher Education

A preprimary or primary school teacher usually has finished 3 years of post-secondary studies in the field of educational sciences. More recent generations of teachers will have studied for 4 years when entering teaching service. Nearly half of all students who wish to become primary school teachers study at the University of Luxembourg. Admission requirements are a diploma in secondary education with qualifying scores, and proven language skills in Luxembourgish, German, and French, which are assessed by an entry examination.

Studies follow a comprehensive approach and begin with courses in education theory, psychology, and didactics. Subject-specific courses are introduced in the second half of the program of study. All students take part in practical preservice training and also pursue studies abroad. The degree of Bachelor of Educational Sciences is conferred upon successful completion of training.

Some students prefer to acquire a qualification in primary teaching at universities abroad. Until now, Luxembourg recognized foreign diplomas from certain universities in Belgium, France, Germany, and Austria. In this case, students follow the foreign curriculum and finish their studies with the national diploma, for example, the national degree examination (part II) of German universities or the primary teacher's diploma of French universities.¹³

On completion of studies in Luxembourg or abroad, prospective teachers must pass a national examination in order to become fully certified preprimary or primary teachers in Luxembourg. Its content is determined by the Ministry for Education and Vocational Training and includes language skills in Luxembourgish, German, and French; competence in the teaching of maths, languages, and sciences; knowledge of the national curriculum and national legal regulations relating to schools.¹⁴

There are no specific requirements for teaching reading, and all certified primary teachers can be given responsibility for language and reading instruction. During their studies, teachers are trained in how to teach reading, rather than on how to teach the reading curriculum. However, the recurring language tests at the beginning and at the end of studies reflect the importance of language and reading instruction in primary education. These examinations ensure that primary teachers have a sufficient knowledge level of all languages of instruction.

Teacher In-service Education

All forms of in-service education fall under the responsibility of the Ministry for Education and Vocational Training. Projects focus either on the development of specific professional skills or on innovative projects in primary schools. Training courses are held throughout the year, and the content and number of courses is decided following consultation between schools, school inspectors, national program committees, and teacher associations. Participation in continuing education is always testified by a certificate, and some in-service trainings lead to higher degrees.¹⁵

Further sources of in-service education are the meetings held by the school inspectors, mandatory for teaching staff, which deal with current issues and also provide teacher training.

Examinations or Assessments

National or Regional Examinations

No national examinations are conducted during primary education until the end of grade 6, when all students take part in a national assessment to gauge the aptitude of each student for post-primary education.¹⁶ This procedure was introduced in 1996 and replaced the former entrance examination to secondary education. A student's abilities in German, French, and mathematics are evaluated using standardized assessments. The final recommendation is based on these results but also takes into consideration the marks at the end of grade 6. The final recommendation is issued by a committee headed by the local school inspector and includes the class teacher, two post-primary teachers, and a psychologist who may provide an opinion at parents' request. Parents may appeal the recommendation if they disagree with the decision of the committee.¹⁷

Standardized Tests

Standardized tests of ability in German and French are conducted in primary and secondary school. In grades 2 and 4, these tests assess students' educational development, while tests in grades 6 and 9 are given to determine the students' intended further education.

The German-language tests focus on core aspects of the curriculum by examining reading comprehension, listening comprehension, writing ability, grammar, and vocabulary. They also investigate learning results, such as determining students' skills and whether they have attained educational standards. These tests are based on a constructivist understanding of the reading process whereby the student is required to independently derive information from a text and link this to prior knowledge to construct meaning about the structure and content of the text.

Based on this theory of reading and text appreciation, a wide variety of texts and contents are used in assessments, from literary to factual texts or continuous to non-continuous texts. These texts are then put at the disposal of the class teacher and are used by a majority of teachers. All test instruments are produced by the Ministry. There is no use of commercial tests.



Monitoring Individual Student Progress

In all subjects and subject groups, students are tested through regular tests of learning progress and students' work, the majority of which are paper-and-pencil tests. Regular tests that accompany lessons give teachers an indication of their students' current level of knowledge and also of the effectiveness of the teaching methods being used. Periodic tests are more comprehensive, covering longer phases of learning and producing a conclusive survey of learning progress.

Assessment is both qualitative (in the form of written reports by the teacher) and quantitative (through a points rating system). A points scale from 60 (very good performance) to 1 (unsatisfactory performance) applies to all school subjects. A student must receive a minimum of 30 points for their performance to be judged satisfactory.

The test results for each student and subject are documented in a notebook that is shown to students and parents three times per school year. In addition to this, teachers are obliged to regularly consult with parents. These performance reports are collated in a term report and serve as the basis of the teacher's decision about whether a student may proceed to the next grade.

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Republic of Macedonia

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Language and Literacy

The official language in the Republic of Macedonia is Macedonian. However, following changes to the Constitution in 2001, regions with predominantly non-Macedonian ethnic groups also consider their ethnic languages to be official. All national groups in Macedonia are entitled to primary and secondary education in their mother tongue. The Albanian population also has the right to education in Albanian at the university level at the Faculty of Pedagogy in Skopje and the third State University in Tetovo.

In primary and secondary schools, instruction is provided in Macedonian, Albanian, Turkish, and Serbian.

Overview of the Education System

As a country in transition, the Republic of Macedonia has been working toward decentralizing its education system and improving quality, equality of opportunities, and efficiency. To accomplish these goals, professional and technical assistance have been necessary as well as capacity building in a number of areas. For these reasons, the Ministry of Education and Science developed the Decentralization Concept and made changes in the legal framework to redefine the roles and functions of the education system. The first phase of the decentralization process was to transfer the responsibility for school maintenance to the municipalities, which was implemented beginning in June 2005. The second phase entailed transferring teacher employment and salary decisions to the municipality level, which began in July 2007.

The Ministry of Education and Science is responsible for national education policy. These responsibilities include education finance decisions, administration of state institutions, and establishing and monitoring education laws and regulations. Within the Ministry of Education and Science, several entities carry out the duties of the Ministry. The Bureau for Development of Education is in charge of curriculum development, providing professional support to schools' improvement efforts, professional development of school staff, and accreditation of teacher training providers. The Bureau for Development in elementary and secondary education. The State Educational Inspectorate supervises legal and regulatory matters at all levels of education and monitors and evaluates the quality

of schools. The Pedagogical Service inspects and approves the curricula, textbooks, and projects implemented into elementary and secondary education.

In the Republic of Macedonia, education is equally accessible to everyone. The new Constitution gives citizens rights to establish private educational institutions at all levels of education except elementary.

Structure of the Education System

The education system in Macedonia is comprised of preschool, elementary, secondary, and higher education. **Preschool** education, which is not compulsory, is intended for children from 7 months to 5 years old.

Elementary education is compulsory for students ages 6 to 15, though parents often enroll their children earlier. It has been divided into two 4-year cycles: classroom teaching from grades 1 to 4, and subject teaching from grades 5 to 8. For the 2007–08 school year, the structure changed to a 9-year elementary school with three 3-year cycles.¹

Secondary education includes gymnasiums and 3- and 4-year vocational schools. Students who take gymnasium classes usually continue their education at the university, and students from 4-year vocational schools also tend to continue their education.

Role of Preprimary Education

Kindergarten education is conducted in the child's mother tongue, typically Macedonian, Albanian, Turkish, or Serbian. Preschool institutions are either state run (public) or private. The Bureau for Development of Education prepares the curriculum for public kindergartens. Private kindergartens may develop their own curriculum, though it must be approved by the Ministry of Education and Science. Particularly in state kindergartens, children are provided with care and meals and engage in play activities, oral expression development, creative expression in music, drawing, gymnastics, and are introduced to science and social studies.

Children enrolled in preschool institutions are organized into homogenous groups according to their age. These institutions offer either whole-day (6–9 hours) or half-day (4–6 hours) programs.

Reading Curriculum in the Primary Grades

Reading Policy

Within the mother-tongue curriculum (Macedonian, Albanian, Turkish, and Serbian) for elementary education, the area of reading and literature is essential. The mother-tongue curriculum from grades 1 to 4 states that the area of reading and literature has a central place in instruction that is realized through reading and analyzing popular and informative texts. Reading literacy is considered a crucial skill for successful achievement in other subjects, as well as a precondition for lifelong learning. Formal reading instruction begins in grade 1, and the mother-tongue curriculum for this grade states that students are expected to be able to read independently and accurately.

Summary of National Curriculum

In grade 1, emphasis is placed on the recognition of sound symbols, their connection to words, and reading sentences and short texts aloud. By the end of grade 1, students are expected to achieve the following reading objectives.²

- Read aloud 20 to 50 words per minute;
- Read silently;
- Read with inflection, paying attention to punctuation, and adjusting the voice according to the nature of text; and
- Be able to determine the main idea of the text and describe its events, characters, and characteristics.

In grades 2 to 4, greater emphasis is given to developing reading habits, introducing children to works by national and international authors, and increasing text interpretation skills. At the end of grade 4, students are expected to achieve one of three standards in reading: minimum, sufficient, or high.³

The minimum standard requires students to:

- Recognize explicit messages in a written text;
- Recognize and differentiate the strophe, verse, and rhyme; and
- Recognize cause-and-effect relationships when they are explicitly stated in the text.

The sufficient standard requires students to:

- Recognize cause-and-effect relationships among elements of the text;
- Organize the content elements (characters, events, places, objects) by order of appearance in the text; and
- Recognize information in an informative text provided by symbols, maps or tables.

The high standard requires students to:

- Recognize features in common across different textual elements;
- Interpret parts of the text;
- Draw conclusions based on explicit messages in the text; and
- Explain the title of the text.

The objectives of mother-tongue curriculum in elementary education are achieved through reading, grammar, expression and creation, and cultural media. The need to integrate all these areas of mother-tongue learning has been emphasized in the past decade. More often, however, the text becomes the basis for instruction in oral and written expression. Cultural media are used to encourage students to develop good reading habits and obtain information from various sources.

Reading in the classroom is encouraged by having additional activities for students after lessons and by honoring the best reader in the school. Students can also choose to attend additional literature classes. For these literature classes, the teacher prepares



a program in which students analyze works that are included in regular lessons, recite poetry, or create their own works independently.

Reading Instruction in the Primary Grades

Instructional Time

According to the curriculum, students in grades 1 to 4 receive 18–22 hours of instruction per week. A single lesson lasts 45 minutes, and students have five mother-tongue lessons per week. Of the annual total of 180 mother-tongue lessons, 100 lessons are dedicated to teaching reading, making it the most emphasized area of the curriculum.

Instructional Materials

For each grade in elementary education, there are two or three books from which teachers can choose the texts that will be read and interpreted. The books are collections of prose and poetry by national and international authors. Worksheets are available for the teachers and students that follow the contents of the reading books and provide practice in text analysis. For each elementary grade, there is a list of 8 to 10 literary works that each student must read and analyze throughout the school year. In addition, students are encouraged to read children's magazines and books from the school library.

Use of Technology

The use of modern technology is a recent development in elementary schools. This initiative has been supported by various international donors such as the United States Agency for International Development, the Foundation Open Society Institute of Macedonia, and the People's Republic of China.

Learning software named *ToolKid* has been adapted to suit the national language curriculum and is used in the first phase of primary education. In addition, the new governmental initiative *Computer for Every Child* will enhance the usage of technology in the teaching and learning process. This project aims to provide 150,000 computers for students beginning in the 2007–08 school year.⁴

Second-language Instruction

Students from other nationalities living in the Republic of Macedonia receive instruction in their mother tongue. However, they also are required to learn the Macedonian language. According to the curriculum, they begin learning Macedonian as a second language in grade 3 with two lessons per week. Macedonian language teachers teach this curriculum.

Effective Practices

In the course of instruction, teachers practice the methods and approaches adopted from the *Reading and Writing for Critical Thinking* project that was implemented with the help of the Foundation Open Society Institute of Macedonia.⁵ The purpose of this project is to introduce new teaching methods and techniques that encourage critical thinking to students of all ages and for every school subject. Through the adoption of new teaching methods, teachers are able to encourage the practice of reading and

foster text comprehension. Teachers also have been trained to create an atmosphere that inspires open and responsible interaction in their classrooms and to use methods intended to promote critical thinking. This recently established practice of teaching has been directed towards changing the dominant role of the teachers in classrooms. Organizing lessons in this manner is meant to help students think in a critical way and become responsible for what they learn.

Reading Disabilities

Teachers or psychologists usually identify students who have difficulties in the area of literacy in grade 1 through the use of tests for reading speed and accuracy. The assessment lasts 1 minute, during which the examiner notes both the number and the type of mistakes made by each student. The results are given to the teachers, who are responsible for developing individualized plans to assist students with their reading difficulties. If the reading difficulties continue, the teacher organizes additional lessons for the student at least once a week. Unfortunately, there are no reading specialists or material geared towards students with special reading needs within schools. If dyslexia is discovered, the student works with a specialist in a specialized institution.

Teachers and Teacher Education

According to the Law for Elementary Education, teachers who have completed the Pedagogical Academy, a Pedagogical Faculty, or the Institute of Pedagogy at the Philosophical Faculty may become classroom teachers. However, the Pedagogical Academy, a 2-year program, was closed 5 years ago, and the Pedagogical Faculties were established to provide 4-year programs. Teachers preparing to teach grades 1 to 4 take courses in reading and children's literature. In the third and fourth year of their programs, they have compulsory practice in schools.

Examinations and Assessments

National or Regional Examinations

The first national assessments of achievement in the Macedonian language, the Albanian language, and mathematics were established at the end of grade 4 in 2001.⁶ The goal of these assessments is to provide the educational administration and professional institutions with valid data about student attainments that can be used to inform educational policy and give schools and teachers information to improve teaching and learning.

The national assessments are on a repeating 4-year cycle, with one subject assessed each year. The assessment is administered to representative samples of schools and students. In the mother-tongue assessment, student achievement is measured in the areas of grammar, vocabulary, reading informative and literary texts, and written expression. Unfortunately, the Republic of Macedonia still does not have a specialized institution for preparing diagnostic tests.



Monitoring Individual Student Progress

Assessing students' achievement is the teacher's responsibility. There are no standardized tests used to measure individual student's progress in any area that is part of mother-tongue instruction. During the school year, teachers collect information about each student's performance through observations, interviews, completed student work, and school-wide tests. Using information from the student's portfolio, teachers inform parents of their child's achievement at least four times per year. Teachers evaluate student achievement through written comments from the first to the third grade.⁷ Numbers from 1 to 5 (1 = basic, 5 = excellent) are the most commonly used summative marks for evaluation of student achievement in grade 4.

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Republic of Moldova

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Language and Literacy

The official language of the Republic of Moldova is Romanian. However, Moldovans represent about 120 different regional and cultural ethnicities, and one third of the population speaks a language other than Romanian, including Ukrainian, Russian, Gagauz, Bulgarian, Hebrew, and Polish.

Emphasis on Literacy

Moldova's commitment to promoting a literate society is evident in its literacy rate of 99% in 2003.¹ There are 294 different newspapers and magazines in circulation. Its 1,386 public libraries and 1,500 school libraries are located primarily in the urban centers, where nearly half the country's population lives.² Internet access is common in the urban centers.

There is a whole system of initiatives at the classroom, school, and national level to stimulate reading. Examples of these initiatives include the so-called Olympiads (subject contests), thematic holidays, and publication of class newspapers. The winners of the Olympiads are exempted from university entrance examinations in the corresponding subject. To honor the Romanian language, the parliament established by decree a national holiday—Our Romanian Language—on August 31st of each year.

Overview of the Education System

The Ministry of Education guides Moldova's centralized education system and is responsible for implementing educational policy, developing the national curriculum, and providing manuals and didactic materials necessary to develop the educational process. In collaboration with the local public administration, the Ministry appoints the school administration, including heads of schools and their assistants. While the Ministry allocates funding, the local public administration is responsible for schools' financing.

The education system is currently under reform, with the World Bank and the Moldovan government sharing responsibility for financing the reform effort. At present, there are 9,643,131 students enrolled in 1,554 schools. The language of instruction is Romanian in 1,150 schools, Russian in 275 schools, both Romanian and Russian in 118 schools, both Ukrainian and Russian in 5 schools, and Bulgarian in 4 schools.

Structure of the Education System

The education system is divided into the following components: preprimary (crèches and kindergarten), primary (grades 1–4), general secondary or gymnasium (grades 5–9), and upper secondary or lyceum (grades 10–12). Compulsory education includes grades 1 to 9. All secondary schools follow the single syllabus developed by the Ministry of Education. Education in the lyceum is optional, and ends with Baccalaureate examinations, which offer the opportunity to enter an institution of higher education without taking entrance examinations.

Children ages 1 through 6 may attend **preprimary** education, which addresses the different aspects of child development and prepares children for school. During a period of economic growth, the net enrollment rate in preschools improved substantially from 38.5% in 2000 to 68.6% in 2005. An increase in the budgetary income at the central and local level allowed the reparation and re-establishment of a considerable number of kindergartens, bringing the total from 1,128 in the year 2001 to 1,269 in the year 2004.

At the age of 7, the great majority of children begin **primary** education. Primary schools can work as independent institutions or can be incorporated within the gymnasium or lyceum, depending on local circumstances. The net coverage rate for primary education has decreased between 2000 and 2005 from 94% to 88%, primarily due to enrollment decreases in rural areas.

General secondary education constitutes 90% of eligible children. The net enrollment rate for compulsory secondary education has increased from 87% in 2000 to 89% in 2004, paradoxically, due to enrollment increases in rural areas. However, it is obvious that the decrease of matriculation within primary education in 2000–04 implies a future reduction of matriculation at the second stage. The gross enrollment rate for upper-secondary education remains under 50%. This reflects the collapse of the vocational secondary education, which is viewed as outdated and unattractive to young people and their parents. Secondary vocational schools assure the possibility to obtain both a secondary education and a profession.

Reading Curriculum in the Primary Grades

Reading Policy

The goal of primary education is to help students develop as personalities in a free and democratic society, capable of thinking for themselves and prepared to assume responsibility. The basic curriculum is based on the Law of Education, as well as current advancements in content and pedagogy, and can be considered an educational national standard.

The main function of primary education is to form an intellectual basis, by providing instruction in the fundamentals of reading, writing, and calculating. In the program for grades 1 to 4, the curriculum is presented according to the concentric principle. The same program is compulsory for all children. According to teaching principles, students acquire new knowledge and improve their performance through learning. Reading is not taught as a separate subject. Instead, students are taught how to read as part of basic language lessons.

Summary of National Curriculum

The Romanian language is the main subject in the syllabus because language is essential for learning and provides the basis for clear and organized thinking. Also, learning the forms of correct expression enhances successful participation in the community.

The main objectives for grades 1 and 2 include:

- Developing an awareness of letter-sound correspondence in the Latin alphabet;
- Mastering the technique of correct, conscious, and fluent reading, and understanding what was read; and
- Developing the capacity to relate what they have read to their personal experiences and beginning to understand the role of books in everyday life, through increased understanding of text.

By grade 3, students have been exposed to the foundations of language and literacy and should be able to do the following:

- Read 30-35 lines of text fluently, without syllabification, omission, or substitution;
- Read an appropriate text silently and orally demonstrate understanding of the text;
- Improve reading techniques and speed;
- Develop personal opinions about texts; and
- Begin elementary analysis of the text.

The main objectives for grade 4 build upon the objectives in prior grades and incorporate the affective domain of reading. Specifically, grade-4 students should be able to:

- Demonstrate expressive reading without pausing;
- Identify the significance of the information contained in the text in the indicated source;
- Realize the pleasure of reading;
- Present detailed information after reading using adequate language;
- Stimulate curiosity, imagination, and the habit of permanent reading;
- Form the habit of systematic attendance at the library to become familiarized with a variety of texts, such as books, newspapers, and magazines; and
- Manifest a conscious attitude towards what was read.

The goal of Romanian language instruction is for students to recognize and use the Romanian language orally, with elements of reading and writing beginning in grade 1 and increasing in complexity as skills are learned in native language instruction. By the end of grade 4, students should be able to:

- Listen to sounds, words, and sentences, and reproduce them;
- Assimilate a certain minimum of lexical units and phraseological expressions;



- Know the sounds and letters, master reading aloud in a correct and expressive way, and write legibly;
- Develop abilities of oral speech; and
- Write a brief summary of what has been read or heard, formulate the theme and main idea of a literary text, or describe a main character.

Mandated Materials for Reading Instruction

Sets of instructional materials were created by the Ministry of Education for teaching and learning the curriculum in grades 1 through 4. These sets include a student's manual, literary texts, a workbook for formative evaluation, demonstration tables for selfevaluation, and a teacher's guide. The components of the set of instructional materials are closely interdependent. In developing materials, consideration was given to the socialcultural, educational, psycho-pedagogical and psycho-physiological attributes of the students and their learning environments. The materials were tested in experimental schools between 1992 and 1996, before being revised and approved by the Council of the Ministry of Education and recommended for the use in schools.

The teacher's guide offers various activities for working in groups or with the whole class. The workbooks contain activities for individual work. The materials cover the content areas of knowledge according to the school curriculum. Alternative reading instruction textbooks and children's books with fiction and nonfiction texts also are published.

Reading Instruction in the Primary Grades

Instructional Time

The school year lasts from the first of September through the end May, with four weeks of holidays observed during the school year. There are two semesters in the year. The basic syllabus specifies 20 academic hours per week in grade 1, 22 hours in grade 2, 23 hours in grade 3, and 24 hours in grade 4. An academic hour is equal to 45 minutes.

The educational plan for the Romanian language lessons provides 7 hours per week in grade 1 and 6 hours per week in grades 2 through 4. Since reading and speech development are components of the practical course of Romanian, special hours to improve Romanian are not provided in primary classes.

Teachers in primary classes are responsible for all subjects. Only subjects such as music, physical training, and foreign languages are taught by specialist teachers. Beginning with grade 5, each teacher teaches one subject in which he or she is a specialist.

The law limits class size to 25 students. In reality, the number of students depends on the situation in a certain locality and may vary from 15 to 35 students in a class. The teacher decides whether to conduct lessons with the class as a whole, or to group students for instruction.

Role of Reading Specialists

Primary school teachers conduct lessons in all the disciplines defined in the syllabus. The classroom teacher is responsible for the students' success in reading. University studies

provide the necessary training for teachers. In some alternative or private institutions, a specialist teaches Romanian language, including reading.

Second-language Instruction

The Constitution of the Republic of Moldova ensures the right of any citizen to study in their native language. In localities densely populated by national minorities, legislation determines the functioning of the official language as well as the languages of national minorities in political, economic, and cultural life. In schools in these areas, the syllabus specifies the study of Romanian language beginning with 2 hours per week in grades 1 and 2, 3 hours per week in grade 3, and 4 hours per week in grade 4. In gymnasia, study of Romanian language is 3 hours per week, and in lyceums, study is 3 or 4 hours per week. Beginning in grade 2, the syllabus requires the study of a foreign language, including Russian, twice a week, and in grades 5 and 6, students must study two foreign languages, including Russian, for 2 hours per week.

Reading Disabilities

Students with reading difficulties receive assistance from teachers in individual consultations, additional lessons, and supplementary reading. As a rule, parents are involved in the remediation process. Students with physiological speech difficulties are guided by a specialist in logopedics. The school psychologist helps to identify students in any need of assistance.

Teachers and Teacher Education

Teachers are trained in universities (5 years beyond secondary school or 4 years beyond lyceum) and colleges (5 years beyond gymnasium). Most college graduates teach in primary schools and continue their studies at the universities as part-time students. The Ministry of Education, or sometimes an independent association, oversees the syllabus for teacher training.

Some faculties train teachers with double qualifications. For example, a teacher can have qualifications to teach kindergarten or primary school. Alternatively, a teacher can have qualifications to teach primary school and a foreign language. Teachers in schools and kindergartens where Romanian is not the language of instruction receive pedagogical training for providing instruction in the minority languages.

Teacher In-service Education

Every year, school teachers have the opportunity to improve their pedagogical skills through distance studies, refresher courses, seminars, consultations, workshops, and by sharing their experience with other teachers. The Assessment Board of the Ministry of Education evaluates teachers every 5 years. After passing several tests, school teachers and teachers-in-training from pre-university institutions can obtain a first and second teaching degree. Such degrees lead to a 10% salary increase.



Examinations and Assessments

Monitoring Individual Student Progress

Evaluation occupies an important place in the process of teaching and learning, since it provides opportunities to measure students' achievement of the curricular goals. The application of three evaluation types (initial, current, and summative) enables teachers to identify gaps in students' understanding, and helps students to reach their full potential.

Primary teachers create their own assessments that concentrate on the content areas and the cognitive domains: knowledge, understanding, and application. Teachers often use a 10-point system for marking, with the marks 5–10 considered positive and 1–4 unsatisfactory. At the end of each semester, students are given marks in each subject and at the end of the year, the students receive an average mark in each subject, based on marks for the two semesters. Students lagging behind in one or two subjects are promoted to the next grade, but they will not receive a finishing school certificate for their studies. To continue their studies after leaving school, they may take subject area examinations, and will receive the certificate once they have passed the examinations.

When evaluating a student's independent reading, an emphasis is placed on the quality and understanding of what the student has read. To assess reading, teachers administer tests that include questions asking the student to interpret content, provide an explanation of the title of the text, identify the main idea, and explain particular expressions and words from the text. Student proficiency is determined by the level of coherent, expressive, and conscious reading.

National or Regional Examinations

Implemented with the help of the World Bank, an important component of the reform of pre-university education in Moldova is evaluating the instructional process. The Ministry's Department of Evaluation and Examination oversees the process of determining the framework and specifications, writing items to assess student achievement, organizing the test administration, and analyzing and publishing results.

School syllabus examinations are set at the end of the primary cycle in Romanian and mathematics, and at the end of the gymnasium cycle in native language, mathematics, history, and foreign language. In order to receive a bachelor's degree, students completing their studies in a lyceum must take seven examinations, depending on the lyceum's profile, including native and foreign languages, which are obligatory. Those students who choose not to go to a lyceum take their final examinations at the end of grade 11 in secondary school. In order to enter a college or university, their entrance examinations scores must meet the profile requirements of the higher institution.

Despite the fact that education is compulsory, some gymnasia, as a town ordinance, organize entrance examinations for grades 1 and 5, which increases the selectivity of these educational institutions.

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The Netherlands

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Language and Literacy

Dutch is the first official language in the Netherlands. However, Frisian, the second official language, is spoken by more than 400,000 people in the northern province of Friesland. Non-Western ethnic minorities form over 10% of the total population in the Netherlands. This is a heterogeneous group in terms of language and culture. Almost half of the population are from Turkey, Morocco, Suriname, the Netherlands Antilles, and Aruba.

Dutch is the first language of instruction in schools, although Frisian or a regional dialect also may be taught alongside Dutch. English is the first foreign language students learn, beginning in the last 3 years of primary school. The goal of Expertisecentrum Nederlands (The National Center for Language Education) is to improve the teaching and learning of Dutch language arts in primary schools. By undertaking research and development projects, the center studies school conditions that help children become skilled and motivated communicators and readers. In this respect, interactive language instruction is the focus of teaching children Dutch either as a first or second language. Interactive language instruction is intended to promote social, meaningful, and strategic learning.

The Reading Foundation (Stichting Lezen) is an organization established to promote reading for pleasure, both in Dutch and in Frisian. The foundation supports the reading policy of the Dutch Ministry of Education, Culture, and Science by allocating funds and stimulating projects that encourage and support reading. The foundation initiates projects and links these with existing activities that promote reading, supports the development of new reading instruction methods, and funds research.

Overview of the Education System

One of the key features of the Dutch education system is freedom of education, which is guaranteed by the Constitution. This includes the freedom to establish schools (freedom of establishment), organize the teaching in schools (freedom of organization of teaching), and determine the principles on which they are based (freedom of conviction). Therefore, people living in the Netherlands have the right to found schools on the basis of religious, ideological, or educational beliefs, and receive government funding for these schools.¹

The Dutch education system combines a centralized education policy with a decentralized administration and management of schools. The central government controls education by means of regulations and legislation. Its prime responsibilities relate to the structuring and funding of the system. All schools have a legally recognized competent authority—the school board. The school board administers and manages the school(s) for which it is responsible. This involves meeting with personnel and managing operational costs, determining policy on the curriculum, and overseeing the admission of students.² The Education Inspectorate, "the eyes and ears of the Minister", is responsible for monitoring the quality of education in schools. The Inspectorate periodically conducts school visits to evaluate schools' compliance with statutory regulations and reports its findings to the Ministry, as well as to the individual schools.

Parents in the Netherlands can choose from a range of public and private schools. Both public and private schools are funded by the government, according to Article 23 of the Constitution. Education is free of charge for all students up to the age of 16, although some schools ask for a voluntary parental contribution.

Public schools are run by the municipal authorities or by a governing committee appointed by the municipality for this purpose. However, most children attend private schools run by associations or foundations. Most of the private schools are either Roman Catholic or Protestant, but there are also Jewish, Islamic, Hindu, and Humanist schools, as well as nondenominational schools. Like some public schools, many private schools base their teachings on specific educational principles, such as those introduced by Maria Montessori, Peter Petersen, and Rudolf Steiner. Unlike public schools, which must admit all students, private schools can impose criteria for admission. In practice, however, most private schools pursue nonrestrictive admission policies.

Structure of the Education System

The education system in the Netherlands is separated into three levels: primary, secondary, and tertiary. Primary education is for children ages 4 to 12. Special primary education is for children ages 3 to 12 who require special education. Secondary education, for students ages 12 to 18, provides several program options, depending on schools' recommendations. These recommendations are made based on a student monitoring system at the primary level. Most secondary schools offer more than one program so that students can transfer easily from one program to another.

The secondary programs are as follows:

- VMBO (4 years): VMBO offers four learning pathways: 1) basic vocational, 2) middle-management vocational, 3) combined, and 4) theoretical. After completing VMBO, students may continue to one of two secondary programs: MBO or HAVO.
- MBO (3-4 years): MBO offers vocational education leading to the job market or to higher education in an HBO program.

- HAVO (5 years): HAVO offers general secondary education, with continuation to an additional, pre-university secondary education program (vwo) or to higher education in an HBO program.
- vwo (6 years): vwo offers pre-university education and provides access to higher education in a wo program

Adult education courses (VAVO) offer a broad basic education in Dutch as a second language, as well as courses that foster self-reliance, for those over the age of 18.

Tertiary or higher education is divided into two programs, HBO and WO. HBO offers higher professional education leading to a 4-year bachelor's degree. wo offers university education leading to a 3-year bachelor's degree, after which a master's degree can be earned in another 2 years.

Role of Preprimary Education

Although the Netherlands has no formal educational provision for children under the age of 4, there are childcare and preschool facilities available for younger children. In June 2000, the Ministry of Education, Culture, and Science published a policy letter on early childhood education that outlines government regulations and initiatives for early childhood programs.

Early childhood education programs which focus on Dutch language learning start in preschool (e.g., play groups, childcare) and continue up to the first 2 years of primary education.³ The target groups for enrollment are those children at risk or educationally disadvantaged (students from low socio-economic backgrounds). The goal of these programs is to give these children a more equitable start in primary school. Effective programs in early childhood education are family-based, have a didactic approach, and feature intensive tutoring at least four times a week.⁴

Reading Curriculum in Primary Grades

According to the Primary Education Act, the goal of education is the broad development of the students, emotionally and cognitively. Education should foster the development of students' creativity and their acquisition of social, cultural, and physical skills. To ensure a high quality of education, the Ministry of Education prescribes a number of attainment targets or goals that students should reach before they enter secondary education at age 12.⁵

Reading Policy

The central government determines the attainment targets and bears primary responsibility for promoting innovation in education and for inspecting the education system. The attainment targets were determined in 1993 and revised in 2006. Schools are required to use the attainment targets as the minimum levels of achievement for the completion of basic primary education. Because of freedom of education, which is guaranteed by the Constitution, schools are free to determine the areas and educational



content of the curriculum, how much time is spent on the various subjects, and how to attain the targets.⁶

Two types of attainment targets are specified for primary education:

- 1. Cross-curricular: Targets that have as their goal the development of general skills, such as fostering motivation to work, promoting self-image, and modeling appropriate social behavior. Cross-curricular education uses a diverse set of learning strategies and incorporates new media.
- 2. Subject matter attainment targets specific to one of the following subject matter areas:
 - Dutch/Frisian language
 - English language
 - Arithmetic/mathematics
 - Orientation of man and world (geography, history)
 - Physical orientation
 - Art orientation

Dutch language education focuses on developing skills that enable students to use the language properly in everyday situations; acquire knowledge of the meaning, use, and form of language; and enjoy the use and awareness of language. The attainment targets in Dutch language education are divided into four domains: oral and aural skills, reading skills, writing skills, and language awareness.

Reading proficiency has been achieved when students can do the following:

- Recognize that a text can be read for different purposes;
- Distinguish between informative and argumentative texts, stories, poetry, and dialogues for a variety of purposes;
- Adapt the way they read according to a reader's goal set by themselves or the teacher;
- Explain and describe the main issues of an informative text;
- Identify the main issues in an argumentative text and explain and describe their views with relation to the opinion expressed in the text; and
- Use generally available written sources of information.

For language and arithmetic, a number of intermediate goals have been established at different stages of primary education. Intermediate goals for early literacy for kindergarten and first grade (Groups 1–3) were published in 1999; ⁷ goals for advanced literacy were published in 2003. ⁸ The development of these intermediate goals was funded by the government, but measuring progress on these goals is not compulsory. The schools are free to use these goals or develop their own goals for each grade. The Education Inspectorate uses the goals as guidelines when observing schools.

Most schools use teaching methods based on textbooks from educational publishers that utilize the attainment targets prescribed by the Ministry of Education.

Although publishers provide reading methods and computer software with practice materials, some schools choose to create their own methods and curriculum.

Reading Instruction in the Primary Grades

Formal reading and writing instruction begins in first grade (Group 3). Preparatory instruction in kindergarten provides an introduction to phonemic awareness and graphemic identification, which is used in instruction in the upper grades. During the first year of reading instruction, there is a strong focus on the acquisition of decoding skills. Although instruction in first grade includes reading stories, only a few instructional activities are aimed at developing reading comprehension. Instruction in comprehension begins in second grade, when most schools adopt a curriculum for reading comprehension.

For reading instruction, about 80% of schools use an indirect phonics method called Veilig Leren Lezen (Learning to Read Safely).^{9, 10} Particularly in the first 4 months of reading instruction, there is a strong focus on the structure of the written and spoken language. Children learn the relationship between graphemes and phonemes. Halfway through first grade, most of the children are able to decode simple Dutch words. In the second part of the year, there is increased emphasis on reading short texts to increase fluency and decoding skills.

The Ministry does not prescribe how much time teachers should spend on subjects and the areas of the curriculum. According to research, the time spent on language instruction in grades 4 to 6 is approximately 5 hours per week. Teachers spent about 2 hours per week on reading instruction.¹¹

Instructional Materials

Textbooks are available for integrated as well as for separate language and reading education. There also is a considerable amount of additional material addressing spelling and grammar. Furthermore, schools have boxes with composition cards and an assortment of readers and reading series. Since the 1980s, specific material has become available for teaching Dutch as a second language. These materials focus primarily on vocabulary and verbal communication and are linked to the Dutch language textbooks.

Use of Technology

Research shows that information communications technology (ICT) figures prominently in schools in the Netherlands across subject areas. About 96% of teachers report using a computer for educational purposes, although the number of hours that they use computers for educational purposes differs. More than one third use the computer 2 to 5 hours per week, while another third use the computer more than 5 hours a week.¹² On average, there is one computer available for every 7 students; one computer with Internet access is available for every 12 students.¹³ Nearly half of the teachers who use computers for educational purposes state that, on a daily basis, they use practice materials accompanying textbooks.¹⁴





The Ministry of Education, Culture, and Science encourages the use of computers in education by providing extra funding specifically for this purpose. One of the initiatives funded by the government was the foundation of *ICT op School*. The aim of *ICT op School* is to support the effective and efficient use of ICT in primary and secondary education.¹⁵ The Ministry also encourages schools to use the Internet in order to communicate with each other and to establish cooperative networks. Kennisnet (Knowledge Net) has made a substantial contribution to this end. Kennisnet is a secure and controlled network that brings together schools, institutions, museums, and libraries via cable connections. It is used by students in primary and secondary education, school managers, teachers, and parents.

Role of Reading Specialists

Although there are no reading specialists in Dutch schools, students with reading difficulties are often helped by a remedial teacher or speech therapist associated with the school or school advisory service. There is a trend in primary education toward employing coordinators who are responsible for a certain subject or age group (e.g., internal student counselors, junior department coordinators, senior department coordinators, language coordinators, and arithmetic coordinators). A language coordinator, someone with specialized knowledge of language teaching methods, takes stock of the primary school's language policy and implements and evaluates this policy together with the school's management and teachers. If necessary, a language coordinator will coach and guide staff members.

Second-language Instruction

The proportion of students from non-Western, ethnic minority backgrounds in the primary school population has increased sharply in the past two decades. In 1980, only 6% of students came from a non-Dutch background. In 2003, this percentage was over 15%.¹⁶ Although non-Western ethnic minority students still score lower in tests than native Dutch children, trends in performance levels show improvement for both language proficiency and arithmetic achievement levels.¹⁷ Because schools are free to determine their curriculum, they are able to focus on topics that meet their students' needs. Schools with a large minority student population devote more attention to vocabulary and verbal communication than schools whose student populations consist of mostly native Dutch-speaking children. Since August 2006, municipal authorities are responsible for setting up multi-school bridging classes for primary school students who are disadvantaged because of their poor Dutch language skills. These children are required to spend a year learning Dutch before returning to regular classes.

Effective Practices

Expertisecentrum Nederlands implements interactive language instruction in primary schools. Interactive language instruction is intended to promote social, meaningful, and strategic learning. Social learning is learning through interaction, in dialogue and cooperation with peers who are more advanced readers. Cooperative group work,

where the group has mutual goals and every member of the group has his or her own responsibilities, is seen as a promising method. In small groups, children have the opportunity to negotiate meaning, transfer information, and model their communicative strategies.¹⁸ Meaningful learning is an active process in which children construct ideas about language as they engage in communicative settings. In these authentic situations, children can learn to use information directly. By incorporating reading strategies, children how to solve language problems in an effective manner.¹⁹

Reading Disabilities

By order of the Ministry of Education, Expertisecentrum Nederlands is collaborating with the research institutes KPC Group and WSNS Plus in a project, *Master Plan Dyslexia*, that takes a comprehensive approach to dyslexia in all areas of education. The main purpose of the project is to develop, record, and implement an integrated and well-tested process for identifying, diagnosing, and tutoring students with dyslexia.

Diagnostic Testing

Approximately 9% of students in primary education have difficulties with reading and spelling, and an additional 4% have dyslexia,²⁰ which may have serious consequences for their cognitive and socio-emotional development. To better equip primary school teachers with training to guide these students, the Expertisecentrum Nederlands has published the *Reading Problems and Dyslexia Protocol*. This protocol was distributed to all primary schools and is intended for school leaders; teachers, including remedial teachers; internal counselors; and speech therapists.^{21, 22} The protocol contains guidelines for a structured school-wide dyslexia policy whereby regular assessments facilitate early identification, prevention, and intervention of reading difficulties. The protocol recommends early reading interventions, such as ELLO, Connect, and Ralfi, as early as the end of the first 8 weeks of formal reading instruction.²³ These interventions are related to context but emphasize decoding and phonology.

Special Education

Instruction in special education in the primary grades is geared to the developmental potential of the individual child. The goal is to enable as many students as possible to return to mainstream education. Research shows that in primary education about 7 out of every 25 students have special needs (zorgleerlingen). Eighty percent of these students have learning disabilities, while 37% have problems with task-work attitude, and 35% have social-emotional related problems.²⁴ To accommodate these needs, the policy, *Going to School Together (Weer Samen Naar School*), was introduced in 1991. The policy's goal is to enable children with special needs to attend mainstream education. To reach this goal, special schools collaborate with mainstream schools and provide expertise and support. Children who require special facilities to attend a mainstream school because of sensory, physical, or mental disabilities are not included in this policy. In 2003, the legislation on personal budgets was introduced. The legislation gives each individual child with disabilities a budget that "travels" with the child. This budget pays for staffing



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and equipment costs and any adaptations that may be necessary to meet the child's needs. In this way, the parents of the child are given the option of choosing between a mainstream and a special school.²⁵

Teachers and Teacher Education

Primary school teacher training colleges provide training at the higher professional education level (HBO). Teacher education takes a total of 4 years and begins with a preparatory year. Students enter the main phase of training only after successfully passing an examination at the end of the first year of study. Most students begin their teacher training immediately after secondary education (HAVO or VWO) at the age of 17 or 18. Most of the current training program consists of practical work experience in primary or special education. In addition to the original vocational training, some teachers receive additional training or opt for a specialization to improve their own expertise and to strengthen the expertise of their teaching team in general. All teachers working in primary school must successfully complete the college program, qualifying them to teach all subjects (except physical education) across the whole primary school curriculum.

Teacher In-service Education

Teachers can get additional training in various fields through teacher training colleges or other institutions, such as school advisory services. These courses are not compulsory. Teachers can decide whether they want additional training and in what subject. As a result of the Going to School Together policy, more and more children with developmental, learning, and behavioral difficulties are placed in regular primary education. This creates a special challenge for teachers. In response, many choose to receive training in diagnostic and remedial skills, as well as in how to vary teaching formats and group students during instruction, monitor progress of students who have wide-ranging levels of proficiency, and deal with students who require additional attention or have exhibited behavioral problems in class. Additional training also is provided for teachers who have classes with high percentages of students from a non-Dutch-speaking and/or disadvantaged background. Teachers may take courses in implementing a student monitoring system, working with intervention plans, intercultural teaching and/or teaching aimed at decreasing gender stereotypes and applying new methods in teaching arithmetic.²⁶ Finally, training is provided for those entering new professions in primary education, such as internal student counselors, arithmetic and language coordinators, junior and senior department coordinators, and ICT coordinators.

Examinations and Assessments

Dutch schools are free to choose tests that monitor students' progress. They often use curriculum-embedded tests that match the subject matter provided in the textbooks for various subjects. Additionally, most schools use the student monitoring system, Leerling Volg Systeem, for groups 1 through 8 in primary education. This system was developed by Cito, the National Institute for Educational Measurement. It enables teachers to monitor students' development throughout all primary education grades. The system consists of a series of packages for various basic skills. Normally, each package includes three components: the tests, material to identify possible problems, and specific aids. The system involves a number of phases. Since tests are administered on a regular basis, problems are usually spotted at an early stage and subsequently analyzed to devise a remedial action plan. Regular testing prevents children from falling behind unnoticed.²⁷ The system also is used by the Education Inspectorate to assess whether the quality of education is sufficient or if it needs to be improved. Tests help teachers to report more accurately to parents and school boards and also play a role in quality control at the national level.²⁸

Some 85% of all Dutch primary schools use tests developed by Cito to assess students' level of attainment at the end of primary schooling.²⁹ The tests measure academic skills in four areas: language, arithmetic/mathematics, study skills (different sources of information, schedules, tables, etc.), and world orientation. The results of these (or similar) tests, together with head teachers' recommendation, are used to determine the most appropriate type of secondary education for each student.

Suggested Reading

Cito. Testing and assessment company. http://www.cito.nl/com_index.htm

Eurydice. The information network on education in Europe. http://www.eurydice.org/

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New Zealand

Megan Chamberlain Ministry of Education¹

Language and Literacy

New Zealand has three official languages, English, Māori, and New Zealand Sign Language. Māori, an official language since 1987, is a Malayo-Polynesian language closely related to the Eastern Polynesian languages spoken in Tahiti, Hawaii, Rarotonga, and French Polynesia.² New Zealand Sign Language became the country's third official language in April 2006. Other languages commonly spoken in New Zealand include the Western Polynesian languages such as Samoan and Tongan, the Chinese dialects of Cantonese and Mandarin, and Western Asian languages such as Hindi.^{3,4}

The majority of New Zealand school children receive instruction in English. About 3% of domestic primary and secondary school students (14% of Māori learners) were enrolled in Māori-medium settings in 2005, where more than 30% of teaching is in the Māori language. Approximately 2% of Year 5 students (9% of Māori learners) received more than 80% of their instruction in Māori.⁵ About 0.3% of primary and secondary students receive some instruction in a Pacific Island language, most often Samoan.^{6,7}

Emphasis on Literacy

After the government announced, in October 1998, the goal that "by 2005, every child turning nine will be able to read, write, and do maths for success", the Literacy Taskforce was established to provide advice on how to achieve the reading and writing aspects of the goal. Recommendations made by the Literacy Taskforce in early 1999 subsequently informed the work of the *Literacy and Numeracy Strategy*. The strategy has provided alignment and consistency for a range of policies, programs, and projects across the education sector, all of which focus on improving literacy achievement.

There are three major themes to the framework underpinning the strategy:

- Raising expectations for students' progress and achievement;
- Improving practice by lifting the capability of professionals in the school sector; and
- Encouraging and supporting families and others to engage in students' education.

The predominant view of reading is that it is intrinsically linked with writing. As such, many official documents and resource materials interpret literacy as, "the ability to understand, respond to, and use those forms of written language that are required by society and valued by individuals and communities." ⁸

The main focus of the literacy work in English-medium settings has been on the first 4 years of primary schooling (Years 1 to 4), and more recently Years 5 to 8. Work also has been done in the early childhood and secondary education sectors, with special attention paid to the transition points between primary schooling and these two areas respectively.

The Māori-medium literacy strategy *Te Reo Matatini*, released in May 2007, also seeks to align existing literacy-related initiatives, as well as those initiatives related to Māori-medium education in general. Underpinning the strategy are three central principles. The first, and at the heart of the strategy, is a commitment to the Maori language and culture. The second is that Māori knowledge is evolving, and the third is taking collective responsibility for realizing students' literacy potential.⁹

To raise the profile of literacy and numeracy with parents and families, the Ministry of Education coordinated a multi-media public campaign known as *Feed the Mind*, which offered ideas to parents and caregivers of early childhood and school-age children on practical ways that they can support young children's learning. In October 2005, the *Team-Up* program was launched by the Ministry in order to provide a broad range of information to support parents and families as they engage in their children's education.

The adult literacy strategy, *More than Words*, has been shaped by the work undertaken in the school sector. It has the broad goal that, over the long term, New Zealanders should enjoy a level of literacy which enables them to participate fully in all aspects of life and have the opportunity to achieve literacy in English and Māori.

Overview of the Education System

The delivery of education to the early childhood and school sectors in New Zealand is through a decentralized system involving three key governmental agencies. Legal responsibility for managing the schools is assigned to boards of trustees.

The Ministry of Education provides policy advice on all aspects of education, manages the implementation of government policy, and oversees the use of the resources it provides to early childhood services and schools. It is responsible for developing national guidelines, including national curriculum statements; learning resources for the school sector; and monitoring the education sector's compliance with regulations. It also collects, analyzes, and disseminates education statistics and commissions education research.

The Education Review Office reviews school operations to ensure that schools are accountable for funds and are meeting educational objectives set out in their charters. It evaluates school-based education through reports on individual schools, as well as through national reports which evaluate broad education programs, policies, structures, and other system-wide matters.

The New Zealand Qualifications Authority oversees the system of qualifications, certificates, and awards. In addition, it coordinates secondary school and academic, professional, and trade qualifications and prescribes criteria to be met for awards at the senior secondary level.¹⁰

The Boards of Trustees are responsible for the governance of state or state-integrated schools.¹¹ The primary role of the boards, the majority of whose members are elected

parent representatives, is to develop a written charter, outlining their school's policy goals and objectives, in accordance with the *National Education Guidelines* and the Education Act 1989. School principals are responsible for the day-to-day management of schools and curriculum delivery, while teachers determine the pedagogical approaches used in the classroom.¹²

Structure of the Education System

Early childhood education is available to children under the age of 6, and while not compulsory, the majority of children attend early education services before starting primary school. Children, ages 3 and 4, typically attend a service for 14 to 17 hours per week. The services offered at this level of education are broad and include kindergartens, play centers, childcare, and home-based services. A number of early childhood education services offer bilingual and total immersion programs in Māori and Pacific languages. Of note is Kōhanga Reo, an early childhood education service based on the total immersion of young children from birth until school age in Māori language, culture, and values.

New Zealand's early childhood education curriculum, *Te Whāriki*, covers the education of young infants to children of school-entry age. There are four broad principles at the center of the curriculum that together with five strands forms the framework for the curriculum. The strand called Communication-Mana Reo identifies five goals that recognize different aspects of early literacy skills. For example, goal three states, "Children experience an environment where they experience the stories and symbols of their own and other cultures." ¹³

All New Zealand children must attend school from the age of 6 through to 16. Although the compulsory starting age is 6, in practice, nearly all children enter **primary** school on or soon after their fifth birthday. Children attend either a full primary school (until Year 8), or a contributing school (until Year 6). Students attending a contributing school either progress to an intermediate school (Years 7 and 8) or move on to a Year 7–13 secondary school. The majority of primary schools are co-educational.

Most students receive their **secondary** education in comprehensive Year 9 to 13 or Year 7 to 13 secondary schools. There are also some schools (composite schools) that make provision for students from Year 1 to Year 13, and, in recent years, middle schools for students at Years 7 to 10 have been established. Single-sex education is more prevalent at the secondary level than at the primary level, although most secondary school students receive their education in co-educational schools.¹⁴

Māori-medium education refers to primary and secondary schooling where the school curriculum is delivered in the Māori language for at least 12% of the time and is offered in a number of ways. Immersion schooling, either in Kura Kaupapa Māori or in designated character schools, offers instruction 81–100% of the time. Bilingual schools also provide opportunities for students to learn in the Māori language. Finally, some English-medium schools have stand-alone bilingual units for students who wish to be taught at least some of the time in the Māori language, while others have stand-alone immersion units (81–100% of the time).¹⁵



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Private or independent schools are run by religious or philosophical organizations or by private individuals. They may be either co-educational or single-sex schools. They charge fees, although fully registered independent schools receive partial funding from the central government. In 2005, about 4% of all primary and secondary school students were enrolled in independent schools, with the majority of the enrollments at the secondary level.¹⁶

New Zealand schools are able to enroll international students, provided that they recover all costs of educating the students and do not displace domestic students. The majority of international students are fee paying. The proportion of **international feepaying students** has increased significantly over the last decade, although the proportion has decreased slightly since its peak in 2003. In 2005, international feepaying students, the majority of whom came from Asia, represented 1.5% of all primary and secondary school enrollments.¹⁷

The **Correspondence School** provides primary and secondary education for students unable to attend a regular school (e.g., due to living in isolated areas or living overseas). Parents and caregivers who opt to educate their children at home rather than at a state or independent school may do so after receiving approval from the Ministry of Education.

Reading Curriculum in the Primary Grades

The New Zealand Curriculum is the official policy on teaching, learning, and assessment in all schools. The policy for English-medium schools was outlined in *The New Zealand Curriculum Framework* and in *Te Anga Marautanga o Aotearoa* for Māori-medium schools in 1993.¹⁸ The frameworks identify seven essential learning areas and eight sets of essential skills, as well as broad national achievement goals and objectives. A series of national curriculum statements provide the detail of the required learning described in the frameworks.

Implementation of a revision of *The New Zealand Curriculum*, for English-medium settings, released in September 2007, will commence in 2008. Essentially, the revision represents a consolidation of the policy set out in *The New Zealand Curriculum Framework* and the individual national curriculum statements, as well as recognizing current national and international developments in education both in terms of academic and social outcomes. The document includes eight essential learning areas with a new learning area for languages, and English as its own learning area, and replaces the essential skills with key competencies. It specifies, as do the individual curriculum statements, broad objectives for each essential learning area throughout eight progressive levels of achievement for the years of schooling from Years 1 to 13. There are no specific objectives for students at a particular year (or grade).^{19, 20}

The revised Māori-medium curriculum, *Te Marautanga o Aotearoa*, is not a translation. It articulates aspirations for students learning in Maori-medium settings. *Te Marautanga o Aotearoa* is scheduled to be implemented in 2009.

Reading Policy

Reading is a fundamental part of the New Zealand curriculum. The curriculum for reading (pānui) is outlined in a substrand of written language in *English in the New Zealand Curriculum* and as a substrand of receptive language (Reo Torohu) in *Te Reo Māori i roto i te Marautanga o Aotearoa.*²¹ At primary school, reading typically has been taught as a separate subject or more recently as part of a wider literacy program, while at secondary school it is taught as part of the broader English or Māori (language) curricula.

The overarching objectives of the written language strand, for example, state that students should be able to:

- Engage with and enjoy written language in all its varieties; and
- Understand, respond to, and use written language effectively in a range of contexts.

Specifically, students at level 3 of the reading substrand, the level at which Year 5 students are typically working, "should discuss language, meanings, and ideas in a range of texts, relating their understanding to personal experiences and other texts." ²²

While the curriculum's objectives and goals are general, there is an expectation among New Zealand teachers that by the end of 4 years of formal schooling, children will be able to read, comprehend, and respond to texts that are appropriate at their chronological age (i.e., Year 4 students are typically 9 years of age). *Effective Literacy Practice in Years 1 to 4* describes what students should be able to do after 4 years of literacy learning.²³

Specifically for reading these are:

- Integrate meaning, structure, visual and grapho-phonic information, and prior knowledge when reading.
- Select and use the processing strategies effectively and self-monitor.
- Use word-identification strategies appropriately and automatically when encountering unknown words.
- Confidently share and discuss their thoughts about and responses to a range of texts (fiction and nonfiction), print tests, and electronic texts.
- Think critically about what is being read.
- Use a range of comprehension strategies. Analyze and interpret what the author is saying, make inferences and justify them, and make connections.
- Gather, process, and evaluate information from a variety of sources, including multimedia sources.
- Read silently.
- Read aloud with expression and fluency.
- Demonstrate a developing understanding of text structure and author's style when discussing texts.
- Have a strong sense of what they like to read and locate such material.

In New Zealand, teachers and schools are responsible for determining the most appropriate approaches to teaching students and selecting instructional materials,



including those for reading. An extensive range of reading materials and classroom resources in English, Māori, and Pacific Island languages are published and distributed free of charge to schools on behalf of the Ministry of Education by Learning Media Ltd (Te Pou Taki Kōrero). There also are a number of private New Zealand publishers who produce a range of high-quality reading texts and other supporting aids for teachers.

As a result of the work from the *Literacy and Numeracy Strategy*, the Ministry of Education published *Effective Literacy Practice in Years 1 to 4* and *Effective Literacy Practice in Years 5 to 8.*²⁴ These guides identify and describe characteristics of literacy practice in English-medium schools that have been found through national and international research to be most effective in improving student outcomes. They set out the theoretical basis for effective literacy teaching practice in New Zealand, as well as provide a framework of the dimensions that define effective literacy practice and how it relates to teachers' practice and student achievement.

Reading Instruction in the Primary Grades

Instructional Time

New Zealand state and state-integrated primary schools are required to be open for instruction 386 half days a year from February to December. A typical primary school day runs from 9 a.m. to 3 p.m., including instructional time and breaks. There is, however, no specified time for reading instruction. All schools are required to offer a balanced curriculum, with school principals and teaching staff having responsibility for the interpretation of what this means. Results from the 2001 IEA PIRLS showed that New Zealand Year 5 students typically received 9 hours of language instruction a week, including 6 hours explicitly focused on reading instruction.²⁵

Instructional Materials

Schools and teachers choose the instructional materials for reading programs. These include books, journals, CD-ROMS, websites, audiotapes, and CDs. The following resources are examples of those published for the New Zealand Ministry of Education by Learning Media Ltd.

Ready to Read, a graded reading series published in English, is probably one of the most popular series used to support reading programs for children, ages 5 to 8. The series is published for three different stages of reading: emergent, early, and fluent. The content of the *Ready to Read* texts reflects the lives and interests of New Zealand children. The series includes single titles, big books, and poem cards, as well as tapes and CDS. Accompanying individual titles are notes for teachers describing specific text features and suggestions for use in literacy programs.

The School Journal is a magazine for school children, ages 7 to 13, accompanied by teachers' notes. The magazine includes a mix of fiction and nonfiction material. This journal serves a dual purpose, as a magazine that children can read for their own interest and enjoyment and, because it is graded, as a useful classroom resource for reading instruction or as a reference source for other curriculum areas.

Three examples of regular publications used by teachers and students in Māorimedium education include *He Purapura*, a series of graded readers for 5 to 8 year olds; *He Kohikohinga* (with teachers notes), designed for 7 to 9 year olds; and *Tāiki E!*, a takehome magazine for 7 to 10 year olds. *Tupu* is an example of a regular series available in five Pacific Island languages and accompanied by teachers' notes and CD.

Use of Technology

Teachers have access to a range of media for use in their literacy programs, some of which support learners who may have reading difficulties. For example, Learning Media Ltd. has published five electronic storybooks (CD-ROMS) on behalf of the Ministry of Education. The storybooks can be used along with the *School Journal* and are accompanied by suggestions for writing activities. There are also some commercially-developed materials available with web-based investigative activities which provide teachers with an opportunity to integrate a technological aspect into their literacy programs.

Role of Reading Specialists

Primary school teachers generally teach all curriculum areas including reading. Many schools, particularly in the junior syndicate, will have an experienced senior teacher who has responsibility for the leadership and organization of their school's literacy program.

Second-language Instruction

Significant immigration since the late 1990s, particularly from Asia, led to an increase in the number of children in New Zealand schools who have English language learning needs. The Ministry of Education provides additional resources for schools to meet the language needs of all English language learners (i.e., students who are learning English as a second language), including new immigrants and refugees, and New Zealand-born students from non-English speaking backgrounds. Schools are responsible for organizational arrangements for teaching English language learners. In primary schools, English language learners typically are in a regular class setting and those with high English language learning needs may be taken out for English language lessons to work with teachers who have training as specialists. Sometimes, this arrangement is supplemented by within-class support, such as a teacher's aide or a buddy or peer-support program. Schools also provide English language programs and support for their international feepaying students. The programs for these students are most likely to be integrated with language programs for domestic students who have English language needs.²⁶

Effective Practices

Effective literacy practice has a theoretical basis that can be expressed in terms of three related areas: a developmental perspective, a socialization model, and the fact that each child's development is unique. The framework for describing literacy acquisition, outlined in the two Ministry of Education effective practice publications, identifies



three aspects: learning the code, making meaning, and thinking critically. There are six dimensions of effective literacy practice:

- *Teachers' knowledge of literacy learning* by continually developing their knowledge about literacy and about literacy acquisition;
- *Knowledge of the learner* encompasses teachers' knowledge of each child in terms of developing an individual profile of their learning, patterns of progression, and literacy practices outside of school;
- *Engaging learners with texts* involves using and creating a variety of appropriate texts, which relate to children's interests, draw on and affirm their social and cultural identities, use authentic language, and motivate and challenge them as learners;
- *Teachers' expectations* for learners, which should be reflected on and reviewed, should be high but, at the same time, appropriate and clearly expressed to learner and their family;
- *Partnerships* among significant people in learners' lives, including family peers and specialist teachers, should be actively promoted; and
- *Instructional strategies* and the deliberate acts of teaching should focus on learning to achieve a particular outcome.

Deliberate acts of teaching have been identified and described in the texts and are intended to sharpen the focus of instruction. Teachers use these to develop their students' knowledge, strategies, and awareness in terms of learning the code of written English, making meaning, and thinking critically when reading and writing.²⁷

Reading Disabilities

Diagnostic Testing

There is currently no single, mandatory comprehensive screening test used by schools to identify students with problems that could potentially affect children's ability to learn to read or for identifying a reading disability. Schools decide on the appropriate assessment tools to examine and monitor students' reading progress, as well as the most appropriate remediation programs. *An Observation Survey of Early Literacy Achievement* (Six-year-Net), ²⁸ is an example of an assessment tool administered to children at age 6 after they have completed 1 year of schooling. The survey is a comprehensive assessment which includes a dictation exercise to see how students write and hear sounds in words and word tests to check students' letter identification and concepts about print.²⁹

Instruction for Children with Reading Disabilities

Reading Recovery[®] is a key early intervention program that English-medium schools may choose for children identified as making only limited progress in reading after 1 year of schooling.³⁰ Students who enter the program undergo intensive one-on-one sessions with trained *Reading Recovery*[®] teachers. The main goal of the program is to accelerate students to the same reading level as their peers within a 20-week period.

Resource Teachers of Literacy, employed by the Ministry of Education, also provide support for schools that have identified students with reading and writing difficulties. These specialist teachers work with clusters of schools to provide advice and support to underachieving students and the teachers of these students.

A number of other interventions are offered or can be accessed by schools, including the services of teachers' aides, and organizations such as the Specific Learning Disabilities Federation, which provides assistance to people including children who have learning difficulties.

Special Education

A range of support is available to early childhood education services and schools in New Zealand to ensure that children are able to access the curriculum and take part in education. For example, all regular schools receive a Special Education Grant and can access school-based resource teachers. Most children with special education needs receive support and services from the regular school they attend. If necessary, schools can arrange for services from teachers who are specialists or make a referral to Group Special Education within the Ministry of Education to determine if additional services and resources are required. Special schools also provide special education services for children with high or very high needs, including those with specific physical, hearing or vision impairments, or intellectual needs.

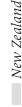
Teachers and Teacher Education

Teacher Education and Training

All teacher education programs that lead to registration as a teacher must be specifically approved by the New Zealand Teachers Council. Prior to 1989, the year in which New Zealand's major education reforms were beginning to be implemented, teacher education was conducted in colleges of education, which offered either a 3-year primary teaching diploma program or, for degree graduates, a shortened 2-year program. Programs for secondary school teachers who have university degrees were typically 1-year post-graduate programs.

Initial teacher education qualifications for early childhood, primary, and secondary teaching are now offered by a range of universities, polytechnics, wānanga (Māori-based tertiary institutions), and private teacher-education providers who specialize in, for example, Christian education. Typically, qualifications for primary school teaching are 3 or 4 years in duration and lead to a bachelor's degree of teaching, or, for those already with university degrees, a graduate diploma of teaching.³¹ Prospective secondary school teachers complete a 3- or 4-year university degree, followed by a 1-year post-graduate teacher education program. A number of providers offer programs for those prospective teachers who wish to work in bilingual or Māori immersion settings.

While the courses at different institutions vary in the content and number of core hours spent on the content areas, they cover all aspects of the New Zealand curriculum, foundations of education, learning processes, and teaching practices. In





most institutions, student teachers may elect a curriculum area of particular interest (e.g., reading, special needs, or music education) or a year-level focus (e.g., new entrants or Year 1 and intermediate or Year 7 and 8) and complete more advanced study. There are no requirements specific to the teaching of reading other than what is taught in the core requirements.

During initial teacher education, student teachers take part in classroom practice under the supervision of experienced teachers in a range of schools. After graduating, beginning teachers are provisionally registered and must undergo further supervision for 2 years under certain restrictions (e.g., maximum class size, etc.) before receiving full registration.

The New Zealand Teachers Council, the teachers' professional body, is responsible for registering (or licensing) teachers who qualify for a 3-year practicing certificate under the Education Standards Act 2001. Teacher registration is mandatory for any teacher employed in kindergartens, private, state-integrated schools, and state schools. There are three categories of registration: *provisional* for teachers applying for registration for the first time and for teachers who have not held full registration before, *subject to confirmation* for experienced teachers who have not taught for 2 out of the previous 5 years, and *full* for experienced teachers who meet all requirements.

Teacher In-service Education

There are various professional development opportunities for practicing teachers, ranging from 1-day seminars and workshops, to a part-time master's degree program. Teacher education in-service providers include schools and colleges of education and specialist companies or consultants. The School Support Services, based in either faculties of education in universities or in colleges of education, are the main providers of professional learning programs on behalf of the Ministry of Education. Schools are responsible for ensuring that teachers participate regularly in some form of professional development. The majority of in-service education occurs in school contexts.

Examinations and Assessments

National Examinations and Assessments

There are no high-stakes examinations at the primary-school level. In secondary school, students in Years 11 through 13, undertake a mix of internal and external assessments for the National Certificate of Education Achievement. This qualification was first introduced in 2002, and replaces five separate qualifications previously used in Years 11–13.

The National Education Monitoring Project provides system-level information on the educational achievement, attitudes, and motivation of students in Years 4 and 8. National monitoring started in English-medium education settings in 1995 and in Māori-medium settings (Year 8 only) in 1999. Each year about 3,000 students in 260 schools are randomly selected to take part. The same learning areas are assessed every 4 years in order to give a picture of progress across time. Four approaches are used to assess students:

- 1. One-to-one, where one student works with a teacher(test)-administrator;
- 2. *Group*, where four students work together on a task;
- 3. *Pencil and paper* (independent), where four students work independently on the same pencil-and-paper tasks; and
- 4. Stations, where four students work independently on a series of hands-on activities.

Since the purpose of the national monitoring project is to provide a national picture of student achievement using different assessment approaches, it is neither feasible nor appropriate to release information about individual students or schools.

Standardized Tests

New Zealand teachers and schools develop their own policies and practices for assessment in accordance with the *National Administration Guidelines*. Specifically, one of these guidelines states that schools are required to, "through a range of assessment practices, gather information that is sufficiently comprehensive to enable the progress and achievement of students to be evaluated."³² Furthermore, schools are required to have written statements about the tools used to gather assessment information and when each kind of assessment will take place.

A number of nationally-developed assessment resources are available for use in English-medium settings to support teachers and schools in collecting quality achievement information. Recent initiatives also have seen the development of assessment tools in both English and Māori languages, which also reflect the different curriculum frameworks.

Assessment Tools for Teaching and Learning are pencil-and-paper tests, available in English and Māori, that allow teachers to monitor Years 4 to 12 students' progress in reading (or pānui), writing (or tuhituhi), and mathematics (or pāngarau). The results are analyzed using norm-referenced and nationally moderated criteria, and are used to diagnose and describe students' strengths and learning needs, as well as measure and compare student progress over time in relation to national standards. The information from these tests also can be aggregated at the school level.³³

Progressive Achievement Tests are a series of pencil-and-paper tests, developed by the New Zealand Council for Educational Research, for use as diagnostic tools in listening comprehension³⁴ and reading comprehension and vocabulary.³⁵ All the tests are norm-referenced tests, which enable teachers to make valid and reliable comparisons between their students and samples of students, ages 8 to 14 (Years 3 to 10).

The Supplementary Test of Achievement in Reading, another pencil-and-paper, norm-reference diagnostic tool, enables teachers of students in Years 3 to 9 to examine students' progress in several aspects of reading (including word recognition, sentence comprehension, paragraph comprehension, and vocabulary range).³⁶

Monitoring Individual Student Progress

The *National Administration Guidelines* require teachers to report to individual students and their parents on their achievement and their progress at school. Schools usually provide written reports, although parents can request to meet with teachers at any time



to talk about their child's progress. As well as using information from the above-named assessments, a number of other assessments are available to teachers.³⁷

The New Zealand revision of the Burt Word Reading Test is an individually administered, un-timed word recognition test. The purpose of this test is to identify possible weaknesses in a student's word recognition and decoding skills. This tool is often used in conjunction with other information diagnostic assessments and with students in Years 2 through to 8 (typically ages 6 years to 13).³⁸

Running Records is a diagnostic tool that provides accurate and objective information on children's oral reading performance.³⁹ The procedures employ standard methods for recording exactly what a child does when they read aloud. Data are collected on record sheets, looking specifically at running words error rate, accuracy, and self-correction rate across a range of text difficulty levels. This tool is not generally used with fluent readers.

Assessment Resource Banks include an online collection of assessment tasks organized to match the New Zealand curriculum statements for English, mathematics, and science. These assessment tasks were developed by the New Zealand Council for Educational Research for the Ministry of Education. They are intended for use with students from Years 4 to 10. Each task has information on the performance of a sample of students at a given year level. The assessments have the versatility of being used for formative, diagnostic, and summative assessments, as well as for monitoring school-wide performance over time.

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- 21 These two documents were the official curricula for reading and pānui respectively at the time PIRLS was administered in New Zealand. They will continue to be used as support materials when the new curricula are implemented in 2008/2009.
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- 39 Developed by Dame Marie Clay. The Ministry of Education has published a video resource kit, Using Running Records, which is in all schools with students in Years 1 to 3. Pūkete Pānui Haere provides a running record assessment in the Māori language.

Norway

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Language and Literacy

Norwegian, the main language spoken in Norway, has a variety of dialects. There are two forms of written Norwegian, Bokmaal and Nynorsk, which have been official languages of Norway for nearly 100 years. Over 80% of the population writes Bokmaal, and a little less than 20% writes Nynorsk. Both languages are taught in school, therefore, all textbooks and other instructional materials must be available in both languages. In addition, the Sámi population speaks and writes three distinctive Sámi languages, with most people speaking North Sámi. In Norway, Sámi students in compulsory school have the right to be educated in their own language. Beginning in first grade, Norwegian students also are taught English.

Emphasis on Literacy

Make Space for Reading! is the national plan for improving reading.¹ Drawn up and initiated by the Ministry of Education and Research for 2003 through 2007, the plan was put into place when national and international studies indicated that Norwegian students' reading skills were unsatisfactory. The Directorate for Primary and Secondary Education has responsibility for the plan, which has the following three goals:

- To improve reading skills and the motivation to read among children and youths;
- To improve teachers' skills at teaching reading, communication of literature, and use of school libraries; and
- To increase society's awareness of reading as a basis for other learning, cultural skills, quality of life, and participation in working life and a democratic society.

The action plan presents specific proposals for projects at primary school and at lower- and upper-secondary schools, as well as in libraries and colleges. These projects include activities directed at students, teachers, and teachers in training. Activities at the system level include school strategy work, developing curricula, and assessing reading skills and behaviors through participation in national and international surveys. The plan also encourages extensive collaboration and network building among schools, between schools and colleges or research environments, and with communities and organizations outside of schools that are committed to the promotion of reading, such as librarians, publishers, and authors. In January 2004, the Centre for Reading Research at the University of Stavanger was designated the National Centre for Reading Education, and subsequently changed its name to National Centre for Reading Education and Research. It offers support and guidance to local authorities, libraries, and schools and is responsible, alone or in cooperation with others, for a number of the measures included in the action plan.

Overview of the Education System

The Ministry of Education and Research is responsible for the Norwegian school system. Individual municipalities are responsible for managing primary and lower-secondary schools, while county authorities have responsibility for upper-secondary schools. The Ministry provides the guidelines and monitors outcomes. Municipalities, schools, and teachers are responsible for deciding what learning materials to use and what teaching methods to adopt within the framework of statutes and national curricula.

In 2004, the Directorate for Education and Training was established as the executive agency for the Ministry of Education and Research. The Directorate is responsible for the development of primary and secondary education. In this capacity, the Directorate has the overall responsibility for supervising education and the governance of the education sector, as well as the implementation of acts of Parliament and regulations. The Directorate also is responsible for managing the Norwegian Support System for Special Education, state-owned schools, and the educational direction of the National Education Centers.

Role of Preprimary Education

Preschool education in Norway is voluntary and the responsibility of the Ministry of Education and Research. It is the goal of the Government that all preschool children attend kindergarten. In 2000, approximately 52% of children, ages 0–5, received preprimary education (barnehage). In 2004, this figure increased by 20%. The attendance rate is lower for younger children and rises as they get older. In 2005, there were 6,278 childcare institutions in Norway, with the majority (54%) being private preschool institutions.²

Structure of the Education System

Compulsory education in Norway consists of primary and lower-secondary education. Children start school in the calendar year they become 6 and finish their compulsory education in the calendar year they turn 16. The primary level consists of grades 1–7, and the lower-secondary level consists of grades 8–10. As a result of Norway's scattered population, 40% of primary and lower-secondary schools are so small that primary and lower-secondary levels are often combined in the same school, and children of different ages are taught in the same class. After lower-secondary school, most students attend upper-secondary school, typically for an additional 3 years. Most students are enrolled in public schools. Private schools are considered a supplement to public education, with about 2% of the students attending private schools at the primary and lower-secondary level.³

All municipalities in Norway are legally obliged to provide day-care facilities before and after school for children attending the first four grades. Day-care facilities must provide cultural and recreational activities that are age appropriate and conditions that also support children with physical disabilities.

Reading Curriculum in the Primary Grades

Knowledge Promotion is the latest reform effort in education, introducing certain changes in substance, structure, and organization in all grades.⁴ The reform took effect in autumn 2006 for students in grades 1–9 and in the first grade of upper-secondary school (year 11). In the following school year, the reform was introduced in grade 10 and in the last two grades of upper-secondary school. As a result of the reform, a new curriculum was introduced which replaced the 1997 curriculum. Students participating in PIRLS 2006 received their education in accordance with the 1997 curriculum. Information about the 1997 curriculum is described in detail in the PIRLS 2001 Encyclopedia.⁵

The goal of *Knowledge Promotion* is to help all students develop fundamental skills that will enable them to participate actively in our society of knowledge. The Norwegian school system is inclusive; everyone is given the same opportunities to develop their abilities. The reform, with its special emphasis on learning, is meant to ensure that all students receive a differentiated education.

The most important changes in the Norwegian school system that stem from the Knowledge Promotion reform include:

- Strengthening of basic skills;
- Emphasizing reading and writing from the first grade;
- Creating new subject syllabi in all subjects, clearly indicating what students and apprentices (teachers in training) are expected to learn;
- Redistributing teaching hours per subject;
- Reorganizing available choices within education programs; and
- Initiating freedom at the local level with respect to work methods, teaching materials, and the organization of classroom instruction.

Under the new reform, schools are to cultivate the following five basic skills that provide the foundation for all other learning across subjects: the ability to express oneself orally, to read, do arithmetic, to write, and to make use of information and communication technology. These basic skills have been incorporated into the syllabi for all subjects. Therefore, all teachers are responsible for enabling students and apprentices to develop basic skills through their work in various subjects.

Reading Policy

The new syllabi contain clear goals for what students should attain in different grades.⁶ In assigning such skill targets, there is the expectation that all students, in varying degrees, should be able to reach the targets through differentiated education. If a student is not benefiting properly from regular education, he or she is entitled to special tuition.



At the end of grade 4, there are goals for oral, written, and combined texts. Goals in grade 4 include being able to read children's literature and textbooks with comprehension, describing their own choice of literature, and demonstrating basic skills in examining language elements and comparing different texts. Students also should be able to write a story, a poem, a letter, and a text dealing with facts.

Mandated Materials for Reading Instruction

Textbooks for use in school are not subject to official approval, but they should comply with the goals of the curriculum. Depending on the textbook, additional materials, such as workbooks or special materials for children with learning or reading problems may be available.

Reading Instruction in the Primary Grades

Instructional Time

The distribution of teaching hours per subject for compulsory school is established as a whole for primary schooling (grades 1–7) and for lower-secondary schools (grades 8–10). The school owner (municipality or county authority) is responsible for the distribution of teaching hours at each level. The school year, which is 190 days, runs from the middle of August to the middle of June. Students in the primary grades should receive a total of 4,930 hours of school by the time they have completed seventh grade. Of this, the total amount of instructional time for Norwegian is 1,296 hours.⁷ For example, in grade 4, the total instructional time is between 20 and 24 hours per week, and the average for the study of Norwegian is 5 hours of per week. Students also will have language instruction (mainly English) for 1 hour per week, increasing the average total language instruction per week to 6 hours. To improve each student's access to differentiated education, municipalities and county authorities may reassign one quarter of the hours for a given subject to help students attain the goals for their subjects as a whole. However, the goals of the subject syllabus cannot be deviated from, even if the number of hours has been changed. Any reassignment requires the consent of each student or apprentice, as well as their parents or guardians.

Instructional Materials

In principle, an individual teacher can select a textbook used for classroom instruction, but for practical reasons, most teachers in the same school will use the same textbooks. A number of different textbooks (readers) which comply with the 1997 curriculum have been available for teaching reading, four or five account for almost all textbooks used for reading instruction. New textbooks complying with the new subject syllabi have been developed, and it is expected that more textbooks will be made available as the new reform is implemented in all grades.

Use of Technology

The ability to make use of information communications technology is one of the five basic skills in all subjects. These skills have been incorporated into all the different subject syllabi.

Norway

Even so, the use of information technology for beginning reading and writing instruction is not widespread. When used, it typically supplements more traditional methods.

Role of Reading Specialists

Classroom teachers are responsible for teaching reading and writing in primary school. The teachers receive instruction and practice in teaching reading as part of their general teacher education and are expected to handle the instructional needs of most students. While most schools have special teachers engaged in teaching students with special education needs, they do not act as reading specialists. There are numerous inservice courses in teaching reading that teachers can take to improve their knowledge and expertise.

Second-language Instruction

Proficiency in the mother tongue is considered essential for the acquisition of a second language. Therefore, students with a foreign language background may choose Norwegian as a second language and will receive instruction in their mother tongue. In special instances, students with a foreign language background can receive extra training in Norwegian. The goal is that these students will have sufficient mastery of Norwegian so that they can receive instruction in the language.

Sámi-speaking students have the right to receive all primary and lower-secondary education in Sámi. A separate curriculum has been designed for the Sámi *Knowledge Promotion* reform. This curriculum is used in all Sámi administrative districts.

Effective Practices

The last large survey (17,000 students and 880 teachers in 1997) on reading skills in lower primary schools asked teachers about the methods used when teaching the students to read. On the whole, the results revealed that most Norwegian teachers have an eclectic approach to reading education, since 84% reported that they used a mixed approach, 14% relied on "phonics", and 2% said they based their instruction on a "whole language" approach. Further analyses indicated that instruction based solely on "whole language" represented a problem primarily for poor readers, but it was pointed out that the "whole language" group was very small.⁸

Reading Disabilities

Diagnostic Testing

Screening tests in reading are available in most grades 1 through 9. The tests focus on identifying students performing at or below the 20th percentile in reading. In 2000, all schools started using a screening test in reading for grades 2 and 7 in a 4-year trial period. After the trial period was over, the Directorate for Education and Training advised all schools to continue using the grade-2 screening test in reading. The National Centre for Reading Education and Research has revised the screening test in reading for grade 2 so that it will comply with the new standards set by the *Knowledge Promotion* reform.



Instruction for Children with Reading Disabilities

As a first step, a student who lags behind in reading receives special attention from the classroom teacher. Many schools have a teacher or a team of teachers engaged in special education from which the classroom teacher can recruit assistance. If the reading difficulty is more severe, the problem will be diagnosed by the educational-psychological service available in every municipality.

Special Education

Students who are diagnosed as having dyslexia or for other reasons are diagnosed as needing special help are entitled to special education. Special education can be organized in the class by having an extra teacher take part in the instruction of reading and writing. Special education also may be organized into individual tutoring sessions or small-group tutoring.

Teachers and Teacher Education

General teacher education lasts 4 years at state teacher colleges. Another way of qualifying as a teacher is to complete a university study (a minimum of 4 years), followed by an additional year of teacher training and practice. General teacher education is typical for teachers in primary school, but teachers with general teacher education also may teach in lower-secondary school. Teachers qualified to teach preprimary (preschool) education may teach grades 1 to 4 if they complete an additional year of teacher training. Teachers with a university education may only teach the subjects they have studied and are mainly employed as subject teachers in lower-secondary school. In upper-secondary schools, all teachers are subject specialists. The academic or vocational subjects a teacher is qualified to teach will determine the school and type of class where he or she will teach.

General teacher education was reformed in 2003 to include a compulsory module: Basic Education in Reading, Writing, and Mathematics. ⁹One year of full-time study is equal to 60 academic points; the new compulsory module is a 10-point module.

Teacher In-service Training

In-service training for further teacher professional development is encouraged and is part of an extra week (the 39th week) in the school year. Also, universities, state teacher colleges, and a number of public and private institutions offer a wide range of courses and seminars.

Examinations and Assessments

Monitoring Individual Student Progress

Progression from year to year throughout compulsory education is automatic, and at no point are students required to pass examinations before moving on to the next grade. In September 2007, fifth- and eighth-grade students began participating in national reading tests in Norwegian and English, as well as tests in mathematics. The test results determine whether students' skills are consistent with the syllabus goal for basic skills at the end of fourth and seventh grades. Results are made available to those who are involved with

qualitative development in schools; however, there is no ranking of schools. The results are intended to serve as a platform for qualitative development on the part of the schools and the school owners, as well as at the regional and national levels.

There are general provisions in the regulations of the Education Act¹⁰ for both the 10-year compulsory school and upper-secondary education and training. Assessment in grades 1–7 does not involve the awarding of marks. Marks are introduced in lower-secondary school in the form of a 6 to 1 scale, 6 being the top mark. The provisions stipulate when assessments are to be administered, with and without grades. The former includes both average marks (assessment grades) and examination grades. In the syllabi, there are provisions for average marks and for determining which rules apply for examinations in any given subject.

At the end of lower-secondary school (grade 10), students have to take a written examination in one of three subjects: Norwegian, mathematics, or English. Examination papers are prepared centrally, and students are told the subject of their examination only a few days beforehand. In subjects where the students have not taken an examination, the final mark is given on the basis of teachers' assessment throughout the year.

As of the 2006–07 school year, a compulsory mapping test (screening test) in reading is administered annually to students in the second grade. The test was developed by the National Centre for Reading Education and Research. Each year the National Centre collects test results from a representative sample of students in second grade. Results are reported on a national level, with no comparison between regions or schools.

Suggested Readings

The following websites contain relevant information about education in Norway, most of it also in English.

- Norwegian Ministry of Education and Research http://www.regjeringen.no/en/ministries/kd
- Norwegian Directorate for Education and Training http://www.udir.no

Statistics Norway http://www.ssb.no

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Poland

Language and Literacy

Polish is the official language of Poland and belongs to the Western Slavic group of Indo-European languages. German, Ukrainian, Belarussian, and Kashubian are among the languages spoken by national and ethnic minorities in Poland.

Polish also is the language of instruction in all schools. Children from national and ethnic minorities (1.3% of primary-school students) are taught their mother tongues and cultures. There also are bilingual secondary schools, attended by 1.5% of students, in which instruction is conducted in a foreign language in some subjects.

Emphasis on Literacy

Since the publication of the Organization for Economic Co-operation and Development's Adult Literacy Survey in 1995,¹ which showed that the Polish sample appeared at the bottom of the achievement distribution in understanding written texts, improving literacy has become a focus in Poland. In response to the study's results, a current initiative, organized by the Whole Poland Reads to Children foundation, centers on a national mass media campaign that encourages parents to read to their child for 20 minutes every day.

Overview of the Education System

After 1989, the Polish education system, much like the entire country, has become gradually decentralized. Between 1991 and 1999, the provision of education became a responsibility of local governments, which receive subsidized funding from the state.

In 1999, the production of school curricula and textbooks was decentralized as well. Since then, the government has limited itself to publishing the *Basic Curriculum* that generally describes the teaching objectives and content of subjects included in primary, lower-, and upper-secondary school. However, the government can withdraw from use any published curriculum or textbook on the grounds that it does not conform to the *Basic Curriculum*.

Structure of the Education System

The Polish education system consists of four levels: **primary** (6 years), **lower secondary** (3 years), **upper secondary** (3 or 4 years), and **postsecondary** (1–3 semesters). Primary school is divided into two 3-year periods: integrated teaching and teaching subjects. In the integrated teaching period, a single or main teacher teaches content undivided

into subjects and assesses students' achievement descriptively. In the teaching subjects period, there are separate teachers for the major subject areas (Polish language, history and society, mathematics, science, etc.) and marks are used for assessment.

A modern foreign language is a mandatory subject in grades 4-6 of primary school, with English selected by half of the students. Foreign language instruction in grades 0-3 is offered by a few schools as an extracurricular activity and usually at parents' expense.

The upper-secondary level is comprised of three types of schools: general education (liceum), general vocational (liceum profilowane) and vocational (technikum). Each type of school offers a final examination (matura), which entitles students with passing scores to apply to a higher-education institution. Typically, general education graduates achieve the highest examination test scores of all upper-secondary school students, thereby earning a greater chance than other students to study at prestigious universities and departments. The postsecondary level is available to upper-secondary school graduates who wish to gain vocational qualifications equivalent to those of vocational graduates.

As an exception to the structure of the education system, there are some 2-year basic vocational schools that prepare students for skilled industrial or trade vocations. About 18% of lower-secondary school graduates attend these school. Upon completion, students receive a certificate that may not be used for entry into higher education institutions.

Role of Preprimary Education

Preprimary education is compulsory for children at age 6 but is voluntary for children between ages 3 and 5. Currently, kindergarten is attended by 19% of children in rural areas and 59% of children in urban areas.

Reading Curriculum in the Primary Grades

Reading Policy

The official policy on reading literacy is summarized in the *Basic Curriculum*. For grades o-3, reading centers on three major areas: teaching objectives, school responsibilities, and content. Teachers support student development of reading, writing, and arithmetic skills. Reading instruction focuses on syllables, words, sentences, and texts, including Polish and foreign classical children's literature. In addition, students are taught to read silently and with understanding. The *Basic Curriculum* does not recommend particular methods of reading instruction or formulate expectations of students' reading levels in consecutive grades.

For grades 4–6, the *Basic Curriculum* addresses reading in the context of teaching objectives, school responsibilities, and student achievement. Teaching objectives include supporting students' communication skills and introducing them to the world of culture by:

• Developing speaking, listening, reading, and writing skills in diverse communication in private and public situations;

- Discovering students' interests, capabilities, and needs, as well as their linguistic and literacy skills; and
- Enhancing students' motivation to read.

Schools are responsible for motivating students to discover literature and cultural texts (including regional ones). Schools also are expected to give students opportunities to improve their speaking, listening, reading, and writing skills and understand texts and works of art.

In grades 4–6, students should be able to read aloud, respecting the principles of the culture of speech, and read silently, with understanding. Their understanding should span diverse kinds of texts, taking into consideration the author's intention, such as conveying information or expressing an experience or argument.

Summary of National Curriculum

Teachers of grades o-3 are required to design their own curriculum or choose one of the curricula already accepted by the Ministry of National Education. Most of the curricula in use define the goals of reading instruction in the following way:

- Grade 0 (6 year olds): Students prepare to read (that is, teachers develop visual and aural readiness and introduce letters, syllables, short and simple words, and sentences).
- Grade 1 (7 and 8 year olds): Students perform aural and visual analysis and synthesis; read aloud words, sentences and short texts; and understand short children's rhymes and stories.
- Grade 2 (8 and 9 year olds): Students read fluently, correctly, and at the right pace; understand longer, simple texts; and read texts with dialogue.
- Grade 3 (9 and 10 year olds): Students read fluently, vary the pitch and tone of their voices, and keep the right pace of reading. They understand longer and more difficult texts and are able to perform excerpts of their favorite literary works.

Mandated Materials for Reading Instruction

There are no regulations governing the use of materials for reading instruction. Teachers are solely responsible for the selection of reading materials in classrooms. Students in all grades listen to recorded fairy tales, poems, and other literary works. Teachers also read aloud stories. Students in grades 1 to 3 read texts in their textbooks and workbooks, as well as children's books and magazines of increasing difficulty.

Reading Instruction in the Primary Grades

Instructional Time

Reading is considered a part of the curriculum for language instruction. No specified amount of time is assigned to language instruction or to reading, since teaching in grades o-3 is integrated (not divided into subjects). Different sources suggest that most teachers spend one fourth of their total instruction time on reading instruction.





Instructional Materials

Students are expected to read texts published in their Polish language textbooks and workbooks. Workbooks typically include exercises that ask students to demonstrate their understanding and evaluation of the texts. In grade 3, students are expected to read at home a children's story or a short novel selected by the teacher.

Use of Technology

In grades 0–3, audiovisual equipment is available in many classrooms. However, few computers are available to children in these lower-primary grades. In Polish primary schools, on average, there is 1 computer for every 20 students.² Computer rooms are used primarily by students in grades 4–6 during their information technology classes.

Role of Reading Specialists

There are no trained reading specialists in Poland. Schools employ speech therapists and educational therapists to assist students with special needs or learning disabilities. On average, there are 33 teacher-therapists for every 100 primary schools.³

Second-language Instruction

Primary grade students whose mother tongue is not Polish may attend compensatory classes in their schools.

Reading Disabilities

Diagnostic Testing

In Poland, there are no standardized screening tests for reading disabilities. It is the teacher's responsibility to identify students with reading and writing difficulties and recommend the proper course of action such as remediation.

Instruction for Children with Reading Disabilities

Students with reading disabilities are referred to remedial classes within their schools, usually following their regular classes. In the majority of the schools, remedial classes are managed by an elementary grade teacher who quite often also teaches students in the regular classes.

Teachers and Teacher Education

Teacher Education and Training

Every teacher must successfully complete a university or college course for a 3-year bachelor's (first) or 2-year master's (second) degree and a 1-year internship in a school. Some universities offer 5-year studies that integrate the first- and second-degree programs.

A teacher in grades 0–3 of primary school must have a degree in elementary education. Reading instruction is an integral component of teachers' responsibilities in these grades. There are no specific requirements for teaching reading.

Teacher In-service Education

Polish teachers have ample opportunities for professional development. In every province, there is a public in-service training center. Shorter or longer courses are offered by commercial education firms. Universities offer postgraduate courses for teachers wanting to qualify to teach additional subjects.

Examinations and Assessments

National or Regional Examinations

Most students take a national examination at the end of each of the first three levels of education: after primary school (age 13), after lower-secondary school (age 16), and after upper-secondary school (age 19 or 20).

The first examination requires a student to complete a single standardized paper-and pencil-test within 60 minutes. The second examination is comprised of two standardized knowledge tests, one in the humanities and the other in mathematics and science. Each test is 120 minutes. The third examination consists of an oral presentation and standardized knowledge tests in at least three subjects areas: Polish language, a modern foreign language, and a subject chosen by the student.

The first two examinations report a graduate's knowledge (facts, skills, and strategies). However, graduation is not contingent upon the examination score. The importance of the examinations grows, however, if in the next level school, the number of applicants exceeds the number of places. A typical admission policy then selects applicants according to their examination scores.

The third examination also preselects candidates for higher education. Only those graduates who have at least 30% of the maximum number of points in every examination subject may apply to a higher-education institution. An institution uses the examination scores to select applicants if the number of applicants exceeds the places that are available at the institution.

Standardized Tests

Students in grades 0–3 do not take national examinations. Commercial achievement tests compete for teachers' attention. Such achievement tests usually consist of a few tasks that assess students' understanding of short, informative texts.

Monitoring Individual Student Progress

An elementary-grade teacher is required by law to assess every student's achievement twice a year. The assessment, provided to the student and his or her parents, is a lengthy description specifying the student's academic and social achievement and his or her strengths and weaknesses. By law, the use of marks is not permitted for the bi-annual assessments.

During the academic year, a teacher collects information on their students' achievement, such as conventional marks or other symbols devised by the teacher that include short comments or students' portfolios.

Poland



Suggested Readings

- Bogaj, A., Kwiatkowski, A, & Szymański, M. (1999). *Education in Poland in the process of social changes*. Warszawa: Institute for Educational Research.
- Bogaj, A. (2000). *Education for all: The year* 2000 assessment. Warszawa: Institute for Educational Research.
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- 2 Education in the academic year 2005/2006.
 (2006). Warszawa: Central Statistical Office.
 (p. 59).
- 3 Teachers in the academic year 2002/2003. (2003). Warszawa: CODN. (p. 54).



Abdessalem Bouslama Evaluation Institute, Supreme Education Council

Language and Literacy

Arabic is the official language and language of instruction in Qatar, although recently some schools have started teaching mathematics and science in English to predominantly native Arabic-speaking students. Balochi, Pashto, Urdu, and Farsi are among the many languages and dialects spoken by Qatar's large expatriate community. English is the common language spoken among Western expatriates.

Emphasis on Literacy

The importance of literacy in Qatari society is evident in a variety of contexts. The Qatari National Library, Dar Al Kutub, is among the oldest libraries in the Gulf region and one of the most prominent cultural landmarks in Qatar. The library is responsible for a number of initiatives that support literacy, such as book fairs.

In conjunction with Qatar's participation in PIRLS 2006, the Ministry of Education organized a contest at the primary grades for outstanding performance in Arabic language literacy. The primary objective was to improve third-grade students' performance in basic reading competencies in Arabic. The contest also attempted to identify reading skills needing improvement and develop a culture of valuing achievement among primary school staff and students.

One tradition that promotes literacy in the home is parents reading the Quran to their children at an early age and having them repeat short verses. When children begin reading on their own, this activity becomes a daily practice that is monitored by parents or tutors at home.

Overview of the Education System

The Qatari government is responsible for the definition and implementation of educational policy and operates the majority of schools in the country (Ministry of Education schools). Every child in Qatar receives a free education from kindergarten through university. The state provides textbooks, stationery, transportation, sport kits, and gear for all students at all levels of education. It also offers financial incentives for Qatari students and organizes religious and cultural events and competitions.

The education budget increased from 25 million Qatari Riyal in 1960 to 3,093 million in 2005.¹ Despite a discrepancy during the 1950s between the number of boys and the number of girls attending school, attendance was almost equal by gender in the late 1970s, with girls outperforming boys academically.

Until 2002, the education system had been highly centralized, hierarchical, and uniform in its organization and operation. In November 2002, however, in an important act, the Supreme Education Council was established by an Emiri decree to assist in the development and implementation of education reform. The Council is made up of three institutes: 1) The Higher Education Institute, 2) The Evaluation Institute, and 3) The Education Institute, which oversees and provides support services to the newly founded independent schools (a type of charter school). The Education Institute is responsible for developing curriculum standards, providing professional development opportunities to teachers and principals, and monitoring the schools' financial management through periodic reports and audits.

Structure of the Education System

Education as it is known in Qatar today began with the opening of the Qatar Elementary School in 1950–51. Official curricula were introduced in 1952, and textbooks were imported from other Arab countries. In 1956, the first girls' elementary school was opened.

The system of education incorporates three stages: elementary (6 years), preparatory (3 years), and secondary (3 years). Education is compulsory up to the preparatory (intermediate) level, and is free for all Qataris all the way to the university. Almost 80% of Qataris under the age of 15 are enrolled in government schools.

There are 223 public schools, 288 private Schools, 14 adult education schools, and 5 special education schools employing a total of 16,680 school staff and serving 142,782 students.² Table 1 shows the number of students, schools, and teachers within primary, preparatory, and secondary schools in the 2004–05 school year.

School Stage	Number of Students	Number of Schools	Number of Teachers	
Primary	70,469	203	6,282	
Preparatory	30,100	115	2,919	
Secondary	26,662	100	2,564	

Table 1School Figures for the 2004–05 School Year

SOURCE: Ministry of Education. (2006). Annual statistics report, 2004–2005. Doha: Author.

The number of independent schools in Qatar increased sharply in the 3-year period between the 2004–05 and 2006–07 school years. Table 2 presents the number of students, schools, and teachers within each stage in each of the 3 years.

	<u> </u>								
School Year	Primary Schools		Preparatory Schools			Secondary Schools			
	Number of Students	Number of Schools	Number of Teachers	Number of Students	Number of Schools	Number of Teachers	Number of Students	Number of Schools	Number of Teachers
2004–05	5,165	12	584	1,937	4	171	1,012	3	119
2005-06	11,453	22	1,110	5,709	10	458	3,396	7	318
2006-07	14,054	27	1,329	8,533	16	738	5,091	11	492

 Table 2
 School Figures for Independent Schools between 2004–05 and 2006–07 School Years

SOURCE: Supreme Education Council http://www.sec.gov.ga

The total number of private institutes, including higher education academies, preschools, and the schools of the Arab and foreign communities, stood at 215 in 2000. There are 101 Arab schools, 14 foreign schools, and 44 preschools. The Ministry of Education provides private Arabic schools with textbooks used in the Ministry of Education's schools and supervises their educational activities. There is also a large number of international schools, which follow their own curricula.

Role of Preprimary Education

Preprimary education is a cornerstone of the new Qatari Educational policy. Early childhood education is available to children under the age of 6, but is not compulsory. Students attend preschool from 4 to 5 hours daily. In 2005, 36% of children were enrolled in preprimary schools.³

Through its Preschool Unit, the Ministry of Education establishes the preprimary curriculum and defines its educational and developmental role. The focus of the curriculum at this level is on social skills and religious instruction, concept development, emergent expression, language development, movement, and songs. Students are motivated to learn through play. Although some reading activity is taught in the kindergarten stage, formal reading instruction begins at age 6, in the first year of primary schooling.

Reading Curriculum in the Primary Grades

Reading Policy

The Ministry of Education, which manages the majority of schools in Qatar, maintains and follows the National Curriculum Guide that is also followed by private Arabic schools. Independent schools follow the Qatar Curriculum Standards that leave a lot of freedom to the individual independent schools in the instruction and achievement of the standards.

In Qatar, reading is taught as a part of the Arabic language curriculum throughout compulsory school. Arabic language is taught as an integrated curriculum to assure the unity of the language, and achieve balance between its skills. Formal reading instruction begins at the age of 6 in the first grade of compulsory education.

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Summary of the Ministry of Education's Curriculum Guide

The Ministry of Education's National Curriculum Guide establishes standards and objectives for reading, writing, and computation skills for all nine grades of compulsory school. The goals of the curriculum guide for grade 4 include promoting literacy as a means of communication, education, and thinking; promoting values through strengthened ties with the Quran, learning some chosen sayings of the Prophet and masterpieces from Arabic writing; enhancing knowledge and culture; and developing language and self-education.

The main objectives for students in grade 4 are:

- Acquire knowledge of graphemes and phonemes and the correspondence between them;
- Become familiar with the concepts of words, sentences, poem, rhythm, letters, message, telegram, news, stories, dialogue, and punctuation marks;
- Read comprehensively and fluently, aloud in a clear voice, and silently at a reasonable speed, using the rules of correct Arabic phonetics;
- Read correctly, adding or deleting words or changing the emphasis on the letters of a word;
- Perform tasks that promote the acquisition of a broader vocabulary and linguistic understanding; and
- Make use of a varied range of texts and understand them.

In independent schools, Arabic as a school subject is divided into four major areas: writing, grammar, expression, and reading. The reading domain calls for students to develop silent and oral reading ability to read freely and correctly in order to develop the mind and fluently express ideas.

The Qatar Curriculum Standards for reading (and writing) performance by the end of grade 4, for students in independent schools, state that students will be able to:

- Scan texts to identify key sections, paragraphs, and words;
- Identify connectives that signal time and indicate sequence;
- In prose fiction and poetry, recognize roles of theme, plot, setting, dialogue, direct and reported speech, rhyme, rhythm, assonance, emotive language, and similes;
- In nonfiction, identify instructions or procedure texts, identify typical language and organizational features of information texts, and read and discuss a variety of explanation texts;
- Read and understand the main ideas and details in a variety of texts;
- Retell stories or relate information from reading; and
- Write continuous texts, linking purpose to form, and write story openings, portraits of characters, short sequences of dialogue, and more extended stories.

Mandated Materials for Reading Instruction

There is no specific curriculum for reading in Ministry of Education schools. Students are exposed to reading activity in their daily lessons, either through reading passages explained and analyzed in the classroom or through assignments for individual students in the school's library or a class visit to the library whenever possible.

Reading Instruction in the Primary Grades

Instructional Time

The school day and year are somewhat shorter in Qatar than in most other countries. The school year is a 8-month instructional period for Ministry of Education schools (with about 120 days devoted to instruction) and a 9-month period for independent schools.

In a typical week, the total amount of instructional time prescribed by the curriculum at the fourth grade of primary school is about 27 teaching hours. The prescribed percentage of total instructional time devoted to Arabic language instruction is 45%. The percentage of total instructional time for reading instruction is 35%.⁴

Instructional Materials

The Ministry of Education publishes and distributes official schoolbooks. Private publishers from other Arabic countries also produce a range of reading texts, story workbooks, educational materials for instructional use, and other supporting aids for teachers. Computers are available in all secondary schools, as well as some elementary and intermediary schools.

In addition to what is used in the Ministry of Education schools, independent schools use newspapers, magazines, tape recorders, and television in their instruction. Moreover, computers are available in all schools, and the Internet is used as an aid for reading instruction.

Use of Technology

By 1990, information technology courses were integrated in the first grade of secondary schools on a trial program. Four years later, a decision was made to have information technology literacy as an educational means in all schools. By 1998, elementary schools were included in the program.

The number of computers in schools has been growing steadily, and technology is beginning to play an important role in an increasing number of the Ministry of Education schools. By 1998, 17 elementary schools were included in an information technology literacy program and equipped with PCs. In independent schools, all teachers use a personal laptop and a computer in class. Students use a computer in the library, computer laboratory, or in the classroom.

In 2006, the Supreme Council of Information and Communications Technology announced the initiation of the first phase of the *e-Schoolbag* project.⁵ Initially, 200 students from al-Wakra Independent School for Girls at the seventh grade will receive Tablet PCs to be used inside the classrooms and to continue interacting with their respective teachers from home.⁶



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Role of Reading Specialists

There are no reading specialists in Qatari schools, except those for children with special needs who receive assistance with reading from a special education teacher. Classroom teachers regularly assess students to diagnose reading difficulties. Those identified with reading difficulties are given support, depending on the severity of the problem.

Second-language Instruction

English is the first foreign language taught starting in first grade in all Ministry of Education and independent schools in Qatar. It is also the first teaching language in many international schools. Moreover, some independent schools have opted for teaching the subject areas mathematics and science in English.

Effective Practices

To offer the optimal classroom environment, teachers promote an environment rich in vocabulary and devote a large portion of instructional time for reading and writing. Students receive instruction in word recognition and are given opportunities in the classroom to read texts and stories from a range of text genres and develop concepts and high-quality discussion about what they have read. During instruction, teachers incorporate "think-aloud" techniques in addition to using visual representation of texts, summarization, and questioning to assess students' understanding.

Reading Disabilities

Because students speak colloquial Arabic outside the classroom environment, learning standard Arabic in school can be very challenging for some students. As one of the factors that makes reading tasks for primary students particularly difficult, difficulties associated with this circumstance are differentiated from other reading disabilities.

Diagnostic Testing

There is no diagnostic testing to specifically identify reading disabilities in Ministry of Education primary schools. In independent schools there is no common prescriptive reading disabilities screening test available, and the opportunity for diagnostic screening varies from school to school. The Qatar Individual Needs program is working to identify potential valid and reliable individual reading assessments intended to further inform professionals and parents about any student's suspected reading problems. The program recently tested a screening inventory in four pilot schools.

Instruction for Children with Reading Disabilities

No specialized institution exists that focuses specifically on children with reading disabilities. It is possible, however, that some special needs centers may also address students' reading disabilities.

The Learning Center, a private, nonprofit organization, assists students with learning difficulties or Attention-Deficit Hyperactivity Disorder but who otherwise have an average or above average aptitude. The center works closely with over 30 schools in the country

to provide children with a variety of services. It also runs special weekly workshops for parents and teachers.

At present, neither Ministry of Education schools nor independent schools employ teachers specifically to teach children with reading disabilities. A teacher with special education training is not likely to be trained as a reading disabilities specialist. In independent schools, special education teachers are expected to work collaboratively and cooperatively with the students' primary teachers to best meet the students' needs.

Special Education

A student with a reading disability would be identified as an individual needs student in independent schools. If a school administered any individualized diagnostic reading assessments, the general classroom teacher, in collaboration with the school-based individual needs coordinator, would implement the Primary Service Delivery System to identify strategies for differentiating reading instruction. If this Primary Service Delivery System does not meet a student's need, the level of services or intervention would be increased, with the student receiving more targeted attention, usually provided by an intervention specialist. At this point, an Individual Education Plan would specifically describe the services or intervention to be received.

Teachers and Teacher Education

There are approximately 13,000 teachers (both with full and partial teaching loads) in compulsory and secondary schools in Qatar. Table 1 shows the distribution of teachers in schools by gender for the different education stages in the 2004–05 school year.

	Teachers						
Stage	Male Only	Percent Male Only	Female Only	Percent Female Only	Mixed	Percent Mixed	Total
Kindergarten	0	0	1,074	100	0		1,074
Primary	917	15	4,044	64	1,321	21	6,282
Intermediate	989	34	1,111	38	819	28	2,919
Secondary	877	34	1,222	48	465	18	2,564

 Table 3
 Distribution of Teachers in Single Sex and Mixed Sex Schools

SOURCE: Ministry of Education (2006). Annual statistics report, 2004–2005. Doha: Author

Qatar has a rather young teaching force. In the 2004-05 school year, about 1,930 primary teachers (52%) were between the ages of 20 and 30, another 1,694 (45%) between the ages of 31 and 45, and about 113 (3%) over the age of 45.⁷

Teacher Education and Training

The first Teachers Training Institute was opened in 1967 to help overcome the shortage of qualified teachers. The number of schools continued to increase, and the first commercial school was opened in 1967–68. In 1973, the Language Teaching Institute was opened



and the School of Teachers formed the nucleus of Qatar University, which now includes seven colleges.

Teachers in Qatar must follow one of two certificate programs: a 4-year university course, completing a Bachelor of Arts or Science in Education degree or a 4-year college course, completing a Bachelor of Education at the University of Qatar, with curricular concentration on theoretical and practical aspects of becoming a teacher. Many elementary school teachers are prepared at the college level. Upon graduation, teachers may teach at the level for which they have been trained—primary, intermediate, or secondary school.

Teachers from other Arab countries, which constitute a big part of the teacher work force in Qatar, or other foreign teachers, must provide evidence of their teacher training and licensing from their home countries, and have at least 8 years of teaching experience in order to teach in Qatari schools.

There are no specific requirements or preparation in how to teach the reading curriculum as a part of preservice education for Ministry of Education teachers. Professional development in independent schools includes courses on how to teach reading in the framework of the Qatar Curriculum Standards.

Teacher In-service Education

In its effort to improve the quality of teaching in the independent schools, the Education Institute launched an online teachers' network in 2007. The goal of the new network is to promote professional development by providing a meeting place for all teachers in Qatar to exchange views and information on teaching matters. The network encourages teachers to exchange ideas on curricula, best practices, teaching resources, lesson plans, and pedagogy. It also enables teachers to discuss and learn about the latest trends in education through regularly scheduled online interviews with leading education experts. New, aspiring, and experienced teachers can exchange resources in learning, gain a broad insight into all aspects of teaching, as well as apply or search for jobs online.

School inspectors play a large role in designing professional development workshops for teachers in Ministry of Education schools.

Examinations and Assessments

National or Regional Examinations

Education reform in Qatar includes an innovative evaluation component to ensure that decision makers have access to high-quality, objective information. The Evaluation Institute coordinates the administration of the annual Qatar Comprehensive Educational Assessment in Arabic, English, mathematics, and science in grades 4 through 11 and disseminates results. Reading is a strand of the Arabic assessment, and is reported separately, as well as part of the overall Arabic score and performance level information. The assessment is low stakes for students, but is part of an accountability system for independent schools. There is no national or regional examination in the primary school. The test is only one part of Qatar's comprehensive assessment system. Another role is played by classroom-based tests developed by teachers. The third component consists of international assessments that allow for the comparison of the performance of Qatari students with those in other countries. The Evaluation Institute oversees the implementation of the three major international student assessments—TIMSS, PIRLS, and PISA—the last two focus on reading.

In addition, high-stakes summative tests are conducted in all Ministry of Education schools at the end of each grade. Students are tested in all Ministry of Education schools, during the same school week by a writing and oral reading test assigned by the school. Independent schools are free to choose both the time and the test used for determining students' grades.

Monitoring Individual Student Progress

In grades 1 to 4, students are monitored and progress is documented with assessment cards by the schools. Students take both oral and written examinations for this purpose. In grades 1 and 2, verbal assessments are predominant. In the upper grades, both verbal and written assessments are used, as well as homework grades.

Starting with the Qatar Comprehensive Educational Assessment's 2006 administration, individual student performance in all subject areas (and strands) tested in this assessment are reported in customized reports to students and parents. This includes information on performance on the overall subject area of Arabic as well as the reading strand, indicating whether students have met the Qatar Curriculum Standards.

Suggested Readings

- Daly, E.J., Chafouleas, S., & Skinner, C.H. (2004). Interventions for reading problems: Designing and evaluating effective strategies. New York: Guilford Press.
- Beattie, J., Jordan, L., & Algozzine, R. F. (2006). *Making inclusion work: Effective practices for all teachers.* Thousand Oaks, CA: Corwin Press.
- Gregory, V. H., & Rozzelle-Nikas, J. (2004). *The learning communities guide to improving instruction.* Thousand Oaks, CA: Corwin Press.

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- 6 Ibid.
- 7 Ministry of Education. (2005). *Annual statistics report*, 2004-2005. Doha: Author.

Romania

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Language and Literacy

Romanian is the official language of Romania, and is the language of instruction in most schools. Nevertheless, in multicultural communities with a significant minority population, primary schools teach the National Curriculum in the minority language. The most commonly spoken minority languages include Bulgarian, Czech, German, Hungarian, Serbian, Slovak, and Ukrainian. Some private schools also provide instruction in English.

Languages spoken at home correspond to the various ethnic groups. Although predominantly Romanian, other languages spoken in the home include Hungarian, German, Hebrew, Gypsy and Slavic languages, Turkish, Greek, and Armenian.

Emphasis on Literacy

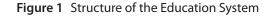
Textbook and children's book publishers have recently begun initiatives to promote literacy and enjoyment of reading. In the past 4 or 5 years, some textbooks and teacher training courses have adopted more modern student-centered approaches, attempting to match instructional materials and approaches with students' interests. Publishers also organize book fairs to encourage children to read.

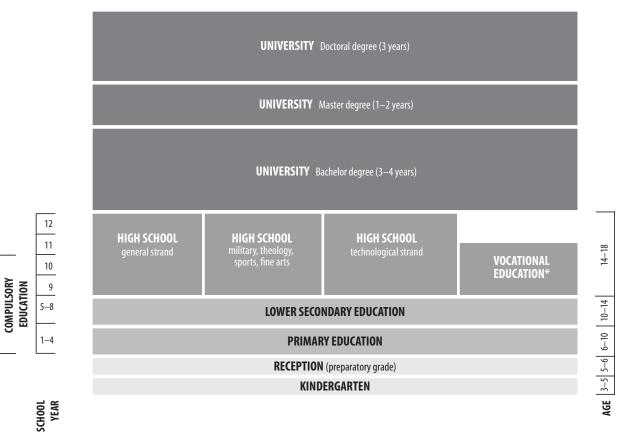
Overview of the Education System

In the past decade, the centralized Romanian education system has been moving toward decentralization. The Education Act of 1995 defines the organization and management of education at all levels—national, regional, and local.¹ According to the Education Act, the Ministry of Education and Research coordinates and directs the national education system. The Ministry is responsible for organizing the public education network, planning research activities, and overseeing pre-service and in-service teacher training. The Ministry also approves the curricula and school textbooks for primary and secondary education and organizes national contests for school textbooks, providing funding for their publication. County Inspectorates serve as regional authorities for the implementation of education policy.

Structure of the Education System

Figure 1 presents the education system in Romania:





* After completion year, graduates of vocational education can continue their studies by enrolling in grade 11 of the technological high school strand

Preprimary education is available to children ages 3 to 6 (lower, middle, upper, and preparatory grade). With the exception of the preparatory grade, kindergarten is not compulsory in Romania. There are three types of private and public nursery school programs: standard (approximately 4 or 5 hours in the morning), extended (8 to 9 hours), and weekly (5 days per week). The state funds half the meals and accommodation expenses for the latter two types of programs.

As a provision to the Education Act implemented in the 2003–04 school year, education is compulsory for 10 years following preschool education. Compulsory schooling terminates when students reach the age of 16, or upon completion of lower-secondary school, whichever occurs first.

Primary education includes grades 1 to 4 (ages 6–11), and is organized as full-time education. Parents or legal guardians may request that their child be enrolled at age 7. Schools can create a "second chance form" for those students, for various reasons, who have not finished the first four grades of compulsory education by the age of 14.

Lower-secondary education includes grades 5 to 10 (ages 11–16). Students take a national test at the end of grade 8.

Upper-secondary education, for 16-to 19-year-olds, is optional. Full-time uppersecondary programs cover grades 11 and 12 (or 13 for some types of schools) and part-time and evening programs cover grades 11 to 13. Upper-secondary education has the following branches: theoretical, technological, and vocational. Enrollment is determined on the basis of the results on the national test combined with the average mark in the lowersecondary grades. At the end of upper-secondary school, students take a baccalaureate examination. The graduates who pass this examination receive a "baccalaureate diploma" that allows them enrollment in higher education.

Vocational education lasts 1, 2, or 3 years for the upper-secondary age group and is organized as full-time education or as evening classes in vocational schools and apprentice schools. Admission is granted on the basis of predominantly practical tests, specific to the selected profession. At the end of the course, students take a "graduation examination" and those with passing scores obtain a "graduation diploma" (occupational proficiency certificate).

Post upper-secondary education, (1–3 years), is organized in post-high schools and foreman schools where students specialize in domains required by various companies and institutions. Admission is granted on a competitive basis. High school graduates, whether or not they are baccalaureate diploma holders, may take part in the entrance examination. Students who pass their studies upon completion will receive a graduation certificate.

Almost all schools in Romania, from preprimary to higher education, are state-run. Private education is considered an alternative or a complement to public education, and the small number of private institutions become part of the national education system once they have been accredited. Private education institutions have organizational and functional autonomy, according to the Education Act and with national agreement and standards.

Role of Preprimary Education

The goal of preprimary education is to socialize the children and provide them with learning activities in the curricular areas that will lay the foundation for the compulsory core curriculum.

Reading Curriculum in the Primary Grades

Reading Policy

The goals of primary education in Romania are to:

- Provide basic literacy to all children;
- Develop the child's personality at his or her individual pace; and
- Support the child's knowledge, skills, and attitude acquisition in order to stimulate an effective and creative approach to the child's social and natural environment and to make further education possible.

By the end of primary school, Romanian students are expected to have acquired the basics of literacy and numeracy (reading, writing, arithmetic). Students should be able



to demonstrate language competency in Romanian, their mother tongue, and foreign languages and to express themselves in various situations.

Summary of National Curriculum

A Curriculum Framework for the primary level was introduced at the beginning of the 1998–99 school year, with revisions in 2001 and 2003. According to the framework, reading is part of Romanian language instruction, which begins in grade 1.

As described in the National Curriculum, the main objective of Romanian literature and language instruction at the primary level is to develop elementary competencies in written and oral communication with regard to age-appropriate fiction and nonfiction texts.² The curriculum also endeavors to instill in children attitudes and motivations that will encourage them to pursue an ongoing study of Romanian language and literature. The new curriculum uses a functional model that focuses on the development of oral and written communication through the integration of listening, speaking, reading, and writing skills. The National Curriculum states the curriculum standards for the Romanian language and literature that students are expected to achieve during the period of compulsory education. The following are the standards in Romanian language and literature for achievement by the end of grade 4 within each area of language development.

Listening:

- Understand the overall meaning and some details from an oral message; and
- Get the meaning of a new word by relating to the context of the oral message.

Speaking:

- Adapt an oral message to the dialogue partner;
- Develop grammatically correct sentences; and
- Orally tell a known narrative by making use of a given plan.

Reading:

- Correctly read a text aloud;
- Grasp main ideas in a narrative;
- Identify the narrative, dialogue, and descriptive sequences in a written text;
- Identify physical and moral features of the characters; and
- Develop a simple plan, summarizing a narrative.

Writing:

- Develop a short narrative starting from a simple plan;
- Write short functional texts (note, greeting, card, invitation);
- Observe hyphenation, spelling, punctuation, and presentation rules when writing a text; and
- Write grammatically correct texts.

Student objectives are defined for each individual grade. By the end of the school year, students should be able to do the following in grades 1–4:

Grade 1:

- Identify letters, groups of letters, syllables, words, and sentences in graphic or handwritten text;
- Observe the connection between text and accompanying images;
- Understand the overall meaning of a text;
- Read a familiar text in his or her own rhythm; and
- Manifest curiosity for reading.

Grade 2:

- Identify the main elements of text presentation on the page;
- Identify the essential information from a text;
- Read a short, familiar text fluently, correctly, and expressively;
- Read an unfamiliar short text in his or her own rhythm; and
- Manifest interest for reading.

Grade 3:

- Identify the main elements of the fiction or nonfiction text presentation on the page;
- Understand the main ideas from a text they read;
- Correctly read an unfamiliar text;
- Identify narrative sequences and dialogues in a text;
- Identify various grammar issues in a text; and
- Manifest interest in reading a variety of fiction and nonfiction texts.

Grade 4:

- Observe the role of images that accompany a text;
- Identify main ideas and detailed information from fiction or nonfiction texts;
- Read a short unfamiliar text correctly and in full awareness;
- Identify narrative and descriptive sequences as well as dialogues in a text;
- Identify various grammar problems in a text; and
- Manifest interest and initiative for reading a variety of fiction and nonfiction texts.

Mandated Materials for Reading Instruction

All textbooks, including textbooks used in primary school, are subject to approval by the Ministry of Education and Research. The use of one of the approved textbooks is compulsory. In primary school, the textbooks are given free of charge to students at the beginning of the school year. A variety of readers and children's books are available.



Reading Instruction in the Primary Grades

Instructional Time

The new curriculum framework allows schools to design timetable schemes more in line with their instructional goals, with 80% of the instructional time dedicated to the core curriculum and 20% percent to a school-based curricula. Schools have a significant role in developing school-based curriculum, such as offering optional subjects, courses, or themes, covering 1–3 hours weekly. Details of instructional time designated for particular subject areas are shown in Table 1.

Curricular Area/Subject	Grade 1	Grade 2	Grade 3	Grade 4
Language and Communication	7–9	7–9	7–9	7–9
Romanian Language and Literature	7–8	7–8	5–7	5–7
Modern Language	-	-	2–3	2–3
Mathematics and Natural Sciences	3–4	3–4	4–6	4–6
Mathematics	3–4	3–4	3–4	3–4
Natural Sciences	_	-	1–2	1–2
Environmental Studies	1–2	1–2	-	_
People and Society	1	1	2–3	2–3
Civic Education	_	_	1–2	1–2
History	_	_	_	1–2
Geography	-	_	_	1–2
Religion	1	1	1	1
Arts	2-3	2–3	2–3	2–3
Fine Arts	1–2	1–2	1–2	1–2
Music	1–2	1–2	1–2	1–2
Physical Education	2–3	2–3	2–3	2–3
Technology	1–2	1–2	1–2	1–2
Practical skills	1–2	1–2	1–2	1–2
Counseling and Guidance	0–1	0–1	0–1	0-1
School-based curriculum	1–3	1–3	1–3	1–3
Core Curriculum	16	16	18	18
Minimum number of hours/week	18	18	20	21
Maximum number of hours/week	20	20	22	23

Table 1 Number of Weekly Instructional Hours for the Curriculum in Grades 1 to 4

SOURCE: Order of the Minister of Education No.4686/05.08.2003 and Order of the Minister of Education No.5198/01.11.2004.

Instructional Materials

Compulsory education textbooks are provided free of charge to students. Typically, there are three textbooks available for each grade and school subject, from which a school or individual teacher chooses one that becomes the basic instructional resource. In addition to the free textbooks, teachers and students can choose from a variety of commercially available materials, such as storybooks and picture books, developed for a particular age group. For example, the classic *Cinderella* tale is available in 4-page, 8-page, and 16-page versions. More recently, "Big Books" have been introduced in the retail market. However, such books are quite expensive and not easily available in the rural areas.

Use of Technology

Although electronic instructional software for reading is commercially available, such software is not widely used in Romania for a number of reasons. The main reason is that primary teachers are generally not very familiar with computer use, particularly with information communication technology for education purposes. Further, the average primary school does not have the resources for the technology to use the software. Finally, the traditional teaching approach at primary level does not encourage widespread use of modern technologies.

Role of Reading Specialists

Almost exclusively, reading specialists for students with reading disabilities are employed at specialized centers. Therefore, access to specialists is not readily available to everyone.

Second-language Instruction

Minority groups learn their own language and literature, along with Romanian language and literature. Depending on the type of school and community, there are two ways to provide second language instruction: minority students may learn Romanian as a second language (while their mother tongue is the language of instruction) or they may study their mother tongue as a second language (while Romanian is the language of instruction). At the end of grade 8, students from minority groups who received instruction in their mother-tongue language must take a supplementary examination, which they are required to pass.

Effective Practices

There is little current research on effective reading practices. However, the following practices are prevalent among new approaches introduced to teachers during recent in-service training, and published in educational journals, and other print materials for teachers:

• Project work centering on a short narrative to motivate children to read and discuss their reading;



- Role play based on a literary text; and
- The use of drawing and other non-verbal codes to support reading with students with lower reading achievement.

Reading Disabilities

Diagnostic Testing

At the request of parents or legal guardians, specialized institutions will perform diagnostic tests. General screening tests have not been undertaken for age cohorts enrolled in compulsory education.

Instruction for Children with Reading Disabilities

Beginning in 2001, inclusive education brought many students with mild disabilities into the mainstream system. Schools face certain challenges in meeting the needs of these students, such as the need for additional teaching support and material resources.

Special Education

Students with serious learning disabilities are trained in special schools where they receive individualized assistance and follow a special curriculum.

Teachers and Teacher Education

Teacher Education and Training

Primary school teachers are trained in upper-secondary teacher-training schools or colleges. College training (special short-term education) lasts for 2 years for students from an upper-secondary teacher-training school or 3 years for those from other types of upper-secondary schools. The new regulation stipulates that, beginning with the 2005–06 school year, the initial training of teachers for primary education will be provided by university colleges. Graduates are allowed to teach for 2–3 years based on their diploma. At the end of this period, they have to pass an examination to obtain a certification to teach.

Generally, a single teacher for each class manages the learning process in most content areas. Specialized teachers may teach foreign languages, religion, physical education, and music. Such teachers have a special diploma and have completed a short- or long-term form of higher education, depending on the subject they teach.

Teacher In-service Education

The Ministry of Education, which coordinates and finances in-service education, grants the teachers the right to in-service training. In-service training of the teaching staff is provided by higher education institutions through courses in a particular area or in methodological and pedagogical training.

In each county, the Inspectorate administers a teaching staff center, which provides documents and additional training activities for teachers.

Examinations and Assessment

National or Regional Examinations

In 1995, 1996, 1998, and 2000, Romania assessed the achievement of nationally representative samples of grade 4 students. The purpose of the assessment was to evaluate basic student skills at the end of primary education in order to provide useful and accurate information for educational stakeholders, such as decision makers, teachers, students, parents, inspectors, researchers, curriculum developers, textbook authors, and the public at large.

Since 2000, the National Assessment and Examination Service, an autonomous body responsible for evaluating and examining school results, has carried out a major nationwide assessment program called the National Program for the Assessment of Educational Progress. This program has three major goals:

- To identify, over time, the major changes in student academic achievement and progress;
- To gather reliable data pertaining to the impact of new curricula, textbooks, and other important changes in particular, and of the education system in general; and
- To provide reliable measures of the degrees and levels of students' functional literacy, as well as their mathematical and science literacy at the end of primary education.

In 2000, evaluation instruments were generated, for the first time, for the new curriculum and the new assessment system. Students were tested in three subjects: Romanian language, mathematics, and science. (This was the first time that student achievement, knowledge, and skills had been assessed in science.) The findings of these national assessments are linked to the assessment techniques primary school teachers are encouraged to use in the classroom.³

At the end of grade 8, students should pass an examination, called the National Test, to measure students' capacities in the following subjects: Romanian language and literature, mathematics, and Romanian history and geography. Students belonging to national minorities studying in mother-tongue languages are administered a supplementary examination in the language and literature of their mother tongue.

The national baccalaureate examination is a criterion-based examination that certifies the knowledge and capacities of the high school graduates at the end of high school studies: Romanian language, a foreign language, and mother tongue (for those studying in their mother-tongue language other than Romanian) are compulsory subjects for this examination, no matter which tracks they followed. On the basis of baccalaureate diploma, students can sit in the entrance examination for higher education.

Standardized Tests

Very few standardized reading, mathematics, and sciences tests are designed and used. Use of commercial tests for reading achievement in Romania has not been reported in published documents. The National Assessment and Examination Service created the



standardized tests that are available for national assessments. Most teachers still use their own experience and knowledge to monitor students' abilities.

Monitoring Individual Student Progress

In primary education, marks have been replaced by grades—"very well", "well", "sufficient", and "insufficient"—corresponding to high, average, and minimal levels of performance. Instructions for classroom assessment, both continuous and final, are described in teacher guides for grades 1 to 4. Teachers are responsible for formative assessment in the classrooms. Textbook tests are the most widely used assessments for determining students' progress in reading. At the end of each semester, a summative assessment is undertaken. The teacher, taking into account the students general progress, including reading literacy, undertakes the passage of each student to the next class. There is no examination at the end of primary school.

Suggested Readings

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Russian Federation

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Language and Literacy

Russian is the official language of the Russian Federation. The Russian Federation comprises 88 administrative regions, including autonomous districts each with its own regional culture and community identity. Most students are taught in Russian, although some students receive instruction in one of the country's 79 languages of national ethnic groups.

Emphasis on Literacy

There are programs in place that help parents or preprimary education specialists prepare children for school and, more specifically, to learn to read. As a result of education reform initiatives in 2000, the curriculum underwent significant changes, reflecting efforts to improve reading in the primary grades. Furthermore, new pedagogical systems were introduced, emphasizing learning skills development.

Overview of the Education System

Under the current Law on Education passed in 1992, the Russian education system has become more decentralized in its decision making and funding practices. According to the law, the state guarantees citizens of the Russian Federation free general education and, on a competitive basis, free vocational education at state and municipal educational institutions.

The Law on Education gives much autonomy and responsibility to schools. Under the law, two main documents regulate school instruction: the education standards and the program of study. The education standards define the minimum content of education to be taught in class and the requirements for student achievement.

Financing for education institutions is determined by their legal status: state (municipal and departmental) and non-state (private, religious). In 2005, the annual expenditure on education was 789.9 billion roubles (more than 30 billion US dollars), amounting to 3.7% of the Gross National Product.¹ Nearly all primary, basic, and secondary schools in Russia are state-municipal schools (60,771 of 61,497 schools in the 2005–06 school year), where the municipal budget is the main source of financing, and decisions are made primarily at the regional level.²

Federal education authorities are responsible for making federal policy in the field of education and overseeing its implementation and for developing the legislative basis for the functioning of the education system. Furthermore, the federal authorities establish the federal component of the state educational standards, elaborating model curricula, as well as model programs of study for different school subjects on the basis of these standards. The authorities also organize the publication of textbooks and supplementary literature for schools.

An institution's education program is determined independently and is composed of the curriculum, the annual calendar study plan, and the timetable of classes developed and approved by the institution. Once approved, the curriculum and study schedule of an institution may not be changed by state power, management bodies, or local government bodies, except for cases stipulated by the Russian legislature.

In 2000, the Russian government began to develop a new education reform program, declaring that the education system should shift from a regime of survival to one of development. Major objectives for the reform included modernizing the structure and content of general education, raising the quality of education, providing equal access to education, developing effective mechanisms for transmitting social requests to the system, and broadening public participation in managing education.

Structure of the Education System

The state system of education includes preschool education, general secondary education, secondary vocational training, higher education, post-graduate education and improvement of professional skills, and in-service training and retraining. The diagram in Figure 1 shows the structure of the Russian education system.

Preschool, preprimary education, is not compulsory. In 2006, preprimary education included 46,500 preprimary institutions serving 4.53 million children.³ New types of preschool institutions have been established, which focus on special care, child development, and compensatory (remedial) care.

General secondary education, the core of the Russian education system, includes three stages: **primary** education, grades 1 to 4; **basic** or **lower secondary**, grades 5 to 9; and **secondary** (**completed**) or **upper secondary**, grades 10 and 11. Primary education may be provided in primary schools, in basic schools that include the primary stage, or in secondary education institutions that include all three stages. Basic general education is compulsory according to the Constitution.

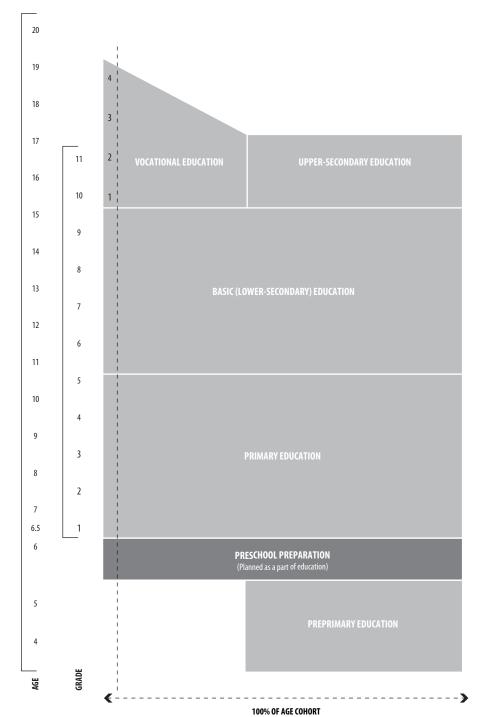


Figure 1 Structure of the Education System in the Russian Federation

Tables 1 and 2 provide the number of schools and enrollment figures, respectively, for the general education system in the 2005–06 school year. Enrollment in the 60,558 general education institutions, which can comprise one, two, or all three stages, was 15.07 million students.⁴ These general education institutions included general schools, schools specializing in teaching specific subjects, gymnasiums, and lyceums. Urban schools make up one third of all general schools, with nearly 70% of all students



attending such schools. Generally, rural schools are small schools with classes having fewer than five students.⁵

Types of Schools	Urban	Rural	Total	
Primary (offering only 4 years of education)	1,469	8,952	10,421	
Lower secondary (offering 9 years of education)	1,056	10,157	11,213	
Secondary (offering 11 years of education)	16,156	20,734	36,890	
Special schools for children with health problems	1,480	456	1,936	
Special schools for children with deviant behavior	49	20	69	
Total	20,232	40,326	60,558	
Number of students in grades 1-4 (primary, lower-secondary, and secondary schools)	552,433	1,571,549	5,123,982	

 Table 1
 General Secondary Education Schools in Russia: 2005–06 School Year

Table 2 Enrollment in General Secondary Education Schools: 2005–06 School Year

Number of Students	Urban	Rural	Total
Primary	176,453	121,461	297,914
Lower secondary (primary included)	168,595	475,365	643,960
Secondary (primary and lower secondary included)	9,774,764	3,925,302	13,700,066
Total	10,456,761	4,613,248	15,070,009
Total Number of Students in the Primary Stage (Grades 1–4)	3,552,433	1,571,549	5,123,982

The system of schools with native language tuition (national schools) provides citizens the right to obtain an education in their native language. In the 2005–06 school year, 3,091 general education institutions conducted lessons in 28 languages for 201,732 students. Also, at least one native language of the 79 different ethnic groups is studied as a separate discipline in 2,906 schools.⁶

A parallel non-state education system is being created with the support of the Ministry of Education and Science. In 2005, non-state general education institutions comprised 1.2% of schools and catered to only 0.5% of students.⁷

The general secondary education curriculum includes three components: federal, ethnic-regional, and institutional. The federal component ensures unity of general education across the country and addresses the portion of educational content that provides for the introduction of global and national values to school programs of study. These are the Russian language (as a state language), mathematics, informatics, physics, astronomy, and chemistry. The ethnic-regional component addresses the specific

interests and needs of peoples from different parts of the country. It contains educational content with ethnic and regional distinguishing features, such as the native language and literature, history, and regional geography. Some subject matter domains or subjects are presented both in federal and ethnic-regional components, such as history, social studies, arts, biology, physical education, and technology. The institutional, or schoolbased, component emphasizes specific features of the institution and promotes school activity development.

The curriculum for general education includes the following subjects: philology (Russian language as either the state or mother-tongue language, literature, and foreign languages), mathematics, social studies (social studies, history, and geography), science (biology, physics, astronomy, and chemistry), arts (fine arts and music), technology, and physical education. In the primary schools, the curriculum includes the same subject areas with minor changes in the area of philology, where literature and foreign languages are replaced with literary reading, and in the areas of science and social studies, where the two subjects are combined into the course "Surrounding World." In accordance with the State Education Standard of primary education, foreign language instruction begins in grade 2.8

According to the reform goals declared by the government in 2000, the structure and content of general education has been modernized. At present, the curriculum includes foreign languages and information communications technology in primary schools. Adopting a general competency approach, there is greater focus on more active forms of learning and an emphasis on social studies in the curriculum. The priorities for primary education reform include maintaining and strengthening the health of children (both physical and mental), supporting each child's individuality, developing interest in learning and the skills to learn, using a more integrative approach in teaching, introducing new qualitative classroom assessments based on measuring the dynamics of child achievement, and increasing attention to gifted and advanced students.

The Ministry of Education developed nine different primary education models, each with its own set of textbooks and supplementary materials. Although all these models are based on the education standards, each model with its own psychologicalpedagogical conceptual framework. Seven of the models are based on the traditional system of primary education and the other two on the psychology of child development and learning theory.

Role of Preprimary Education

During the 1980s and 1990s, the number of children enrolled in preschool institutions decreased significantly. As a result, there also was a decline in the level of children's readiness for primary education. This provoked a change in the structure of the general education system. According to a Russian government regulation in December 2004, the preschool grade will become part of the general education structure by 2008.





Reading Curriculum in the Primary Grades

Reading Policy

The contemporary approach to reading instruction may be characterized as *literary reading* and is included as a course in the study of philology, which includes learning to read and to write Russian. The literary reading course became possible with an increase in the use of different kinds of texts (e.g., official or scientific) in the main subject areas of the surrounding world, mathematics, Russian, and history. Literary reading is part of the continuous literary education from grade 1 through grade 11.

The method now widely used to teach reading was developed by a famous psychologist Daniil Elkonin in the 1960s. The method is based on the premise that before studying the letters of Russian alphabet, preparatory work is necessary whereby children are taught to orientate themselves in the phonetic system of their native language. Students learn to define the sequence of sounds in a word and characterize each sound, such as vowel/ consonant or hard/soft consonant combinations. By acquiring the knowledge of the phonetic system at an early stage, it is believed that children become better familiarized with the skills of reading.

Summary of National Curriculum

A broad goal of literary reading in primary school is to introduce children to literature as the art of writing, and through this literature, to expose children to the world of human relations and moral values. Literary reading is intended to develop students' skills of conscious reading and understanding texts, as well as skills of oral and written speech. Reading also is intended to foster students' creative abilities and the development of a sense of self.

At present, primary schools are operated under the 1998 Regulation of the Ministry of Education or the State Education Standard of primary education, which was issued in 2004. The 1998 regulation approved the following content for the course of literary reading to be taught in all primary schools as a compulsory part of education:⁹

- The techniques of reading and understanding text, including reading of literary and scientific texts silently and aloud, understanding the content and main idea of the text, answering questions regarding the content of the text, and making a simple outline from which to retell the text;
- A reader's view and orientation to the world of books, including folklore, fairy tales, myths, and legends of the people of Russia and the world, Russian classics (from the list of children's reading) and modern Russian literature, foreign literature, children's newspapers and magazines, bibliographic information (e.g., author, title, annotation, and contents), and dictionaries and reference books;
- Special literature knowledge, such as the different genres of works (e.g., story or fairy tale, fable, poem or rhyme, novel, and play), the specific forms of folklore (e.g., riddles, patters, songs, and proverbs), the topic of the text (e.g., main idea, subject, and the character and behavior of the hero), and means of expression in the text (e.g., epithets, comparisons, sound and rhyme in poetry); and

• Language development, including activities in listening, speaking, reading, and writing; knowledge of text purposes (e.g., narration, description, or reasoning); word heritage of the Russian language; emotional and stylistic coloring of speech (e.g., expressive reading and storytelling, and speech etiquette); and demonstrating understanding by retelling, creating a connected story about the main characters, and summarizing students' own impressions of the text.

According to the State Education Standard of primary education, as a result of studying literary reading, students should know the titles and authors of the studied literary texts, and understand their basic content. To meet requirements for student achievement, students should be able to do the following:¹⁰

- Perform the conscious reading of a literary text (silently, at their own pace);
- Determine the topic and main idea of the text;
- Retell the text (of approximately 1.5 pages in length);
- Divide the text into its main parts to make a simple outline;
- Create a small story with student's own impressions of the text, providing an evaluation of the events or character and behavior of the heroes;
- Memorize and recite selected poems;
- Create a small oral story on a given topic;
- Give examples of forms of folklore (proverbs, riddles, and fairy tales);
- Tell the difference between different genres of works (fairy tale, story, and fable), and distinguish folk from literary fairy tales;
- Give examples of literary texts on different subjects or themes from the materials studied; and
- Recognize distinctions between the elements of a book (cover, table of contents, title page, illustration, and annotation).

Students should use the acquired knowledge and skills from literary reading in practical activities and everyday life, such as selecting and reading a variety of sources to find information about a topic, and reading for enjoyment.

Mandated Materials for Reading Instruction

During the past decade, nine different sets of programs and instructional materials were developed and approved by the Ministry of Education for use in the primary schools. The sets of materials are intended to develop the core learning skills necessary for studying all school subjects. Each set of instructional materials consists of a reader with a collection of texts, a textbook that supplements the reader, student work booklets for answering oral and written questions, a collection of guides for analyzing the texts, books for family reading, and a teacher's guide. Materials for family reading reflect the integrated goals of reading in school and outside of school. All sets of instructional materials for literary reading include Russian classical literature, foreign children's classics, children's literature



of different ethnic groups of Russia, and modern children's literature. All sets have a common core of classical literature as well as authors.

Reading Instruction in the Primary Grades

In primary schools, there is no specialized reading teacher. The classroom teacher usually teaches all subjects except music and an experienced teacher, such as the deputy principal, is responsible for providing instructional help to other teachers in all subjects including literary reading. By order of the Ministry, the average class size is 25 students. The average class size for the primary school is 24 but some schools, particularly the rural schools, have very small classes with less than 5 students.

Teachers typically work with the whole class during reading instruction. Students or the teacher read aloud to the class and the teacher organizes class discussion about what was read. In grade 1, when not all students can read, instruction may focus on individual or group activities. Sometimes students who can read when they begin grade 1 are grouped for advanced learning.

Instructional Time

The school year begins the first of September, and has 170 or 240 instructional days, depending on whether the school has a 5- or 6-day week. Typically, most schools operate on a 6-day schedule. During the school year, students have three holidays, including 1 week in the beginning of November, 2 weeks at the end of December through the beginning of January, and 1 week at the end of March.

In 1998, the Ministry of Education established by special order the maximum instructional load for different grades. For grade 1, the maximum instructional time is 20 hours for a 5-day week. For grades 2 to 4, the corresponding hours are equal to 22 for a 5-day week and 25 for a 6-day week. Each instructional period lasts 40 or 45 minutes, except in the beginning of grade 1 when the lessons are somewhat shorter (35 minutes).

Half the total instructional time in grade 1 is devoted to language instruction. In grades 2 to 4, 42% of total instructional time is devoted to language instruction, and 30% is devoted to reading instruction.

Materials for Reading Instruction

Teachers choose instructional materials according to professional preference, children's characteristics and interests, and parental opinion. To help them to select the program of study and accompanying instructional materials, the Ministry prepared descriptions of the different programs of study and their content requirements. Descriptions of the instructional materials discuss how the materials differ in teaching approach, level of theoretical knowledge, the works of literature and lesson structure, and the teacher's role in the classroom. A tendency towards increasing variability in educational programs is illustrated by the growing number of available textbooks for school subjects written by different authors.

Almost every classroom in Russian primary schools has a class library with enough books and magazines to accommodate independent reading according to children's interests during lessons and for children to take home.

Second-language Instruction

Students whose mother tongue is not Russian receive instruction in Russian as a state language.

Reading Disabilities

There is no reading specialist to assist students who have difficulty with reading. Regular classroom teachers use different materials with students at different reading levels, especially with children with reading disabilities. Some primary education models include supplementary materials for use with students with reading disabilities within the regular classroom. The school speech therapist may provide additional special lessons two to three times per week for children with reading disabilities. The speech therapist organizes lessons according to two different groups: one for children with disgraphia and dyslexia, and the second for children with general speech deficiencies. To identify students needing special instruction, the speech therapist uses different diagnostic techniques, of which most are qualitative and are not supported by statistical evidence.

Special classes for students with low-level readiness for education existed through the 1990s, but the creation of such classes has been abandoned, and students now attend heterogeneous classes. Nevertheless, other special classes and schools exist for children with mental deficiencies, mental retardation, and severe dyslexia. Referral of students to these classes and schools is carried out only after the deliberation and decision of a medical-psychological-pedagogical commission, and with parents' consent.

Teachers and Teacher Education

Teacher Education and Training

There are several different ways to become trained as a primary school teacher. Teachers may receive training from a higher education institution, either through a 4-year bachelor's program with a specialization in pedagogy, or a 5-year program with specialization in pedagogy, methodology, and instructions of primary education. Pedagogical colleges offer a 2-year program following graduation from secondary school, or a 4-year program following graduation from basic school. In recent years, earning a diploma from a higher education institution has become more popular among primary teacher candidates. Even those who received their primary teacher qualification from a pedagogical college typically will continue their training in a higher education institution.

The training program for the 5-year higher education program covers about 9,000 hours. This time includes theoretical, practical, and research work, with more than 24 weeks of teaching in school. Theoretical and practical work make up 60% of all instruction time.¹¹ To receive a higher education diploma, a student must complete the program of study specified in the curriculum, prepare and defend his or her graduate qualification work, and pass the state examination.





The teacher training curriculum for each higher education institution is developed on the basis of the State Education Standards for higher professional education and includes the study plan, programs of study for all subjects and courses, and programs for teaching practice in school. The curriculum includes federal, regional or institutional, and student components. The federal component, covering 70% of training time, ensures that all students across the country studying the same specialization at higher education institutions would have 70% of the content of education in common. The distribution of time between the institutional and student components is decided by the individual institutions.

The teacher-training curriculum includes four cycles of subjects and elective courses. There is no specialization in teaching reading. Training in the teaching of reading is included in methodology and instruction in teaching Russian language and literature course. Each cycle includes federal, regional or institutional, and student components. The first cycle, accounting for about 17% of class time and consisting of general humanitarian and social-economic subjects, is relatively the same for all higher education institutions, regardless of the specialization. The following subjects, only four of which are compulsory for all higher education institutions, are included in the first cycle: foreign language, physical education, history of the fatherland, philosophy, culture, politics, jurisprudence, Russian language and the culture of speech, sociology, philosophy, and economics. The second cycle consists of general mathematics and general science subjects (5% of class time). The third cycle, general professional subjects (18% of class time) for primary education, includes psychology (492 hours), pedagogy (500 hours), age anatomy, physiology and hygiene, and the basics of medicine. Finally, the professional cycle accounts for the largest block of time (55% of class time) and includes Russian language, children's literature, introduction to the history of literature, methodology and instruction in teaching Russian language and literature (570 hours), mathematics (250 hours), science, technology, fine arts, and music. Elective courses represent the smallest proportion in the curriculum (5% of class time).

Teacher In-service Education

Primary teachers take part in in-service training every 5 years. In-service teacher training is no longer compulsory and is in the process of changing its orientation to align with the new goals of education. The emphasis has switched from subject content to student development, so that teachers will receive more training in active learning strategies and child development.

According to the state education policy, teachers' work will be evaluated not by knowledge level but by the main developmental indicators of their students. Accordingly, some in-service training focuses on new ways of assessing student achievement and development.

Examinations and Assessments

National or Regional Examinations

The general education system has a flexible system of school examinations. National examinations are set for grades 9 and 11. To be awarded the basic school certificate, students must pass four examinations: compulsory national examinations in mathematics and Russian, and two examinations in subjects selected by the students themselves. To be awarded the certificate of secondary school completion, students must pass five examinations: compulsory national examinations in mathematics, and literature and Russian, and three examinations in subjects selected by the students themselves. In addition to the national examinations, a school may set an examination on every subject at any grade of the basic or secondary school. Examinations may be administered in oral or written forms, including short-answer questions, essay questions, and sometimes multiple-choice questions.

Standardized Tests

Standardized national examinations, known as unified state examinations, have recently been introduced, combining the general secondary education graduate examinations with higher education entrance examinations. Unified state examinations, in which Russian and literature are assessed separately, will be compulsory for all secondary school graduates from 2009.

Between 2001 and 2005, monitoring students' achievement took place in about 2,000 schools from 76 regions as part of an experiment on the modernization of the structure and content of general education. The tests in reading for the primary school (grades 2–4) were developed using the PIRLS approaches in assessing the processes of reading comprehension.

Monitoring Individual Student Progress

Formative and summative assessments are conducted to assure compliance of student achievement with the curriculum requirements and to diagnose students' progress. The timing and form of assessment are chosen by the school. Sometimes the assessment results are used for teacher or school accreditation. Generally, the summative assessment takes place at the end of each school year in each school subject. Assessment formats include oral examinations, short-answer, extended-response or essay questions, and multiple-choice tests. Schools usually use individual teacher-made tests, locally developed tests, or tests developed centrally and published as special supplementary materials.

Innovations in assessment arising from general education reform include the introduction of a qualitative system of assessment without grades or marks at the primary school and a shift in the orientation of assessment from absolute achievement to the dynamics of student achievement throughout primary school.



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Scotland

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Language and Literacy

In Scotland, the official language and language of instruction in most schools is English. However, in the 2004–05 school year, there were 61 (3%) publicly funded primary schools offering a Gaelic-medium education.¹ The main minority ethnic groups in Scotland are Pakistani, Chinese, and Indian. The main community languages are Urdu, Punjabi, Chinese, Polish, and Italian.²

According to the 2001 General Census of Scotland, there are two indigenous heritage languages in Scotland: Scottish Gaelic, with almost 59,000 people who speak this language (over 1% of the population), and Scots, which incorporates a range of local dialects and is sometimes considered an autonomous language.³ More people in Scotland speak Scots than Scottish Gaelic, although the number has not been determined.⁴

Teachers are encouraged to build on the diversity of culture and language in their schools by fostering a respect for and interest in each student's first language and its literature. Where resources allow, students develop proficiency in other community languages.

Scotland has several programs and initiatives that promote literacy in the home, as well as in schools. The goal of the home reading initiative, *Read Together*, is to encourage more parents to read with their children. Since its launch in 2002, nearly £2 million has been invested in more than 1,700 home reading projects, including lending talking books and setting up a "dad's drop-in club" to get fathers more involved in their children's reading.⁵ At the start of 2006, a new initiative, *Scotland Reads*, was piloted to promote literacy skills. In this program, 16- to 25-year-old volunteers work with children and share the enjoyment of reading.⁶ Another initiative has made funding (£65 million) available, until the year 2008, to help adults improve their levels of literacy and numeracy skills. In the first 5 years of the initiative, 137,000 adults were helped.⁷

Overview of the Education System

The First Minister for Scotland is responsible to the Scottish Parliament for the overall supervision and development of the education service in Scotland and for legislation affecting Scottish education, through the Scottish Executive Education Department and the Scottish Executive Enterprise, Transport, and Lifelong Learning Department. These two departments determine broad national goals and standards, formulate national

policy, commission policy-related research, issue guidelines in the area of curriculum and assessment, and oversee teacher training and supply.⁸

Education is compulsory for students ages 5–16. The curriculum, for students, ages 5 to 14, is defined in the national guidelines. The education system includes preschool, primary, and secondary education, as well as further and higher education. Education in Scotland is free for all students and provided by local authorities. However, in September 2005, 3% of primary students and 5% of secondary students attended private schools, which are not publicly funded.^{9, 10}

For students, the academic year lasts a minimum of 190 days (38 weeks). Teachers' contracts allow for 5 additional days, which are devoted to school in-service education. The school year runs from the middle of August to the end of June. The average school week is 27.5 hours; for teachers it is 35 hours. Virtually all students, ages 5 to 16, attend school.¹¹

Structure of the Education System

Primary schools, for ages 5 to 12, are organized into Primary 1 to Primary 7 classes. Teachers follow the national curriculum guidelines for this age group, and specialists may provide support in art, drama, music, and physical education. In September 2005, there were 2,194 publicly funded primary schools in Scotland with 390,260 students, representing a reduction of 30,261 students since 2001.¹² The student enrollment in these schools ranged from 2 to 804 students.¹³ In 2005, about one third of the publicly funded primary schools had a student enrollment of fewer than 100.¹⁴ Of primary schools, 15% were denominational (mainly Catholic).¹⁵ There also were 60 private schools with primary departments.¹⁶ In rural areas, there are a few combined primary and secondary schools. In other areas, there are a few infant schools, which admit children beginning at age 3 and then transfer them to a primary school.

Almost all **secondary** education, with the exception of those schools in very remote areas, begins at age 12 and includes 4 years of compulsory education, followed by an additional 2 years for those students who wish to continue their education. Subject specialists teach mostly on a whole-class basis. In the early secondary years (S1/S2, ages 11–14), classes are usually made up of students with mixed-ability levels, particularly in practical and social subjects. In S3/S4 (ages 13–16), most students are in classes grouped by broad levels of ability, and in the senior school (S5/S6, ages 15–18), classes tend to be self-selecting according to the level of study, although, in some subjects, students also may be placed in classes according to their ability level. In the first 2 years, students follow the curriculum defined in the national guidelines for this age group, and from Secondary 3 onwards, students follow the syllabus for national examinations and the National Certificate. In September 2005, there were 385 publicly funded secondary schools in Scotland with 315,840 students.¹⁷

Opportunities for **higher** education are provided primarily through colleges and universities. There are 39 incorporated colleges and four other colleges in Scotland. These colleges provide a wide range of vocational and non-vocational education and training opportunities and offer several options of both further and higher education qualifications. Colleges provide flexible learning opportunities to people of all ages, from school-age students to the more mature learner. In the 2004–05 school year, the average age of a college student was 32.¹⁸

There are 21 higher education institutions in Scotland comprising 15 universities and 6 other institutions. The higher education institutions provide courses for a sub-degree, first degree, the education and training of teachers, postgraduate studies at masters and doctorate levels, and at a higher level in preparation for a qualification from a professional body.

Role of Preprimary Education

The Scottish Executive is committed to the continuation of the preschool program. From April 2002, under the Standards in Scotland Schools etc. Act (2000), local authorities must secure a free part-time preschool education place for all children, ages 3 and 4, if requested by parents.

Preschool, up to the age of 5, is available in a variety of forms and in a range of settings such as nursery classes within primary schools, nursery schools, and children's centers.¹⁹ In addition, through the development of Childcare Partnerships, all local authorities now commission preschool places from private and voluntary centers, wherever this helps meet parents' and children's needs.

According to participation rates for the 2005–06 school year, 99% of all eligible children had registered for preschool places.²⁰ A curriculum framework for children, ages 3 to 5, was published in 1999 by HM Inspectors of Schools (Scotland) who have a responsibility for inspecting preschool establishments. During every half-day session, it is expected that all children will take part in a range of balanced play, learning, and developmental activities. *The Curriculum Framework* deals with key aspects of children's development and learning and offers guidance on effective learning, staff interaction with children, partnership with parents, appropriate provision for children with additional support needs, equal opportunities, and effective transition to the primary school.²¹

Reading Curriculum for Students Ages 5–14

The 5–14 Curriculum

The goal of the 5–14 curriculum guidelines, followed by students in primary school and the first 2 years of secondary school is to promote the following core skills:

- · Personal and interpersonal skills, including working with others,
- Language and communication skills,
- Numeracy skills,
- Information communications technology (ICT) skills,
- Problem-solving skills, and
- Learning and thinking skills.



These skills are promoted in the main curriculum areas of language (including a modern language), mathematics, environmental studies (society, science, and technology), expressive arts, physical education, and religious and moral education. Some aspects, such as ICT and citizenship, are developed across all areas of the curriculum. While time allocations are not determined by regulation, the 5–14 national guidelines recommend that, in primary school, 20% of the available time each week should be devoted to language (including first language and foreign languages beginning at age 10).

Reading Policy

Government policy on reading literacy is embodied in the national curriculum guidelines for the English language for ages 5 to 14. These were published from June 1991 onwards, and supplements were added in 1999. These guidelines suggest that schools structure English language work according to four outcomes—listening, talking, reading, and writing, and that the weight attached to these outcomes be reviewed at each stage in the education system. For example, most of the time allocated to language in the early stages of primary schools is spent on talking and listening. For the majority of students, the four outcomes will be given approximately equal emphasis by Primary 6 or 7 (ages 11–12).

For each of the four outcomes, there are a number of strands or aspects of learning that students will experience. For example, the strands for reading incorporate the following:

- Reading for information,
- Reading for enjoyment,
- Reading to reflect on the writer's ideas and craft,
- Awareness of genre,
- Reading aloud, and
- Knowledge about language.

Summary of the National Curriculum Guidelines for Reading

For each strand, there are minimum competencies or attainment targets, depending on the primary and secondary education stage. The lowest attainment level (Level A) should be attainable in the course of Primary 1 to 3 (ages 4–8) by almost all students; the highest attainment level (Level F) should be partly attainable by some students and completed by a few students in the course of Primary 7 to Secondary 2 education (ages 10–14). Table 1 shows each of the strands of reading and the attainment targets for the lowest and highest levels. Descriptions of the types of activities teachers and students can undertake to achieve each level of language skills for each strand are found in Programmes of Study in the national curriculum guidelines. These activities are designed to help teachers plan and organize their teaching. For the early stages, the guidelines have been supplemented by the document *Improving Reading at the Early Stages 5–14*, which draws on the experience of HM Inspectors of Schools (Scotland). This information suggests that effective methods of teaching reading use a variety of approaches in ways that support one another. These approaches are exemplified by a number of activities that should be used by teachers of reading.

Strand	Level A	Level F	
Reading for information	Find, with teacher support, an item of information from an informational or reference text.	Gather and categorize information from a range of sources in a variety of formats for cross-curricular research, and make notes independently. Evaluate the appropriateness of such information for particular purposes, including reporting.	
Reading for enjoyment	Read simple stories, poems, and informational texts supported by pictures for enjoyment.	Negotiate a personal reading program, and read texts regularly for enjoyment that range in subject matter and genre. Provide, either orally or in writing, evidence of personal engagement with the texts, substantiated by textual reference.	
Reading to reflect on the writer's ideas and crafts	Read and, with teachers support, talk about a short, straightforward text showing that they understand one important idea.	Read independently, skim, and scan to locate main points of a text. Make predictions and identify subsidiary ideas. Comment briefly on the opinions and attitudes of the writer. Describe, with some support, the simpler aspects of style and its intended audience.	
Awareness of genre (type of text)	Show recognition of one obvious difference between two simple texts of distinct types, such as a story and a list of instructions.	In texts from a range of genres, demonstrate an understanding of the relationship among genre, purpose, and audience. Explore the possibilities of this relationship by creating their own examples. Either orally or in writing, make a critical evaluation of a text, taking into account the genre.	
Reading aloud	Read aloud a familiar passage or poem to convey understanding.	Read aloud familiar texts of some complexity, not only to communicate meaning but also to convey aspects of the writer's craft such as tone and mood.	
Knowledge about language	No attainment targets at this level.	Show that they know, understand, and can use at least the following terms: literary, linguistic, point of view, onomatopoeia, and alliteration.	

Table 1Standards for Reading Attainment for the Lowest (Level A) and Highest (Level F)
for Ages 5–14

Following a National Debate in Education in 2002, the Scottish curriculum is currently going through a national review called *A Curriculum for Excellence*, with the goal of providing a single curriculum for children, ages 3 to 18, supported by a simple and effective structure of assessment and qualifications.²² *A Curriculum for Excellence* redefines the purposes of learning and gives clear priorities for what young people should learn, with the goal of enabling all young people to become successful learners, confident individuals, effective contributors, and responsible citizens. The principles for curriculum design include challenge and enjoyment for children and young people; breadth, progression, depth, and personalization; and choice, coherence, and relevance in their learning.

The Curriculum Review Programme Board published its *Progress and Proposals* report in March 2006. It revealed a broader view of the curriculum to include the ethos



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and life of the school as a community, how learning is organized, the importance of interdisciplinary projects and subjects to help make learning relevant for young people, and the importance of looking at opportunities for recognizing young people's personal achievements within and outside school. ²³ *Building the Curriculum 1*, published online in November 2006, provides information on how the curriculum areas will contribute to young people's learning.²⁴ The provisional learning outcomes and experiences should be available for public feedback throughout the 2007–08 school year.

Mandated Materials for Reading Instruction

Most Scottish schools use a reading scheme and have a variety of books and reading texts for students to use. Specific texts or reading schemes are not recommended by the Scottish Executive Education Department, and the selection and provision of such material are the responsibility of local education authorities and the schools themselves.

Reading Instruction in the Primary Grades

Instructional Time

Apart from the minimum of 20% for overall language teaching, no specific amount of time is specified for the teaching of reading, although it should be taught daily in primary school. Many schools devote a period of time, perhaps a week, where whole-class direct instruction takes place and specific reading strategies are taught in a concentrated way with interaction, support, and differentiation incorporated into instruction.

Instructional Materials

While there are no prescribed materials for the teaching of reading, the Learning and Teaching Scotland Website, funded by Scottish Executive Education Department, has a number of research reports and links to other websites that provide suggestions for suitable books and reading materials. It also has a section called Book Maze, which has a searchable database so that teachers can search for books by a number of criteria including age suitability, genre, and theme.²⁵

Use of Technology

Use of information communications technology in the teaching of reading is becoming more prevalent, with examples and case studies of how to integrate the two provided on the Learning and Teaching Scotland Website.²⁶

Second-language Instruction

The guidelines for English language contain guidance and advice on the teaching and learning of literacy to students for whom English is not a first language. The guidelines note that the school and the student must work together towards early achievement of the targets in English. However, the overall ability of students should not be judged solely by their command of English, which may, by necessity, be incomplete. Support for students in the learning of English may be available from bilingual teachers or teachers of English as an additional language. Bilingual parents and other adults from the local community also may be able to assist in developing students' literacy skills in English. ²⁷

Effective Practices

An Early Intervention Programme was launched in 1997, initially as a 3-year program subsequently extended to 5 years, aimed at improving attainment in reading. Education authorities approached raising attainment via a number of methods, including recruitment of additional staff, purchase of new books, and development of homeschool links. This resulted in participation in early literacy seminars, in-service training promoting early reading, purchase of "Big Books," rhyme and pattern books, and the introduction of peer-tutoring in reading whereby older students worked with younger children to develop their literacy skills. Evaluation of the program revealed that, while being used in conjunction with other initiatives designed to raise attainment, this proram had an enormous impact on many schools in Scotland.²⁸

Another approach adopted for improving reading is the teaching of synthetic phonics, in which phonemes (sounds) associated with particular graphemes (letters) are pronounced in isolation and blended together (synthesized).²⁹ A pilot study showed that this method of teaching reading had an immediate impact on reading words and that these effects were maintained over time, resulting in students' reading age being ahead of their chronological age.³⁰

Reading Disabilities

Many students, at some time, will experience some learning difficulties in language that can usually be overcome by an appropriate curriculum and methodology. Others, however, may have learning difficulties that prevent them from attaining language development targets, even at Level A. To ensure that progress can be made within this one level, the guidelines for students ages 5 to 14 suggest that teaching should reflect maturation, interest changes, and developing skills. The guidelines also suggest that students with severe learning difficulties may need greater emphasis on oral, rather than written, work.

Diagnostic Testing

The majority of primary schools use some form of baseline assessment or screening of children soon after entry to school. Diagnostic testing would occur in any school or early childhood institute whenever there was concern over any aspect of a child's development. This can be conducted by a class teacher, support for learning teacher, language therapist, psychologist, or any other professional with expertise in the area. Schools have a holistic approach to child development and work cooperatively with other professionals and parents to meet children's needs.

Instruction for Children with Reading Disabilities

Classes normally consist of students from all levels of ability, and teachers differentiate work in the class to meet these needs. More specific support is provided to children with additional needs by teachers and assistants. The support is normally provided in class. However, it may be given outside the class in small groups or individually.



Special Education

In November 2005, the Education (Additional Support for Learning) (Scotland) Act 2004 came into force. This act replaces the system for assessing and recording the special educational needs of children and young people with a new framework based on additional support needs. It refers to any child or young person who, for whatever reason, requires additional support to help them make the most of their education. The needs may arise from a wide range of factors such as when a child or young person has motor or sensory impairments, cares for a sick or disabled relative, or has a parent with mental health issues. The vast majority of children with additional support needs are in mainstream schools. (In 2006, 6,975 students attended special schools; this represents 0.99% of the school population).³¹

Teachers and Teacher Education

There are two paths to obtaining a teaching qualification to become a primary school teacher. Students can take a 4-year course leading to a Bachelor of Education degree at one of seven teacher education institutions. Those who already have a university degree can receive a 36-week post-graduate diploma in education. Both programs promote knowledge and understanding of children's learning and development, equip students to teach the full range of subjects covered in the national guidelines, and train students to deliver a well-rounded and stimulating curriculum at the preschool stage. At least 30 weeks of the 4-year Bachelor of Education degree course should be devoted to school experience, and the course should contain an element of specialist study in at least one of the curriculum areas taught in schools. At least half of the post-graduate course must be devoted to school experience.

To become a secondary-school teacher in one or more subjects, students can take either an undergraduate course (combining subject study with teacher training) or, if they already have a degree in a relevant subject, a postgraduate diploma in education. The undergraduate course involves $3\frac{1}{2}$ to $4\frac{1}{2}$ years of study and the postgraduate course involves 36 weeks of study; both include at least 18 weeks of school experience. For their subject areas, students must cover the guidelines for children, ages 5 to 14, as they apply to Secondary 1 and 2; standard grade courses in Secondary 3 and 4; and guidelines on courses in the upper-secondary level. Students must also develop understanding of the primary and further or higher education interface. Teachers wishing to work in publicly funded schools must register with the General Teaching Council for Scotland.

Teacher In-service Education

The Scottish Executive has created a new framework for the continuing professional development of teachers under the agreement, *A Teaching Profession for the 21st Century*. A maximum of 35 hours of continuing professional development per year has been introduced for all teachers. The time is to be spent on an appropriate balance of personal professional development, attendance at nationally accredited courses, small-scale schoolbased activities, or other continuing professional development activity.³²

Examinations and Assessments

National or Regional Examinations

Prior to 2005, attainment in Scottish primary and early secondary school years (up to S2, ages 12–14) was measured through the National Survey of 5–14 Attainment Levels. In addition, the Assessment of Achievement Programme used a sampling approach to study student performance in specific areas. The commitments of Partnership for a Better Scotland were developed through the Assessment is for Learning program to promote assessment that supports learning and led to the creation of the Scottish Survey of Achievement in 2005.³³

The Scottish Survey of Achievement replaced the 5–14 national survey and the Assessment of Achievement Programme survey by using an extended, annual sample survey to measure student attainment in core skills and in specific subject areas. The Scottish Survey of Achievement separates national monitoring from classroom assessment. It is designed to provide accurate information about overall trends in achievement at the national and local authority levels without overburdening schools or distorting classroom practice and, therefore, offers a means of seeing how effective education policy has been and what needs to be done to improve standards for all children.

Monitoring Individual Student Progress

In terms of language, teachers are required to assess and report students' progress in reading, writing, speaking, and listening. Local moderation exercises are used to share standards across teachers and schools. Teachers also are able to make use of National Assessments 5–14, at appropriate times, to confirm their judgments about a student's progress at a level in the 5–14 curriculum. These are tests in reading and writing in which skills are assessed as being "very good", "well established" or "made a good start".³⁴ The assessments are delivered to schools via the National Assessments 5–14 Website, and schools are able to select and download the appropriate assessment package. Teachers download a randomly generated paper at an appropriate level and have no way of knowing in advance what it will contain. These tests are marked by the administering teacher.

Assessment is for Learning (AIFL) is a national initiative with representation from all parts of the Scottish education community. In the AIFL school, a place where everyone is learning together, assessment principles are grouped under the following strands: ³⁵

- Assessment for learning, supporting classroom learning and teaching;
- Assessment as learning, learning how to learn; and
- Assessment of learning, gathering, and interpreting the evidence.

AIFL is well supported online with key assessment issues exemplified in depth and accompanied by extracts from case studies and related continuing professional development activities There are many support materials, including self-assessment toolkits that have been designed to help schools and stage groups, subject departments, faculty groups, and individual members of staff to determine how well they have incorporated the principles of AIFL into practice.



Scotland

AIFL is designed to support the development of a streamlined and coherent system of assessment for Scottish schools that will support learning and ensure that parents, teachers, and other professionals have dependable information on students' learning and developmental needs. Scottish Ministers are committed to introducing AIFL into all Scottish schools by 2007.³⁶

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Ministry of Education

Singapore

Language and Literacy

Singapore has a multi-ethnic population with a diverse language environment. There are four official languages: Malay, Chinese (Mandarin), Tamil, and English. Malay is the national language, while English is the language of administration and the common language spoken by Singaporeans. Mandarin is widely used among the Chinese population in place of other Chinese dialects, such as Hokkien, Teochew, Cantonese, Hakka, Hainanese, and Foochow. Besides Tamil, other languages spoken by the Indian population include Malayalam, Punjabi, Telegu, Hindi, and Bengali. The proportion of the resident population over the age of 14 who are literate increased from 92.5% in 2000 to 95% in 2005.¹ Between 2000 and 2005, there also was an increase in the use of English as the predominant home language among all the major ethnic groups.²

A cornerstone of Singapore's education system is the bilingual policy, which encourages children to be proficient in both English, the language of global business, commerce, and technology, and their mother-tongue, the language of their cultural heritage. English is the medium of instruction for all subjects in schools except civics and moral education and the mother-tongue languages. As a result of the bilingual education policy, the proportion of residents who are literate in two or more languages increased from 45% in 1990 to 56% in 2000.³

Emphasis on Literacy

There are various initiatives and programs at the national and community levels to promote reading and literacy. The National Library Board of Singapore has special reading programs targeting children of different age groups. In 2005, the National Library Board also launched an annual nationwide reading campaign, *READ! Singapore*, to promote a culture of reading among Singaporeans. Ethnic community groups (e.g., the Chinese Development Assistance Council, Eurasian Association, Singapore Indian Development Association, and the Council for the Development of the Singapore Muslim Community) provide education and funding assistance to students from less affluent families in their respective communities and conduct reading programs to support students and give them literacy experiences that may be lacking in the home.

Overview of the Education System

The Ministry of Education formulates and implements education policies and is responsible for the development and administration of the mainstream schools and the

registration of private schools in Singapore. Together with the Singapore Examinations and Assessment Board, it exercises control over the entire national examination system. The Ministry provides curriculum guides and syllabi for the various subjects in the curriculum and ensures that the syllabi remain current with developments in the subject disciplines and meet the needs of the nation. Schools are given the autonomy to develop their own school-based curriculum and introduce different pedagogical approaches and instructional materials that best suit the needs of their students.

In recent years, the largely centralized education system has moved towards becoming a more flexible and diverse system aimed at giving students greater choice and ownership in their learning through a wider range of school types and educational programs. Alternative curricula and qualifications (e.g., International Baccalaureate) are offered in some schools. Until 2004, the school admission system at the post-primary levels was based predominantly on national examination results. However, to recognize a more varied range of student achievements and talents, selected schools now have greater flexibility in student admissions.

Structure of the Education System

Beginning at age 6, a student in Singapore typically undergoes at least 10 years of general education: 6 years in primary school and 4 in secondary school. Figure 1 shows the structure of the education system in Singapore.

Since the implementation of the Compulsory Education Act in 2003, it is compulsory for children who are Singapore citizens to complete primary education. Students who are unable to manage the mainstream secondary curriculum may benefit from a more customized and practice-based curriculum in a vocational school.

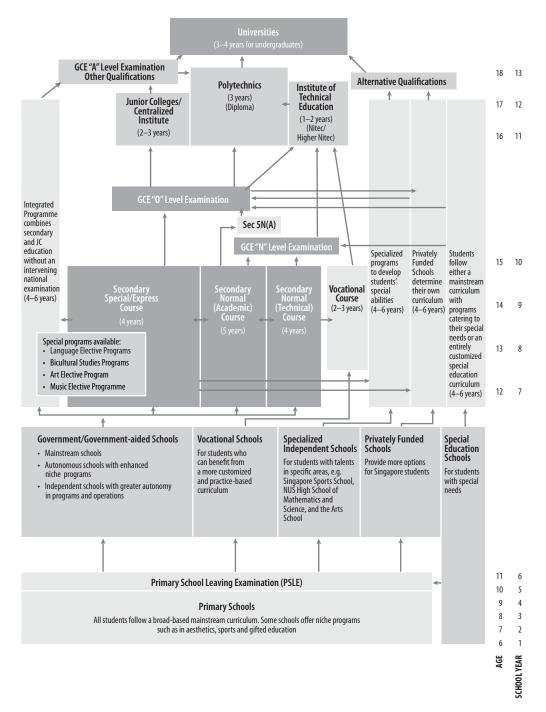
Primary education consists of a 4-year foundation stage (Primary 1 to 4), and a 2-year orientation stage (Primary 5 and 6). At the foundation stage, the emphasis is on basic literacy and numeracy skills. On average, 32% of the total curriculum time will be spent on the English language, 26% on the mother tongue, 20% on mathematics, and the remaining 22% on the other curriculum areas, including science, music, art and crafts, social studies, and project work.⁴ Students also are taught life skills through national education, pastoral care and career guidance, civics and moral education, health education, and physical education. Furthermore, participation in co-curricular activities and community involvement programs is encouraged.

At the orientation stage, students are streamed according to their learning ability. Until 2004, there were three streams at the orientation stage: EM1, EM2, and EM3. Placement in a stream was determined through school examinations at Primary 4, with examination items drawn from the national item bank provided by the Ministry of Education. Parents were given the final decision on which stream their child entered.

Students in the EM1 and EM2 streams take English language, mother-tongue, mathematics, and science courses. In addition, EM1 students study mother tongue at a higher proficiency level. Students in the EM3 stream study English language, mother-tongue, mathematics, and science courses at the basic proficiency level. However, science

Singapore

Figure 1 Structure of the Education System in Singapore



SOURCE: Ministry of Education, Singapore, © 2006

is a non-examination subject for EM3 students. All students, regardless of the stream they are in, continue with non-examination subjects and the non-academic curriculum from the foundation stage.

Since 2005, the distinction between the EM1 and EM2 streams has been removed. Schools are given the flexibility to develop their own Primary 4 examinations to identify and recommend students who are capable of studying mother tongue at a



higher proficiency level or those best served by the foundational course offered in EM3. Schools also have the flexibility to integrate EM3 students with those from the other classes. Parents continue to have the final say in whether they want their child enrolled in higher mother-tongue classes or in the EM3 courses.

At the **secondary** level, the majority of students take the 4-year special and express courses leading to the Singapore-Cambridge General Certificate of Education (GCE) "O" Level Examination. Students in the special course essentially follow the same curriculum as in the express course but study their mother tongue at a higher proficiency level. Students in the normal course are divided into academic and technical streams, both leading to the GCE "N" Level Examination at the end of the fourth year. Lateral transfers across courses are possible. Those who excel in the academic stream can take the GCE "O" Level Examination at the end of the fifth year. For students who are university bound, selected schools offer the Integrated Program, which spans secondary and junior college education without intermediate national examinations and provides time to engage in broader learning experiences.

Since 2006, changes have been introduced in the secondary school curriculum, such as giving students more choice in the range of subjects they can take, based on interest and ability. Students in the normal courses may offer elective modules and up to two subjects at a higher proficiency level from 2006.^{5, 6} Schools also have been given the flexibility to allow selected students in the normal academic stream to bypass the "N" Level Examination and progress directly to take the GCE "O" Examination at the end of the fifth year. These students need to have done well in their school-based examinations at the end of secondary 2 or secondary 3.

For **post-secondary** education, students may apply for pre-university education at a junior college (2-year course) or centralized institute (3-year course), prior to pursuing tertiary education in one of the local universities. They also may undergo teacher training at the National Institute of Education. Students who prefer a more practice-oriented tertiary education may elect to take diploma courses in one of the polytechnics and pursue further tertiary education at the universities upon graduation. Students also have the option of full-time courses offered by the Institute of Technical Education. Those who do well in these courses may proceed to the polytechnics for diploma programs.

In Singapore, schools vary both in their sources of funding and their structure. Government schools are fully funded by the government, while government-aided schools are established by religious missions and other organizations but are heavily subsidized by the government. Independent schools receive substantial funding from the government but are run by boards of governors who decide on personnel and policy matters within the schools. Autonomous schools are government and government-aided schools that are given greater autonomy and more funds to provide a wider range of enrichment programs for their students. Selected schools with an established tradition of promoting Chinese language and culture offer the Special Assistance Plan to enable students to attain higher proficiency in both English and Chinese in a supportive school environment. In addition, specialized independent schools, Integrated Program schools, and privately funded schools offer alternative curricula and qualifications that cater to the varied talents and aptitudes of students. In 2005, there were 173 primary schools, 156 secondary schools, 13 junior colleges, a centralized institute, and 12 schools with multiple levels,⁷ which include schools having both primary and secondary sections and Integrated Program schools having both secondary and pre-university levels.

Role of Preprimary Education

Preschool education in Singapore is a 3-year program offered by community and private organizations. Training for preschool teachers is provided mainly by private training institutes. The goal of preschool education is to provide a holistic education, which lays a firm foundation for lifelong learning. Literacy, numeracy, basic science concepts, music appreciation, and social skills are developed in children through structured activities in a positive learning environment. The preschool curriculum is guided closely by the desired outcomes of preschool education, as defined by the Ministry of Education.

Reading Curriculum in the Primary Grades

Reading Policy

In Singapore, the policy objective of teaching the English language is to help students achieve a level of competency that will enable them to use English effectively in a variety of situations. Literacy development is at the heart of the English language instructional programs in schools. All students are expected to acquire basic literacy (being able to read and write in English) by the time they leave school.

Summary of National Curriculum

The current national syllabus for English language development, *English Language Syllabus 2001*, was implemented in 2001 at primary 1 and 2 and secondary 1. In terms of syllabus design, the 2001 syllabus is organized around Areas of Language Use rather than Themes, which was the organizational framework for the previous syllabus. The 2001 syllabus focuses on language use through exposure to and study of a wide range of text types, organized loosely around language for information, language for literary response and expression, and language for social interaction. Instructional materials gave students exposure to a wider range of text types compared to the materials previously used by schools, the Primary English Thematic Series, which was based on the 1991 syllabus. Unlike the previous syllabus, the 2001 syllabus also specified learning outcomes at 2-year intervals for listening, speaking, viewing, reading, and writing. This gave both curriculum writers and teachers more explicit information on the teaching of language skills for the various levels. For reading, students were first taught the skills and strategies to learn how to read and later on, at the upper levels, they were taught the strategies to read in order to learn.

The 2001 syllabus emphasizes an integrated approach to language learning and literacy development and is intended to help students become independent lifelong learners, creative thinkers, and problem solvers who can communicate effectively in English. Students are expected to read widely, learn how to analyze and evaluate language



and the media, and respond creatively to problems and new technology. Throughout the primary and secondary levels, students are given opportunities for listening, reading, viewing, speaking, and writing to help them become competent and critical listeners and readers and confident and expressive speakers and writers of English. Curricular and co-curricular activities encourage students to use English in a variety of situations and contexts.

The English Language Syllabus 2001 states the following reading objectives:

- Students should read and respond to a variety of texts and demonstrate a positive attitude towards reading and language.
- Students should demonstrate knowledge about language and text types from print, non-print, and electronic sources.
- Students should use reading strategies to construct meaning.
- Students should listen to, read, and view a variety of texts and demonstrate, in oral and written form, understanding of content and the ability to acquire and use knowledge for a variety of purposes.

As part of a 6-year cycle of syllabus revision, an English Language Curriculum and Pedagogy Review Committee was formed in September 2005 to review the teaching and learning of English in schools and to make recommendations for improvement. Based on the review, the committee has recommended fundamental shifts in the curriculum, teaching approaches, and assessment practices to cater to a diverse range of learners with different home language backgrounds, learning needs, and interests.⁸

Mandated Materials for Reading Instruction

There are no mandatory materials for reading instruction at the primary level. The Ministry of Education provides an approved textbook list of all instructional materials including readers, textbooks, and activity books as a guide for schools. Fiction and nonfiction passages in approved textbooks and workbooks are used to teach reading comprehension. Schools are given the autonomy to select books, magazines, or other types of reading material for their extensive reading programs. In addition, schools are given funds to purchase books and multimedia materials for their school and class libraries.

Reading Instruction in the Primary Grades

Background experience and exposure to books, other forms of print, and digital media affect the age at which children begin to read and their reading ability. Learning to read is a highly complex task that involves both decoding and comprehension skills. A balance between decoding and meaning-based instruction is advocated in order to develop fluency, word recognition skills, vocabulary, and comprehension. The teaching of decoding skills (including knowledge of the letters of the alphabet, knowledge of letter-sound correspondences, and phonological awareness) is not done in isolation or only through drill and practice. It is balanced by activities that involve the construction of meaning. Reading instruction guides students through the beginning reading stage to the independent reading stage.

Instructional Time

The total instructional time allocated for the English language curriculum is 17 periods per week for students in Primary 1 and 2, 15 periods for students in Primary 3 and 4, and 12 or 13 periods a week for the majority of students in Primary 5 and 6. Students at Primary 5 and 6 who need additional support may spend up to 16 periods a week studying English. Each period is 30 minutes, and the exact time allocated for reading varies from school to school according to the reading curriculum of the school.

Instructional Materials

Textbooks, workbooks, and audio-visual or multimedia instructional materials for teaching reading and the English language have been produced by educational publishing companies since 1997. Publishing companies are given access to the *English Language Syllabus 2001* and are required to adhere to it. Prior to publication, the Curriculum Planning Officers at the Ministry of Education conduct a rigorous review of the materials. The three sets of materials currently available for Primary 1 to 6 students include the following:

- My Pals are Here
- In Step
- Celebrate! English

Since 2005, the local press has published two English weekly newspapers for upperprimary and secondary school students. The newspapers are used in many schools as supplementary teaching materials to encourage students to develop an interest in current affairs and to improve their language ability.

Use of Technology

The level and type of technology use in the primary school curriculum is decided by the schools and based on their individual learning environments and culture and varies from school to school. Beginning in 2007, the primary education English language curriculum will incorporate baseline information communications technology (ICT) standards developed by the Ministry of Education.⁹ These standards will guide schools on the integration of technology into the curriculum and ensure that all schools achieve a baseline level of information technology use. Schools are given the autonomy to adopt appropriate technology-based materials and pedagogy that best meet their students' learning needs. Funding is provided by the Ministry to schools to purchase the necessary hardware and software to support their programs.

Role of Reading Specialists

Reading specialists play a key role in providing instruction and support for students with reading difficulties. They design the curriculum for early intervention of students who enter Primary 1 with very weak English language and basic early literacy skills. Specialists also design and conduct training courses for specialist teachers, such as the Learning Support Coordinators, who help students with reading difficulties in the primary schools.



Reading specialists also provide consultation to schools on the provision of language and literacy support for students with reading difficulties.

In addition to research and development of reading programs and resources, reading specialists also work with educational psychologists in the assessment of students referred for dyslexia screening. Results from the assessments then are used to plan appropriate intervention strategies for the child and make recommendations for in-school support by teachers or Special Needs Officers. Where appropriate, the child is referred to an external agency that specializes in remediation for students with dyslexia.

Second-language Instruction

Singapore's bilingual policy requires all students in the education system to take courses in both English and a mother-tongue language. Most mother-tongue languages are offered up to the pre-university level. The goal is to have every student study his or her mother tongue for as long as possible and to as high a level as he or she is capable of.

To ensure that the mother-tongue curriculum remains relevant to the needs of students of different language abilities and interests, it was reviewed by various mother-tongue committees (Chinese in 2004 and Malay and Tamil in 2005). The new Chinese language curriculum and the new Malay language and Tamil language curricula will be implemented in stages in schools in 2007 and 2008, respectively. Resources, such as teaching guides, and instructional and reading materials will be provided to schools.

Effective Practices

Primary schools in Singapore use a variety of strategies to teach reading. The major approaches for teaching reading in the lower primary (Primary 1–3) are the Shared Book Approach and the Modified Language Experience Approach. The Shared Book Approach is an integrated and balanced language teaching approach that uses motivating and enjoyable large-print books with illustrations to teach and reinforce word identification skills, vocabulary, and language structures, as specified in the *English Language Syllabus* 2001. The Modified Language Experience Approach is based on activities and stories developed from the personal experiences of the learner. The stories about personal experiences are written down by a teacher and read together until the student associates the written form of the word with the spoken. The Modified Language Experience Approach is more structured than the original Language Experience Approach in that the experiences provided to the students are crafted to elicit specific target structures and vocabulary.

From Primary 4 to 6, the strategies used to teach reading include Directed Reading and Thinking Activities (DRTA) and the 3-Level Guide. DRTA is a strategy that encourages students to make, confirm, and revise predictions as they read segments of text to aid in reading comprehension. The 3-Level Guide is an approach that teaches students to read a text at three levels of comprehension, namely literal, interpretive, and application. Extensive reading programs to promote reading also are held school wide and supported by activities such as storytelling, dramatization, and poetry recitation.

Reading Disabilities

Diagnostic Testing

A School Readiness Test, administered at the beginning of Primary 1, identifies children with very weak English language and basic early literacy skills. These children are supported in the Learning Support Program, an early intervention program that provides additional support in the first 2 years of primary school to help children learn language and basic early literacy skills in English.

Instruction for Children with Reading Disabilities

Students in the Learning Support Program for English attend specially-tailored lessons daily during the English language class period. Lessons are conducted by trained Learning Support Coordinators who are qualified teachers. Teaching in small groups, the Learning Support Coordinator focuses on the development of oral English and key literacy skills. Students are released from the program when they achieve age-appropriate reading competency and pass the school's English semestral assessment at the end of the year. Those who still require support will continue in the program in Primary 2.

Other school-based reading programs include the Buddy Reading Program, which pairs up a competent reader, usually from a higher grade, with a less competent reader to help the latter in developing his reading skills.

Children with specific reading disabilities, such as dyslexia, also have access to additional support in school from Special Needs Officers who are trained in dyslexia intervention. In addition, the Ministry of Education has embarked on training 10% of the teaching staff in special needs support so that they will be better able to cater to the needs of children with reading disabilities.

Special Education

For children with disabilities who are unable to benefit from mainstream schooling, special education schools provide special curricula, rehabilitation, and therapy services to enhance their integration into society. These schools are run by voluntary welfare organizations with funding from the Ministry of Education and the National Council of Social Service.

Teachers and Teacher Education

Teacher Education and Training

Preservice professional training for teachers is conducted by the National Institute of Education at the Nanyang Technological University. The institute offers 4-year programs leading to the degree of Bachelor of Arts or Bachelor of Science with a Diploma in Education. Non-degree programs include 2-year Diploma in Education or Diploma in Physical Education programs offered to GCE "A" level students and polytechnic diploma holders, and 4-year nongraduate programs offered to GCE "O" level holders who wish to become mother-tongue teachers at the primary level.

University graduates can take a 1-year Postgraduate Diploma in Education Program to teach at primary or secondary school level. A 2-year postgraduate diploma program



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offers specialization in teaching physical education at the secondary school level. Prospective teachers may be required to sit for an Entrance Proficiency Test for English language or for a test of the mother-tongue languages for those who wish to become mother-tongue teachers. To enable mainstream teachers to better cater to the needs of students with learning disabilities, initial teacher training also includes a component on learning disabilities. Furthermore, the institute offers a 1-year Diploma in Special Education program for teachers of students with special needs.

Teacher In-service Education

Singapore's education system places great emphasis on teacher development and recognition and is committed to ensuring that the teaching profession remains current in skills and knowledge and is well positioned for the future.

All teachers are entitled to 100 hours of in-service training per year for professional and personal development. The National Institute of Education works closely with the Ministry of Education to provide in-service training for teachers. The institute is the main provider of in-service training courses and advanced programs including the advanced diploma, advanced postgraduate diploma, master's, and doctor of philosophy (Ph.D.) degrees. Apart from in-service courses, the institute offers special courses by foreign speakers, school-based customized courses, workshops, and seminars. The Ministry provides specialized in-service courses, such as workshops to build teacher competency in the teaching of grammar and spoken English. Teachers also can attend formal training courses conducted by the Institute of Public Administration and Management and other external courses, sharing sessions, and conferences.

Other than formal professional development courses, teachers can also benefit from experiential learning in the business and community sectors through the Teacher Work Attachment scheme started in 2003. Through local and overseas work attachments, teachers gain new experiences, which in turn benefit students by way of the fresh perspectives they bring back to their classrooms.

There are various professional development schemes available to help teachers upgrade professionally. Funding is available through education grants, the skills development fund, reimbursement, and scholarships. Experienced teachers may also make use of the Professional Development Leave Scheme to engage in any purposeful professional development activity that adds value to the Education Service.

Examinations and Assessments

National or Regional Examinations

Students in primary school take a major national examination at the end of Primary 6. The Primary School Leaving Examination assesses students' suitability for secondary education and determines their placement in a secondary school. Subjects included in the examination are English, mathematics, science, and a mother tongue. Although the English language as a subject is given the same weight as the other subjects, achievement in the English language is highly regarded due to its status as the working language of Singapore. Based on their

results, students are streamed into an appropriate secondary school course that matches their learning pace, ability, and inclination.

Reading is assessed as part of the English Language Examination, which includes writing, language use, vocabulary, reading comprehension, listening comprehension, and oral communication. The language use and reading comprehension component, which assesses students' language ability and comprehension of graphic and textual information, takes up almost half of the allocated marks.¹⁰ Performance in the individual components is not reported separately.

Standardized Tests

The use of standardized tests in reading is not common in Singapore schools. A variety of standardized reading tests exists, but they are used mainly for identifying reading disabilities and are carried out by educational psychologists and reading specialists from the Ministry of Education.

Monitoring Individual Student Progress

Students are assessed both formally and informally in schools. At every grade, schools generally conduct at least two summative examinations, one at the end of each semester. These semestral assessments tend to adhere quite closely to the approach and format adopted in the national examination. For formative assessment, teachers adopt a variety of assessments, ranging from pen-and-paper tasks, such as written tests and worksheets to oral presentations and portfolios. Informal assessments provide useful indicators for teachers to monitor their students' progress, identify their strengths and weaknesses, and provide meaningful and immediate feedback. They also enable teachers to modify their teaching methods and materials to suit the needs and abilities of their students.

Schools monitor closely the progress of each student. Records of students' performance are kept through the student dossier and in report cards or report books. Children regularly take work home and parents are advised regularly of their children's performance through progress reports (e.g., report cards), personal calls, visits by teachers, and school-organized parent-teacher meetings.

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The Slovak Republic

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Language and Literacy

Slovak, the official state language of the Slovak Republic, is one of the Slavonic languages from the Indo-European family. It has been in use for centuries and its development has been established through historical documents and a rich folklore heritage. The official form of the language was standardized in the 18th and 19th centuries. Although the language of the common people, it was not officially recognized nor was its use allowed in schools until an independent Czechoslovakia was established in 1918.

Although most students receive education and training in the Slovak language, in certain regions, instruction also is carried out in the language of minority groups, primarily Hungarian but also Ukrainian and German. In schools where a minority language is the language of instruction, Slovak is included among the other subjects taught.

Emphasis on Literacy

Through placing an emphasis on forming positive attitudes towards literature and developing the literary interests of the students, the Slovak Republic has quite a long tradition of various literary projects or contests, organized either at the national or regional level. However, although very important, these projects have been aimed mainly at recitation or creative writing development.

Projects specifically targeting reading activities have been adopted from abroad or developed only in recent years. In particular, non profit organizations play an important role in supporting such activities. For example, the Orava Association for Democratic Education, which began its activities in the 1990s, offers various innovative teacher-training projects. Since 2002, it also has organized the *Week of Reading Aloud*, with the goal of developing young readers' interest in reading by means of adults reading aloud to children. The project has proven popular, since many parents, schools and libraries participate in it each year.

Another successful project is the national reading contest called *Reading with Osmijanko*, established by the nonprofit organization Osmijanko in 2004. The contest is designed for 8- to 12-year-olds who, in the course of 6 months, try to find the answers to a number of questions in the contest workbook, based on what they have been reading. In the first year, approximately 10,000 students participated in this project.

Libraries play an important role in supporting reading activities in their communities. In addition to joining national projects or adopting some international projects (e.g., An Evening with Hans Christian Andersen), many libraries also develop their own local projects.

Overview of the Education System

As of January 2004, a new act has regulated state administration and self-government in primary and secondary schools and school facilities. The Ministry of Education oversees the state administration of the school system. The Ministry is also responsible for developing educational concepts and a unified education policy and creating laws and general binding regulations and documents in education, such as curriculum documents. The Ministry has a regional school office in each of the eight autonomous self-governing regions. According to the act, regional school offices provide professional counseling and supervision of the self-governing regions and municipalities. They also are responsible for special schools and facilities. For secondary schools, state administration has been transferred to the self-governing regions. For primary schools, preschools, and facilities outside formal classes, administration has been transferred to municipalities.¹

Each primary and secondary school is managed by a principal who is responsible for implementing curricula, integrating professional and pedagogical standards into the teaching process, and supervising the teaching staff. The principal cooperates with a school board, comprised of teachers, parents, students, the municipality, and higher educational establishments, that functions as public control.

State control is exercised through the State School Inspection that conducts independent school inspections to monitor and evaluate achievement in education and training in schools. Such inspections involve collecting information on the management, organization, and quality of the educational process.

The majority of schools in Slovakia, are state (public) schools, run and funded by the state. Non-public schools are private or church schools that are run by a person or legal entity. Private schools receive contributions from parents as well as state subsidies.

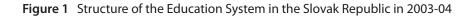
The school year is approximately 180 days, from September until the end of August. However, official teaching ends June 30, followed by holidays in July and August.

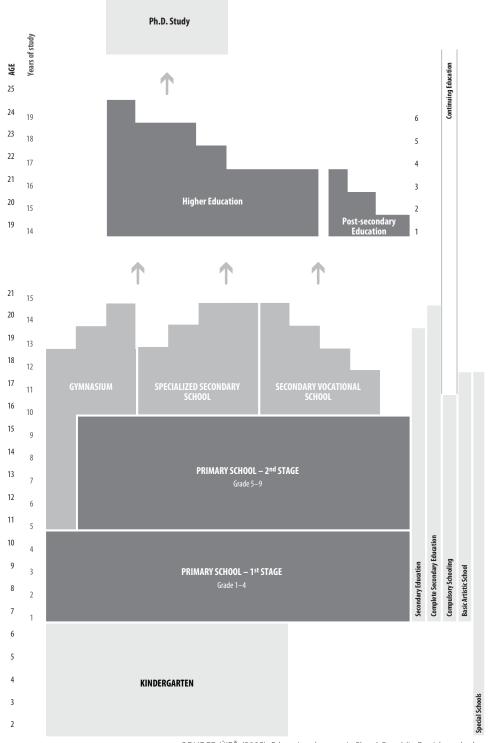
Structure of the Education System

Compulsory education in Slovakia lasts 10 years, from ages 6 to 16 and begins in primary school (základná škola). Students may complete their compulsory schooling when they finish the first year of secondary school. However, most students (83% of students in 2004) continue their studies and complete secondary school. ²

As shown in Figure 1, there are four main levels in the education system: preschool, primary, secondary, and higher education.

Preschool education is voluntary, but is considered a part of the education system. It is designed for children from ages 2 to 6. Preschools include kindergartens (materská škola) and special kindergartens (for children with special educational needs).





SOURCE: ÚIPŠ. (2005). Educational system in Slovak Republic. Bratislava: Author

The goal of preschool education is to complement family education with activities that support the broader development of the child's personality, and to prepare the child for attendance in compulsory school. Preschool education is organized according to the official document, Programme of Education and Training of Children in Kindergartens,



approved by the Ministry of Education. In the 2005-06 school year, about 91% of children attended kindergarten in the year prior to compulsory school.³

Primary school (základná škola), which begins when the child reaches the age of 6, consists of two stages: the first stage (grades 1 to 4) and the second stage (grades 5 to 9). The second stage of primary school is comparable to lower-secondary education in other countries. There is the possibility of adding a "zero" grade for children, age 6 who are entering primary school, come from socially disadvantaged backgrounds, and have not reached the maturity level necessary for schooling.

Teaching at primary schools is based on study plans (učebné plány) and syllabi (učebné osnovy), which are approved by the Ministry of Education. These curriculum documents determine the number of lessons and content specifications for all subjects in particular grades of primary school. There are several variants of study plans, offering extended lessons in mathematics, science subjects, foreign languages, technical education, art, and music, which allow schools to create differentiated classes.

In the first stage, a single teacher usually teaches all or almost all subjects. Students receive instruction in Slovak language and literature, mathematics, and the arts. The basics of history, geography, biology, chemistry, and physics are included in national history and science courses. Beginning in grade 5 (the second stage), all sciences are taught as independent subjects, and students are taught by several teachers who are specialists, generally in two subjects. After completing grade 4 or 6, students with special talents in academic subjects, the arts, or sports, can apply for enrollment in an 8-year gymnasium, conservatory (art school), or sport school.

In the ninth grade, students take the national examination, Monitor 9, in both the language of instruction and mathematics and may apply for further study at a secondary school, for which they are required to pass an additional entrance examination.

Secondary schools are of three types: grammar school (gymnázium), secondary specialized school (stredná odborná škola), and secondary vocational school (stredné odborné učilište). The grammar school offers academic courses in a variety of subjects and prepares students primarily for studies in higher education institutions. Two foreign languages are compulsory. Students may choose some optional subjects according to the school program. The period of study lasts from 4 to 8 years. Students graduate from the gymnasium by passing the school-leaving examination (maturitná skúška).

Secondary specialized schools prepare students primarily for professional careers in economic and technical fields. Programs usually take 4 years to complete and end with a school-leaving examination. Conservatories, a special type of secondary school, have 6-year programs that prepare students for careers in singing, music, dance, or drama and for higher education study.

Vocational schools prepare students for occupation through apprenticeships. Courses last 2 or 3 years and end with a final examination. Students receive a certificate approving their professional skills. Four-year study courses and their specializations are completed by a school-leaving examination.

Reading Curriculum in Primary Grades

Reading Policy

Reading instruction in the primary grades is an integral part of mother-tongue instruction, and all requirements are specified in the curriculum syllabi and educational standards for Slovak language and literature. A substantial part of instruction is devoted to teaching and practicing reading and writing skills, especially in the first and second grades. Children are expected to have mastered basic reading skills after the second grade. Reading comprehension is closely connected with literature instruction in the grades that follow, highlighting reading for pleasure, forming good reading habits, and having a positive attitude towards culture in general.

Summary of National Curriculum

The teaching of reading in the Slovak Republic officially starts in the first grade of primary school, although preschool education gives children opportunities to develop some basic reading skills as well. Reading is not taught as a separate subject but as an integral part of the Slovak language and literature. The subject consists of two main parts: 1) writing, language (orthography, morphology, lexicology, and syntax), and composition; and 2) reading and literature.

The specific goals for reading and literature, as part of Slovak language, and the general goals for literature in grades 1 through 4 are as follows:⁴

- Acquire and improve the technique of reading;
- Gain comprehension skills;
- Stimulate an interest in reading and enjoying literature;
- Enrich and develop vocabulary;
- Form basic communicative skills;
- Improve the command of spoken and written language;
- Stress the ethical and aesthetic function of reading and literature; and
- Create positive personal attitudes and values.

Students are taught the basic reading skills in the course of the first two grades of primary school. Elementary reading instruction is conducted using the analyticalsynthetical method and is closely connected with writing instruction. Attention is given first to segmenting and blending phonemes, training letter-sound connection, linking syllables and words, proper articulation, basic concepts of rhyme and rhythm, fluent reading, the ability to retell the text, and respond to questions based on texts. During the second and third grades, more attention is given to the improvement of reading techniques and literary text comprehension. Special attention is given to developing various ways of reading, recitation of poetry and prose, the use and comprehension of visual materials (pictures), note taking, and the use of reference materials, such as dictionaries and library references. In the upper grades of the first stage, more attention is paid to the analysis and evaluation of the texts read in class, which are mostly fiction.



At the end of fourth grade, students should be able to:

- Read appropriate texts properly, fluently, quietly, and aloud at a reasonable speed, with comprehension;
- Use proper stress, rhythm, and intonation; and
- Use suitable articulation, pronunciation, and proper linguistic items when speaking and reading.

When reading literature, students should be able to:

- Perform a part of story or poem;
- Reproduce (retell) the story following the time and casual sequence;
- Dramatize excerpts (role play);
- Identify the main idea of text; and
- Evaluate the main characters, finding connections and relationships among them.⁵

There are specific goals aimed at literature instruction. Through reading various types of texts, students learn to distinguish among genres and learn certain linguistic terms and expressions.

During the school term, teachers are expected to follow the general outlines given in the curriculum for annual time allocation, thematic units, and genres that are compulsory for the grade. However, they may choose the forms and strategies for achieving these objectives.

Reading Instruction in the Primary Grades

Instructional Time

In all grades and programs in the first stage of primary school, nine lessons per week are allocated to teaching the Slovak language and literature. The subject is comprised of reading, writing, grammar, literature, and written composition. The following number of lessons are devoted to the teaching literature and reading part of the subject:

- In 1st and 2nd grade, five lessons per week, 165 lessons per school year; and
- In 3rd and 4th grade, four lessons per week, 132 lessons per year.

In schools where the language of instruction is Hungarian, students begin learning to read and write in their respective language according to the following number of lessons per week:

- In 1st grade, eight lessons of which there are five lessons of reading and literature; and
- In 2nd through 4th grades, seven lessons of which there are 3 lessons of literature and reading.

Instructional Materials

Teachers are encouraged to use the recommended materials that are approved by the Ministry of Education. Presently, teachers can choose from two special readers for the first grade (basal readers). There are additional teachers' books that present instructional methods and types of lessons and suggested supplementary material. For each grade, there are special readers with excerpts mainly from fiction (national as well as international). Approved textbooks are free and available for all students. Teachers also are encouraged to use various other sources such as children's magazines and books, encyclopedias, film and video, as well as audio tapes with book adaptations. Additional materials used in the classroom are the teacher's choice and are dependent on the teaching method. Children are encouraged to read books of their choice from the school or public library or from other sources.

Use of Technology

In the past few years, extensive changes to the availability and use of technology has taken place in the schools. As part of the Infovek project, and through the support of sponsors, all schools were equipped with at least 5–10 computers and connected to the Internet by 2004. An important part of Infovek has been to train teachers in the basics of working with information communications technology (ICT) and its practical application in the education process. The process of implementing ICT into education is in the initial stage, and much depends on the initiatives taken by individual schools and teachers. To support this effort, there are several projects schools can join, including two projects specifically for language instruction—*Multimedia Stories and Fairy Tales*, and *Villages of Slovakia*.⁶

Role of Reading Specialists

The form teacher is usually the one who provides reading instruction in grades 1 through 4. There is generally no special training provided for reading teachers, except the basic training and practice offered during their teacher-training courses. However, course opportunities in professional development are offered by some in-service training institutions. Such courses are aimed at introducing innovative ways of teaching, including modern methods in reading instruction. Attendance at these courses is optional. Some schools with special classes for children with learning or reading problems have a specialist who is in charge of teaching these students.

Second-language Instruction

For students whose mother tongue and language of instruction is in another language, Slovak is introduced as a second language. For example, students attending primary schools where the language of instruction is Hungarian receive instruction in the Slovak language and literature according to the following number of lessons:

- In grade 1, four or five lessons per week (132 or 165 lessons per school year); and
- In grades 2–4, five lessons per week (165 lessons per year).



In the first and second grades, Slovak is taught according to the structural-global audiovisual method, without reading and writing. Reading and writing of Slovak is introduced in the third grade.

Reading Disabilities

Diagnostic Testing

Diagnostic testing is only used in special diagnostic centers to identify the severity of students' reading difficulties. No general screening test is given to all students in the first grade or any subsequent grade.

Special Education

Children identified by the first grade teacher as having learning problems (e.g., dyslexia) see a specialist in the regional special diagnostic and remedial pedagogical center. The specialist investigates the problem and recommends an appropriate course of action. Parents must agree and support this proposal. Children can either be integrated into the regular classes or they can attend the special classes available in some schools. Instruction is based on the same syllabi as in regular classes, but special methods are used.

Instruction of students who are integrated into regular classes is based on the individual or differentiated approach. Students also receive individual lessons from the school educational counselor or from a specialist at a center.

Special classes are established for students with a particular type of impairment. Students with reading problems are included in special classes for learning disabilities, where a specially trained teacher works with a maximum of 12 students. The study plan for students in such classes is slightly modified, including, for example, the individual speech lessons. Students with learning disabilities remain in special classes only while it is necessary. When the problem has been treated, students are returned to their regular classes.

Teachers and Teacher Education

With respect to ongoing reform, several changes have been adopted in higher education. According to a new act for higher education institutions, approved in 2002, higher education is conducted in three stages. As a consequence, a new structure with new content of fields of study has been established. New study programs have been put into practice fully since the 2005–06 school year.

All teachers must complete the second stage of higher university education, with the exception of preschool teachers, who presently may be graduates of secondary pedagogical schools and social academies.

The first stage (bachelor's degree) of higher education is mainly viewed as preparation for the second stage of higher education. In the course of 3 years, students generally take courses with broader theoretical basics in the subjects necessary for the teaching profession (e.g., pedagogy, psychology, methodology, and biology) as well as in their areas of specialization. Graduates of the first stage also acquire qualifications with which they are able to fill some supportive pedagogical positions depending on their specialization.

During the second stage (master's degree), after another 2 years, students acquire their full teacher qualification. The courses include teaching in the subjects of specialization as well as teaching practice, which includes both observation and teaching.

Teacher education for elementary teachers (teachers for the first stage of primary school) is organized within the autonomous field of preschool and elementary education, which integrates the traditional program for elementary teachers together with programs for preschool teachers.⁷ Teachers for the second stage of primary school and secondary school teachers typically choose to specialize in a combination of two subjects. Besides the faculties of education, students can also attend other faculties within the subject area.

Teacher education and training is completed with the presentation of a thesis and passing of state examinations.

Teacher In-service Education

In-service training of educational staff offers professional development opportunities for updating subject area knowledge and developing teaching methods and skills. A special act of the National Council regulates further education as a part of lifelong education. Teachers are expected to continue their education on an ongoing basis.

In-service education is offered in the following forms:

- Introduction of new staff to practice,
- Training in educational management,
- Continuous education,
- Specialized innovation study,
- Specialized qualification study, and
- Extended courses.

Several institutions provide further training for teachers, including higher education institutions, educational organizations of the Ministry of Education (e.g., the National Institute for Education, the State Institute of Vocational Education, and methodical educational centers), and educational organizations of other ministries that have established some schools or school facilities.

Examinations or Assessments

National or Regional Examinations

Since 2005, ninth-grade students take an examination, Monitor 9, in the language of instruction and in mathematics. The results of this examination are used by the secondary schools as part of the formal admission procedures.

After completing secondary school, students take the school-leaving examination (maturitná skúška). It consists of two parts, an external (written) test and an internal (both written and oral) test. The external examination is centrally prepared and administered on



the same date throughout the country. Students can choose from two levels of difficulty (level A is the higher level, and level B represents the basic level of knowledge). Results of the final-leaving school examination are used to determine eligibility and placement for post-secondary programs of study.

At present, there is no regular national examination for reading literacy. National statistics regarding reading literacy are collected through participation in the international IEA and OECD surveys (PIRLS and PISA).

Monitoring Individual Student Progress

Special general instructions for assessment and marking criteria are offered in the teacher's guides for all grades of primary school for both continuous and final assessment. The level of acquired knowledge, skills, habits, and personal development is assessed through various procedures. Different principles are used based on the age group and subject being evaluated. Students are not given grades in the first grade but rather are provided with only a verbal assessment (very good, good, or weak) based on their classroom performance of reading, writing, and mathematics skills. No special test of oral reading is given, although some teachers' guides recommend and provide speed-reading tests. In grades 2 through 4, assessment in Slovak language and literature can be either verbal or expressed in grades as the result of class examinations and students' performance during the term.

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Slovenia

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Language and Literacy

Slovene, a Slavic language with 36 recognized dialects, is the official language of Slovenia.^{1, 2} Italian and Hungarian also are official languages in regions with Hungarian and Italian minority populations. The majority of the population (88%) speaks Slovene, while 5% speak Serbian, Croatian, or Serbian-Croatian. Two percent speak Macedonian, and less than 1% speak Italian, Hungarian, Romany, or Albanian.³ Slovene is not widely known outside Slovenia, although it is taught in more than 40 university departments in various European countries.⁴

The official language in elementary schools (grades 1 to 9) is predominantly Slovene. However, the Constitution provides the Italian and Hungarian minorities with special rights, including receiving an education in their own language. In the southwest region, with a large Italian population, there are a few elementary schools that conduct instruction in Italian. In the northeast region, with a Hungarian population, there are bilingual Slovene-Hungarian schools. However, instruction is not provided in any other Slavic or Romany languages in Slovene schools.

Emphasis on Literacy

In recent years, there has been increasing emphasis on literacy. In 2004, the Commission for Development of Literacy was established as a national body.⁵ Its tasks include various aspects related to the improvement of lifelong literacy. The commission has prepared a national strategy for the improvement of literacy.

Public libraries are the main promoters of literacy. There are 256 public libraries, of which 10 are "biblio-buses" that make 147 stops in remote areas four times a year.⁶ Altogether, public libraries have 486,000 registered readers, almost one third of whom are children under the age of 15.⁷

The Reading Badge project has been a tradition for over 40 years and remains quite popular among elementary school children. Children read a certain number of books each year in order to receive a "badge," and children who engage in this project throughout elementary school receive a special award.⁸ In recent years, reading clubs and meetings to discuss books also have become widespread.

Overview of Education System

Elementary education is compulsory for all children, ages 6 to 15, who live in the Republic of Slovenia.⁹ The government, which provides funding for education, is responsible for the most important aspects of education including the curriculum and national objectives. The Council of Experts determines the curriculum and the content of school subjects at all levels of education except higher education, where universities are guaranteed autonomy by the Constitution. Council members are appointed for 6 years to minimize the influence of the current political authority (parliamentary elections are held every 4 years). The council is divided into three subcommissions based on the area of focus: general education, vocational education, and adult education.

Structure of the Education System

The Slovene education system consists of preprimary, primary (elementary), uppersecondary, and higher education.

According to the Primary Education Act, schooling is mandatory for all children, ages 6 to 15, which corresponds to grades 1 to 9 of elementary school. The introduction of the 9-year system reflects a gradual change since the 1999–00 school year, when elementary school was extended from 8 to 9 years. The PIRLS 2006 population, therefore, consisted of two grades: third grade in the old system (8 years) and fourth grade in the new system (9 years). Children in both groups have the same average age, although students now enter primary school 1 year earlier, while other requirements remain unchanged.

Elementary school is divided into three 3-year cycles. The first and second cycles are comprehensive. In the third cycle, there is some streaming, the formation of separate subclasses within select subjects (mathematics, Slovene language, and foreign languages) on the basis of students' knowledge and teacher or parental preferences.

Foreign language instruction begins at the fourth grade with two lessons per week. The majority of schools offer English. Usually, one teacher teaches all of the subjects in grades 1 to 5, but foreign languages are taught by a specialist teacher with a university diploma in the specific subject. The number of lessons per week increases to three lessons in grade 5, four lessons in grades 6 and 7, and concludes with three lessons per week in grades 8 and 9. Students may choose another foreign language in grade 7 and study it for 3 years.

Upper-secondary education consists of 4-year gymnasia (general upper-secondary schools), technical and professional schools, and 2- to 3-year vocational and lower-vocational schools. Students who plan to study at a university must pass an examination, the general admission requirement for higher education when they complete 4-year upper-secondary education.

The Ministry of Higher Education, Science, and Technology is responsible for academic university studies and professionally oriented studies.¹⁰ In 2004, amendments to the Higher Education Act were adopted and provided for a three-level study structure. The first level relates to undergraduate studies, and the second and third levels relate to postgraduate studies. Within the first level, study programs are limited to 3 or 4 years

and 180 to 240 credit points. Study programs must be in line with the European Union study programs. The second level is master's studies, which encompasses between 60 and 120 credit points and takes 1 or 2 years to complete. The third level is 3-year doctoral studies.

Role of Preprimary Education

Preschool education is not compulsory. However, the number of children entering preprimary institutions has increased each year over the past decade. The percentage of children enrolled in preprimary education since 1995 is provided in Table 1 below.¹¹

School Year	Percent of Eligible Children Enrolled		
1995	56.9		
2000	56.6		
2003	60.6		
2004	61.4		
2005	63.6		

SOURCE: Statistical Office of the Republic of Slovenia: Novice (n.d.). Retrieved June 12, 2007 from http://www.stat.si/novica_prikazi.aspx?id=267

The curriculum for preschool children consists of six main areas: physical activity, language, art, society, the natural world, and mathematics. The curriculum is divided into two cycles, the first from ages 1 to 3 years and the second from ages 3 to 6. The new curriculum promotes full-day, half-day, and short programs.

Reading Curriculum in the Primary Grades

Reading and writing literacy is emphasized in the first cycle as part of Slovene language instruction. According to the *White Paper on Education in the Republic of Slovenia*, one of the reasons for changing from an 8- to a 9-year elementary school system was to improve literacy.¹¹

Reading Policy

In general, the reading policy, which states the goals of primary education, is defined by the Primary Education Act. The main goal is the development of literacy whereby students will have the ability to communicate and express themselves in the Slovene (or Italian or Hungarian) language. Students should attain a level of knowledge that enables independent, effective, and creative engagement in society and nature and develops critical thinking, as well as meets internationally comparable standards.



Summary of National Curriculum

The *National Curriculum Guide* specifies that reading and writing instruction begin at the age of 6, with an introduction to the written world.¹² The goal of the first cycle of elementary school is for students to reach a basic reading and writing level. A more elaborate literacy program begins in the second cycle (fourth grade), once basic skills are attained.

The curriculum for the Slovene language explicitly defines the basic standard in reading and writing for each of the three cycles (at the end of grades 3, 6, and 9) and for each grade within a cycle.¹³ The first year of schooling prepares children for the process of learning to read and write. Students are introduced to a variety of written materials and should be able to do the following:

- "Read" illustrations, recognize printed names, and simultaneously follow the story with pictures as the teacher reads;
- Learn the basics of writing (e.g., holding the pencils, and practicing drawing from left to right);
- Perform "spoken" texts (e.g., in front of other students in the class, describe a particular event, or describe a picture);
- Read pictograms and write familiar pictograms;
- Compare fictional persons or experiences to themselves or their own experiences; and
- Recognize fairy tales, watch theater shows, describe cartoons and children's movies, and recite poems.

At the end of third grade (i.e., the end of the first cycle), students should be able to do the following:

- Read various kinds of texts fluently, without mistakes and with proper accents;
- Know the answers to general questions after reading a text, such as recognizing the narrator and audience, identifying the intention of the narrator, and recognizing basic facts;
- Finish an unfinished text using cues about the meaning from the supplied text;
- Identify the content, time, and place of the story when reading fiction, name the main characters, and explain the reason for an event; and
- Distinguish between real and imaginary worlds, and explain the distinction.

By the end of fourth grade, which is the first year of the second cycle in elementary school, students should be able to:

- Read informative texts and analyze them in to different ways;
- Read fiction and analyze it in different ways;
- Recognize and write different types of fiction;
- Write drafts of text develop successive drafts;
- Engage in activities that expand and enrich their vocabulary;

Slovenia

- Recognize the logic of an action, and describe it using conjunctions; and
- Express their own opinion.

Mandated Materials for Reading Instruction

Materials for reading instructions are chosen by individual teachers. All textbooks must be approved by the Commission for Textbooks (a subcommission of the Council of Experts). Prescribed textbooks are of two kinds: one with nonfiction texts and tasks, and another with fiction and tasks. There are few textbooks of each kind on the market. Teachers choose additional instructional materials for reading and writing from a variety of available materials.

Reading Instruction in the Primary Grades

Instructional Time

During the first cycle of elementary school, the emphasis in instruction is on the Slovene language. In the first grade, the total amount of time devoted to the Slovene language is 210 school hours per year (a regular school hour is 45 minutes). In second and third grades, 245 school hours per year (7 hours per week) are devoted to Slovene, 175 school hours of lessons per year in fourth grade, and 128 school hours in ninth grade.¹⁴

Instructional Materials

Slovene language courses consist of reading, writing, listening, speaking, literature, and grammar. Teachers use a variety of materials for teaching children how to read and write, not only within the prescribed hours for Slovene language but also within other school subjects. Because graded readers written in Slovene are not available, children's magazines are often used as additional reading materials in the primary grades. There also are some computer-based programs for learning how to read and write, however, they are not widely used at schools.

The choice of instructional materials in classrooms is affected by the financial resources of the students' families. Although elementary school is compulsory and free of charge, parents are required to buy all materials that children will need in school for instruction, including textbooks.

Use of Technology

The role of information communications technology (ICT) during the first years of primary education is not significant. Available computer-based programs for gaining basic literacy in Slovene are mainly oriented towards spelling and counting. In the upper grades, students are encouraged to use the Internet to seek information. However, while the availability of ICT and access to the Internet is spreading rapidly, this technology is not readily available to all students and schools because of a lack of resources.

Role of Reading Specialists

There are no specially employed reading specialists. However, if children have specific problems, they are offered help. Classroom teachers in the first cycle of elementary



school are responsible for reading and writing instruction. In their university teacher preparation courses, they learn the basic approaches for teaching reading that suffice for the majority of students. It is up to the individual teacher to decide if he or she wants to learn additional approaches or strategies. Teachers also are free to choose their instructional approach to teaching reading in the classroom. Besides the basic and the most widespread model, there are some alternative concepts to teaching reading, primarily used in public schools, that differ from those taught at the university. For example, some alternatives allow a more individualized approach to reading instruction, which enables students to work at their own pace.

Second-language Instruction

Slovene as a second language is taught in Italian schools (in the areas where Italian is an official language) and in a few English (i.e., international) schools. In regular Slovene-speaking schools, there are no Slovene language courses for children that do not speak Slovene as their first language. Although remedial Slovene language instruction is available, it does not function as a second-language course.

Reading Disabilities

Diagnostic Testing

The schools in Slovenia typically have a team of specialists (usually comprised of a psychologist, a pedagogical specialist, and sometimes a speech therapist). A psychologist from the team uses standardized tests for detecting reading problems. However, systematic screening for dyslexia or other difficulties that affect reading is not available.

Special Education

In recent years, special attention has been paid to children with special needs. Although at one time they were mainly segregated in special institutions, students with special needs now are integrated into regular classrooms.¹⁵ However, approaches differ in Slovene schools depending on school policy, the quality of the individual school's team of specialists, the school principal, and the individual teacher of the child with special needs.

Some children receive assistance in the classroom from someone from the school's team of specialists during regular classes. Some children take special hours outside of their regular classes, but still in the school, while others receive assistance outside of school after their regular classes.

Teachers and Teacher Education

Teacher Education and Training

Elementary school teachers must complete a university program and receive a diploma. There are two types of teachers at the elementary school: class teachers and specialist teachers. Class teachers for grades 1 to 3 teach all subjects. Class teachers also may teach grades 4 to 6, with the exception of foreign languages and sports, which are taught by specialist teachers. Specialist teachers teach individual subjects in grades 7 (or 6) to 9.

Class teachers must study at faculties of education (there are three such faculties in Slovenia as of 2007). Specialist teachers (e.g., chemistry, geography, or mathematics) may choose a university program outside of a faculty of education. However, they must take certain pedagogical courses during or after their study at the university.

Basic education for first-cycle teachers is obtained through a bachelor's degree program from a university faculty of education with a subspecialty in classroom teaching. The courses take 4 years to complete, and a thesis is required to obtain a diploma. Teaching certificates are available only through the faculties of education. No alternate way of attaining a certificate is available. Teachers are required take an external examination after 1 year of teaching. This examination serves as a certificate of formally competent or independent teaching. With this examination, teachers demonstrate teaching knowledge and familiarity with the Slovene legislation on education.

Teacher In-service Education

In-service education is not mandatory for primary school teachers. However, because teachers have the right to educate themselves, school principals must help teachers pursue further education. In fact, the great majority of the teachers exercise this right, which allows them to gain extra credits for promotion.

Examinations and Assessments

National or Regional Examinations

National examinations are offered at the end of each 3-year cycle of elementary school. At the end of the first cycle there are two examinations, one in mathematics and the other in Slovene language. National examinations are voluntary and do not affect the final report about the child's progress in a specific grade or decisions about whether a student will be promoted to the next grade. However, the national examinations at grade 9 are required for students competing for entry into more popular upper-secondary schools, because acceptance into an upper-secondary school is based on examination results. The system currently is being revised.

Standardized Tests

Standardized tests are not available for use in the classrooms.

Monitoring Individual Student Progress

Monitoring and reporting individual student progress varies across grades. Students are assessed by their teachers based on objectives written into the curriculum and assessment procedure regulations. Student achievement is assessed continuously in written, oral, and applied forms, as well as in written tests.¹⁶ There are rules about how many times per year a student must demonstrate their knowledge in both written and oral forms. Rules vary across the grades and are quite stringent, leaving teachers with limited decision-making authority in terms of classroom assessment.

During the first 3 years of elementary school (grades 1 to 3), students do not receive marks or grades regarding their current knowledge or achievement on written tests.



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Instead, teachers assemble portfolios of students' work and write reports twice a year (in the middle and at the end of the year). Grades in these written reports are descriptive, and not letter grades. Reports at the end of the year are standardized and document how well a student did during the school year.

At grades 4 to 9, students receive numerical grades for every written or oral test, in addition to written reports twice a year. Reports at all grades function as certificates. School certificates at the end of elementary school (grade 9) are very important instruments in Slovenia, because they determine whether a child is eligible to proceed with his or her education at a desired higher-secondary school.

Upon request, once a month, parents can learn about their child's knowledge and overall performance from the teachers or school specialists.

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South Africa

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Language and Literacy

There are currently 11 official languages designated by the constitution of South Africa. English and Afrikaans were the only two official languages in South Africa until the new South African Constitution, formed as a result of the dissolving of the apartheid government in 1993, designated that the nine most prominent African or indigenous languages become joint official languages together with English and Afrikaans. The most commonly spoken language is isiZulu (24%), followed by isiXhosa (18%) and Afrikaans (13%). The remaining languages are English (spoken by fewer than 10%), isiNdebele, Sepedi, Sesotho, Setswana, SiSwati, Tshivenda, and Xitsonga.¹ In addition to the official languages associated with the Khoisan population, such as !Xun and Kwedam, also are commonly spoken.

The Constitution of 1996 entrenched a commitment to make provisions for the right of all children to be educated in their own language. Accordingly, the Department of Education's Language-in-Education Policy recommends that the student's mother tongue be used for teaching and learning wherever possible, especially in the foundation phase (grades R to 3).² However, this recommendation is not uniformly implemented, nor is it standard practice that every student is educated in his or her first language.

The majority of schools provide instruction in grades 1 to 3 in one of the African languages, with the remaining schools providing instruction in English and Afrikaans. Nevertheless, because of migration to urban areas, increasing the diversity of African languages spoken and the large numbers of immigrants from other African countries speaking either other African languages or French or Portuguese, many African students do not receive instruction in their first language. In many urban areas, such as Johannesburg, where all official languages co-exist alongside foreign languages, children often go to a school where their language is not used as a language of learning. Also, languages previously not spoken in particular regions are becoming commonplace, and the local schools in these regions lack teachers from those language groups.

Language of instruction issues are further complicated at the end of the foundation phase, as the current Language-in-Education Policy calls for a switch from the mothertongue to English as the language of the educational curriculum and instruction.³ Recently, planned alterations to the current policy have been announced, including a proposed amendment to extend mother-tongue education another 2 years.⁴ If drafted into policy, this will mean that the switch to English will likely occur at the beginning of grade 6.

Emphasis on Literacy

Currently, the National Department of Education is in the early stages of the development of a National Literacy Strategy to combat the problems with literacy in the country. There are a number of non-governmental organizations that support reading and teach literacy to all ages around the country.

There also are partnerships between government, non-government organizations, and the private sector to promote literacy. One such partnership is the Bridges to the Future Initiative, a public-private collaboration that includes the Department of Education, Multichoice Africa Foundation, SchoolNet South Africa, University of South Africa, and the International Literacy Initiative that helps provide skills for out-of-school youth and adults in adult education. The initiative includes the development of community learning and technology centers for lifelong learning and income generation, the development of tools to improve basic education and literacy through teacher training in selected content areas, and the use of information communications technology (ICT) for human development in areas such as health, agriculture, and prevention of HIV and AIDS.⁵

There are a number of regional newspapers concentrated in and around most city centers and an increasing number of national newspapers being produced. Traditionally, libraries have been concentrated in urban areas and particularly in suburban areas where white citizens had greater access to them. More recently, there has been a greater realization of the role of libraries and a concerted effort to expand library facilities into township areas and increase the major centers' library facilities and book supplies.

Overview of the Education System

South Africa has a higher school enrollment rate than most developing countries, with more than 90% of over 12 million potential students attending schools. In 2006, the numbers of male and female students attending school was almost equal (5,913,189 and 5,895,188 students, respectively). South Africa has some 386,600 teachers and about 26,000 schools, of which about 20,000 are primary schools (grades R-7). Only a small number of schools (about 1,100) are private.

Schools are not all funded to the same degree, largely as a result of the previous apartheid policies on funding according to the racial groupings in the school. Provinces vary in their capacity to provide support to schools, and in some there has been significant migration to major urban areas. Many schools are severely under-resourced, although great strides have been made to improve conditions in many schools. Approximately 40% of schools are categorized either as "poor" or "very poor". Of these, 20% exempt students from paying school fees (only introduced in 2006). About 60% of South African schools have electricity and 67% have telephone lines.

Although there is a national education department, education is largely a provincial responsibility. Within each of the nine provinces, district offices provide support and

advice directly to schools, particularly regarding curriculum delivery. Increasingly, there is discussion about this decentralized model and the extent to which it should be more centralized. A move toward greater centralization is underway in the examination system, where previously all examinations were set by the provincial authorities. As a result of this change, a number of examinations in core subjects were set nationally. The number of examinations set nationally has increased gradually over the past 5 years.

The National Department of Education designed and developed a core curriculum. Curriculum and content development is a function of specialist divisions within the departments of education. While various provincial departments interpret and implement the curriculum, individual schools and provincial departments select instructional materials and examinable content.

A new curriculum (known originally as Curriculum 2005) was first introduced in South Africa in 1997 and was subsequently placed under review until 2003 when it was adopted as the Revised National Curriculum Statements. The revised curriculum adopts an outcomes-based approach to teaching and learning that links various areas of inquiry, reduces the emphasis on factual information, and encourages teachers to spend more time helping students to develop useful concepts, skills, values, and attitudes. The assessment qualifications, competency, and skills-based framework is aligned to the National Qualifications Framework.

Structure of the Education System

The Minister of Education heads the National Department of Education along with a Director General, who oversees the management of the department. There are also nine provincial heads of education. District managers report to these provincial Heads, while school principals report to the district offices.

Primary schools comprise grades 1 to 7, and secondary schools comprise grades 8 to 12. However, in some provinces there are also middle schools with grades 7 to 9, and in isolated areas lower-primary schools with grades 1 to 3 only. However, the structure of the curriculum straddles the primary and secondary schools, as is evident in the structure of compulsory education presented in Table 1.

Phase	Grades	Age in Years	Status of Education	School Level
Preprimary	Grades 000, 00, 0 (also called Reception Year, or Grade R)	4–6	Not compulsory	Preprimary
Foundation	Grades 1–3	7–9	Compulsory	Primary
Intermediate	Grades 4–6	10-12	Compulsory	Primary
Senior	Grades 7–9	13–15	Compulsory	Primary (to grade 7) Secondary (grades 8–9)

Table 1 Structure of Compulsory Education in South Africa



The South African Qualifications Authority Act of 1995 is responsible for the quality assurance of all South African education and training. The South African Qualifications Authority is accountable to the Minister of Education in association with the Minister of Labor. The *National Qualifications Framework* is the quality assurance system for the development and registration of standards and qualifications. A second key organization is *Umalusi*, a statutory organization, established by the General and Further Education and Quality Assurance Act in 2001, that monitors and improves the quality of all education below the level of higher education. Umalusi issues certificates at a number of exit points, controls norms and standards of curricula and assessment, and conducts assessment. A third organization is the South African Council on Higher Education on all issues related to higher education, while the Higher Education Quality Committee is responsible for the accreditation and quality assurance within higher education and training.

The South African Qualifications Authority has a 10-level framework (see Figure 1), with Level 1 being the lowest and Level 10 the highest and most complex. Level 1 has three certification levels for Adult Basic Education (ABET) which lead to the General Education and Training Certificate. The ten levels are grouped into three bands:

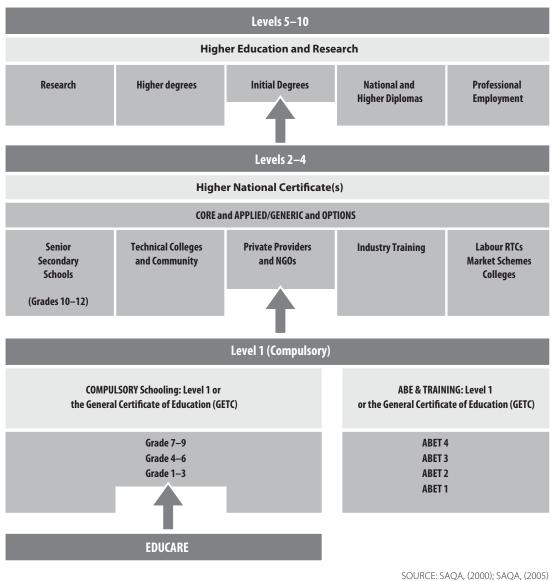
- General Education and Training (GET) comprising Level 1 and lower;
- Further Education and Training (FET) comprising of Levels 2 to 4; and
- Higher Education and Training (HET) and research, covering Levels 5 to 10

The *National Qualifications Framework* divides education and training into 12 fields and the South African Qualifications Authority instituted a National Standard Body for each field. Composed of national stakeholders with a specific interest in a particular field, the National Standard Bodies determine the number and size of the Standard Generation Bodies responsible for generating qualifications and unit standards for subfields within the 12 fields. Each student must achieve a required number and range of credits at a specific level of the National Qualifications Framework to obtain a qualification.

Role of Preprimary Education

The Department of Education encourages preprimary education, although attendance is not compulsory and is not available at many ordinary primary schools. Preprimary education, also called grade R, includes 3 years: Grade 000, Grade 00 and Grade 0. Children may enter grade 000 in the year they become 4 years old. However, at the most, only grade 0 may exist in schools attended by black children, and, thus, the lack of widespread preprimary education disadvantages the majority of children in South Africa. Current discussion in the country reflects the need for the urgent expansion of preprimary education to reduce the widening gap between poor children denied access to preprimary education and those from higher socio-economic backgrounds.

Figure 1 Structure of Education and Training in South Africa: The National Qualifications Framework (Revised 10-level Framework)



Reading Curriculum in the Primary Grades

Reading Policy

The goal of the General Education and Training reading curriculum is that the student is able to "read and view for information and enjoyment, and respond critically to the aesthetic, cultural, and emotional value of texts." ⁶ The reading and viewing outcome is in the language learning area together with other expected language outcomes associated with overall language competency: (1) listening, (2) speaking, (3) writing, (4) thinking and reasoning, and (5) language structure and use.⁷

In the foundation phase (grades 1–3), curriculum policy reflects the guiding principle that language development involves a gradual process of improvement, and reading for meaning is the primary goal of literacy instruction.⁸ The policy acknowledges that reading (including multimedia texts) is essential for language development, learning to



write, personal enjoyment and growth, and learning about the world. The curriculum emphasizes a balanced approach to literacy development, beginning with children's emergent literacy and the reading of "real" books and writing for genuine purposes. Attention is given to phonics as well as other techniques and strategies that help students to read with increasing accuracy and support reading for understanding.

Summary of National Curriculum

According to the revised curriculum statement, the focus of the foundation phase is to ensure that all students learn to read.⁹ In this regard, it is recognized that classroom reading instruction should include the skills students need to decode written text, as well as strategies that help them read with understanding within the context of a print-rich environment. Students should be taught to interpret pictures and other graphics that will help them make sense of multimedia texts. Furthermore, they should know how to locate and use information, follow a process or argument, summarize what they have read, build their own understanding, and adapt and demonstrate what they learn from their reading. Reading will encourage students to experience a wider world than the context in which they themselves live. As part of this reading, relevant social issues are encountered and explored.¹⁰

According to the assessment standards for reading and viewing in grades R to 3, students should be able to: 11

- Begin to recognize and make meaning of letters and words (grade R);
- Begin to develop phonemic awareness (grade R);
- Role-play reading (grades R-1);
- Use visual clues to make meaning (grades R-3);
- Make meaning of written text (grades R-3);
- Recognize letters and words, and make meaning of written text (grade 1);
- Develop phonemic awareness (grades 1 and 2);
- Read for information and enjoyment (grades 1-3);
- Recognize and make meaning of words in longer texts (grade 2);
- Consolidate phonemic awareness (grade 3); and
- Read texts alone, and use a variety of strategies to make meaning (grade 3).

Students will attain the reading and viewing outcomes once they are able to "understand in a simple way some elements of stories" and "some elements of poetry on social issues" by grade 4.

Mandated Materials for Reading Instruction

There are no mandated materials specified in the national curriculum guidelines for reading instruction.

Reading Instruction in the Primary Grades

Instructional Time

The formal teaching time allocated for each learning program in the foundation phase is 22 hours and 30 minutes per week in grades 1 and 2, and 25 hours in grade 3. Overall, the division of time allocated for each of the main learning programs is 40% for literacy, 35% for numeracy, and 25% for life skills.

In the intermediate phase, 26 hours and 30 minutes of formal teaching is allocated per week. The overall curriculum is comprised of eight learning areas, with the following percentages of time allocated weekly for the four main areas: 25% for language, 18% for mathematics, 13% for natural sciences, and 12% for social sciences. The percentage of time for each of the other four areas-technology, economic and management science, life orientation, arts and culture—is 8%.

Instructional Materials

Although the Department of Education recommends suitable texts at the foundation phase, such recommendations serve only as examples and do not preclude teachers from selecting additional texts from available resources. Recommended texts for grades 1 to 3 include fiction, such as picture books, simple descriptions, stories, books, poems, and comics. Also recommended are simple informational texts, such as lists or rosters, instructions or rules, simple word problems and puzzles, games, simple charts, diagrams and bar graphs, invitations and greeting cards, newspapers and magazines, forms, table of contents and indexes, diaries, mind maps, simple book reviews, and pamphlets.¹²

Grade 4 guidelines advocate the use of age- and grade-appropriate newspaper clippings, books, brochures, magazines, and poems. Specifically, the content of the texts needs to be understandable, while providing a level of challenge to students in terms of vocabulary, level of sophistication, and ideas. As students progress through the intermediate phase (grades 4-6) into the senior phase (grades 7-9), content is introduced at an increasing level of complexity. Recommended texts vary from short written pieces to full-length literary works in a variety of genres (e.g., novels, poems, plays, and folklore). In the intermediate phase, shorter texts are to be chosen in both the student's home language and additional languages.¹³

Use of Technology

In 2004, the Ministry of Education published a report outlining the strategic, pedagogical, and developmental aspects of implementing e-Education in South Africa. The strategic objective of the e-Education policy, regarding ICT, states that:

Every South African manager, educator, and student in the general and further education and training bands will be ICT-capable (that is, use ICT confidently and creatively to help develop the skills and knowledge they need as lifelong students to achieve personal goals and to be full participants in the global community) by 2013.¹⁴





Schools with ICT are expected to use it to enhance their students' learning. Teachers are encouraged to use ICT to enhance instruction, management, and administration; to access ICT resources that support curriculum delivery; and to connect to ICT infrastructure. The policy also stipulates the involvement of the community by allowing after-hours community access to the schools' computer facilities. Communities are responsible for supporting, sustaining, and maintaining the facilities.

The implementation of these strategic policy goals necessitates a multi-year implementation strategy in three phases: 1) Enhancement of a system-wide and institutional readiness to use ICTS for instruction and administration, 2) A system-wide integration of ICTS into instruction, and 3) ICTS should be integrated at all levels of the education system.

The extent of the use of ICT still depends on individual schools. In the provinces of Gauteng and the Western Cape, policies exist to implement ICT in every school and implementation has begun. Outside these provinces, ICT in schools is rather limited. In most cases, those schools with ICT are better resourced schools or under-resourced schools that have received ICT from donors.

Role of Reading Specialists

No official information is available about reading specialists. Occupational therapists are employed in some of the more affluent schools or have established links with well-resourced schools, particularly in urban areas. The majority of children in South African schools do not have access to remedial assistance in reading.

Second-language Instruction

The Revised National Curriculum Statement for grades R to 9 specifically advocates an additive approach to multilingualism in schools.¹⁵ This policy is based on a transitional bilingual education model in which students make the transition from a bilingual program to English monolingual education. In classrooms where students have to make the transition from another language to English as the main language of instruction in grade 4, English must to be introduced as an additional subject in grade 1. The students' mother tongue should thereafter be continued for as long as possible.¹⁶

Reading Disabilities

Although mainstream schools are the norm in South Africa, a limited number of special education schools exist. These include schools for students with special education needs, such as those with learning disabilities, hearing or sight impairments, and certain cognitive or developmental disorders. There is a move, however, toward the gradual implementation of inclusive educational practices in all schools in South Africa.

Teachers and Teacher Education

Teacher Education and Training

Many teachers currently in the system obtained a variety of qualifications during the apartheid period. These most often varied according to their racial grouping, since

there were different teacher training colleges and universities for each racial grouping. The qualifications could be 2-year certificates with the equivalent of a school-leaving certificate which were most often obtained by African teachers. There were 3-year Colleges of Education diplomas for mostly African teachers (some colored and Indian), as well as institutions offering 4-year diplomas for white, colored, and Indian teachers. Finally, there were a number of universities offering 3- and 4-year degrees (some being a 3-year undergraduate degree plus a 1-year postgraduate certificate or diploma in education), depending on the institution and racial grouping. Generally, however, white teacher trainees had access to and benefited from the best resourced institutions and generally better training. In the latter half of the 1990s, most colleges of education were closed, merged with universities, or refocused to other disciplines.

Currently, there are two routes required to qualify as a professional teacher— Bachelor of Education (B.Ed.) degree or a postgraduate certificate of education (PGCE). The bachelor's degree program, in either early childhood development or foundations or intermediate phase teaching, extends over at least a 4-year period (eight academic semesters) at a tertiary training institute. The postgraduate certificate of education, either at the primary or secondary level, is undertaken after the student has obtained a bachelor's degree (of 3 years).

Requirements for training in teaching reading include courses in language across the curriculum, classroom literacies, early literacy, literacy programs, and cross-curricular reading skills. Registration with the South African Council of Teachers is mandatory to apply for a teaching position. However, there are teachers currently practicing without this registration.

Teacher In-service Training

Non-governmental organizations are working to promote literacy. Prior to 1994, these organizations were the major supporters of in-service teacher training, although now most of the funding from donors passes through the government, and many non-governmental organizations have closed. Currently, some organizations work in collaboration with the Department of Education, which offers much of the in-service training to public school teachers.

Examinations and Assessments

National Examination

National examinations are administered at the end of schooling (grade 12), and are written by almost half a million students annually. These examinations are high stakes at the school level and have been used as the only measure of the quality of education prior to the inception of national assessments and international studies. The Department of Education currently is planning to introduce examinations at the end of grade 9 (end of compulsory education).





Standardized Tests

Standardized tests are not readily available. Systemic Evaluation has been introduced as a series of national assessments every 3 years at grades 3 and 6, with plans to administer an assessment at grade 9. Systemic Evaluation provides and implements a national framework for the evaluation of the education system and establishes benchmarks from which performance can be interpreted. The assessments focus on language, mathematics, and science, and skills, attitudes, and values are assessed in line with the assessment practices of Outcomes Based Education.¹⁷

Monitoring Individual Student Progress

Teachers are encouraged to report progress on learning outcomes regularly to students and parents. Subject record sheets, which include the learning outcomes assessed, are used to record the performance of students. A combination of marks, codes, and comments is used for both recording and reporting purposes. The Department of Education specifies the following rating codes and percentages for grades R to 6: Code 4—Outstanding or Excellent (70–100%), Code 3—Satisfactory (50–69%), Code 2—Partial Achievement (35–49%), and Code 1—Not Achieved (1–34%).

The overall level of performance is reflected in report cards, which form one of the main communication channels between the school and the parents. The Department of Education stipulates that teachers report regularly to students and parents not only in the form of report cards, but also at parents' meetings, during school visitation days, and through parent-teacher conferences or phone calls. The school determines which reporting strategies are to be used.¹⁸

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Spain

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Language and Literacy

Spain is a country historically characterized by rich cultural and linguistic diversity. This is reflected legally in the Spanish Constitution of 1978 and in the Statutes of Autonomy of the 17 autonomous communities and autonomous cities of Ceuta and Melilla across which the authority in Spain is territorially distributed.¹ The official language is Castilian, although some autonomous communities have another official language in addition to Castilian. Thus, the Constitution expressly recognizes that languages of Spain, in addition to Castilian, shall be official languages in autonomous communities in accordance with their statutes. These co-official languages are Catalan, Galician, Valencian, and Basque.

The language of instruction in all the autonomous communities is Castilian, with the exception of those communities that have their own language and establish regulations regarding the use of the two official languages in teaching. For example, in Galicia, both Castilian and Galician are used, with the mother tongue used predominantly in preprimary and the first course of primary education. In the Valencian Community, Castilian or Valencian is used, depending largely on the geographical location of the school. Catalan is used in Catalonia, as well as in the Balearic Islands along with Castilian. In Navarre and the Basque country, Castilian and Basque are used.

As in other European countries, the number of schools in Spain that have adopted a Content and Language Integrated Learning curriculum, in which some of the curriculum subjects are taught in English, has grown considerably in the past decade.

Emphasis on Literacy

In the past decade, the Ministry of Education and Science and the education authorities have sponsored numerous promotional activities to encourage reading and the use of school libraries. The Ministry organizes an annual National Best Practices competition to revitalize and encourage innovation in school libraries, and to help children and young people develop solid competencies in reading and processing information, especially through the use of new technologies. The goal of this competition is to turn the school library into a dynamic space for resources and information services that support the school's curriculum and educational projects. The role of the library is to facilitate interdisciplinary projects and encourage teamwork among students and teachers, inspiring classroom activity and participation in the programs and projects of the school. In addition, there are several collaboration agreements between the Ministry of Education and Science and the Education Advisory Boards of the autonomous communities for improving school libraries.

Overview of the Education System

The Spanish Constitution of 1978, in accordance with the autonomous territorial structure of the State, has allowed for a high degree of decentralization of education. The public administration is responsible for overseeing legislation, basic structure, and foreign relations to guarantee the unity of the education system. The autonomous communities are responsible for all other aspects of the education system, such as financial management, and management of personnel, schools, and curriculum in their respective territories.

The process of transferring responsibilities to the autonomous communities concluded in 2000. Subsequent education legislation has attempted to reconcile this distribution with the inter-regional cooperation necessary to guarantee a coordinated effort in developing educational policies throughout the state. The Organic Law on Education of 2006 guarantees the necessary basic homogeneity and unity of the education system and highlights the broad legislative and executive frameworks available to the autonomous communities to achieve the goals of the education system.² The Law includes a proposal for regional cooperation among the education authorities in order to develop projects and programs of general interest, share information, and benefit from best practices.

According to provisional statistics from the Ministry of Education, public expenditure on education in 2006 totalled 43 million Euros (4.5% of the Gross Domestic Product). In 2004 this expenditure was distributed as follows: preprimary, primary, and special education, 31%; secondary education, 30%; university education, 23%; special system of education, adult and other education (initial vocational training, administration and associated activities), 13%; and grants, 3%.³

In the 2005–06 school year, almost 7 million students were enrolled in all state and private schools in non-university education. In the 2004–05 academic year, the average number of students per teacher was 14 in primary education, 11 in secondary education, and 12 in university education.⁴

Structure of the Education System

The basic structure of the Spanish education system was established in 1990 by the Organic Law on the General Organization of the Education System.⁵ The system is organized into stages, cycles, years, and levels of education. The levels of education are preprimary (o to 6-year-olds), primary (6- to 12-year-olds), compulsory secondary (12- to 16-year-olds), baccalaureate (16- to 18-year-olds), and vocational (intermediate level, 16- to 18-year-olds, and higher level, over 18).

Primary and compulsory secondary education form Spain's basic education which is compulsory and free of charge, and comprises 10 years of schooling, generally from ages 6 to 16. Secondary education is divided into compulsory secondary education and postcompulsory secondary education. The latter includes the baccalaureate, the intermediate level of vocational education, the intermediate level of vocational education in arts and design, and the intermediate level of sports education.

Higher education includes university education, higher arts education, the higher level of vocational education, the higher level of arts and design, and the higher level of sports education.

Schools are classified according to whether they are state or private schools. State schools are owned by a public authority. However, the vast majority of private schools also are publicly funded, since the state finances their operational costs under the general system for grant-maintained schools in return for the public education service they provide to society.

The primary stage comprises three cycles of 2 academic years each, and normally includes students, ages 6 through 12. The goal of this stage is to provide all students with an education that allows them to consolidate their personal development and their own well being, as well as to acquire basic cultural skills relating to oral expression and comprehension, reading, writing, and numeracy. Primary education also focuses on the development of social skills, work and study habits, and creative and emotional growth. The education provided in this stage must integrate different experiences and knowledge, as well as adapt the instructional pace to individual students' needs. The Organic Law on Education has established objectives which describe the student competencies to be developed for the primary stage.

The primary stage places special emphasis on responding appropriately to student diversity and supporting individual students, preventing learning difficulties, and putting remedial mechanisms into place as soon as difficulties are detected.

Role of Preprimary Education

The preprimary stage of education is not compulsory. It is organized into two cycles (ages o to 3, and 3 to 6), the second of which is free of charge.

Reading Curriculum in the Primary Grades

Reading Policy

Over the course of the primary stage, students develop a general awareness of the communicative practices necessary to live in 21st century society. The goal of instruction in the area of language and literature is for students to achieve competence in the linguistic skills of speaking, listening, taking part in conversations, reading, and writing. The main purpose of the language and literacy curriculum is to introduce students to reading and understanding literary texts. The starting point for linguistic education is the use of language that students have already acquired at the beginning of the primary stage. The role of primary education is to broaden this linguistic and communicative competence so that students are able to participate in the different social spheres in which they will become involved.

Article 19 of the Organic Law on Education, which is applicable throughout the country and binding upon the entire state, requires a period of time to be devoted daily



to reading instruction to foster positive reading habits. A subsequent decree on the core curriculum for primary education established a period of at least 30 minutes daily. Article 19 also states that, even though reading comprehension is specifically included in the area of language and literature, it must be addressed in all areas of the curriculum. Finally, Article 113 makes it compulsory for all schools to have a school library.⁶

Summary of National (or Autonomous) Curriculum

Reading is included in the language and literature section of the national curriculum. The law defines "curriculum" as all the objectives, key competencies, content, pedagogical methods, and assessment criteria for each type of education. The basic content of the core curriculum for Language and Literature requires 55% of total instructional time for autonomous communities with a co-official language, and 65% for those that do not. Even though each autonomous community develops and defines the curriculum for its region, the core curriculum focuses on the social use of language in different contexts: private and public, family, and school. The content has been structured into four blocks:

- Listening, speaking, and discourse;
- Reading and writing;
- Literary education (e.g., promoting reading for enjoyment, introducing students to acting and role playing, both for personal and group experiences, and fostering positive reading habits); and
- Knowledge of the language and linguistic features.

The teaching team arranges the sequence of these contents throughout the period of the cycle. When the general curriculum is defined for each autonomous community, the teaching staff is provided with teachers' manuals, instructional materials, and resources for illustrative purposes.

Reading Instruction in the Primary Grades

Instructional Time

The total amount of instructional time in primary education is 25 hours per week, 16% of which is devoted to language instruction. This percentage rises to 26% in autonomous communities which have their own language. According to the law, 30 minutes should be devoted daily to reading across the curriculum. Thus, the 10-25% of the total amount of time to language that is devoted to reading instruction is only an approximate figure.

Instructional Materials

In addition to textbooks, it is common practice for schools to use books that include reading comprehension activities. Also, classrooms usually have sets of children's literature anthologies. All books made available for the teaching staff (textbooks, teachers' manuals, etc.) are for illustrative purposes only and are not at all prescriptive.

Use of Technology

In primary education, one of the competencies specified in language and literature instruction is to use the media of everyday communication and information communications technology to obtain, interpret, and value different opinions and information. The content specified in each block, for all cycles, includes references to relevant elements of new technologies, either for support or as a source of information to develop comprehension and expression.

Role of Reading Specialists

There are no reading specialists in primary education. The language and literature teacher, normally the classroom teacher, is responsible for reading instruction, even though other subject teachers also cover reading comprehension.

Some autonomous communities have a *Plan for the Promotion of Reading* and the *Development of Reading Comprehension* which states that primary schools must appoint a reading coordinator and conduct a needs analysis in terms of instruction, materials, and library resources. The plan also establishes a system for providing advice and information to teachers, developing initiatives, collaborating with support centers, scheduling the use of the library and evaluating the plan itself.

Second-language Instruction

In communities with more than one official language, the language most commonly spoken is used for instruction, although some subjects may be taught in another co-official language. For example, in Catalonia, Catalan is the language normally used for instruction, and in Galicia, it is compulsory to teach some subjects or areas of study in Galician.^{7,8} In the Valencian Community, schools can choose one language of instruction or another (Castilian or Valencian).⁹ In the Balearic Islands, the use of the Catalan language as spoken in the islands is equivalent to the use of Castilian.¹⁰

In Navarre, different models determine the language of instruction.¹¹ In Model G, the language of instruction is Castilian. In Model A, instruction is in Castilian. The Basque language is studied as a subject at all levels, and is compulsory in the Basque-speaking area (unless exempt) and optional in the mixed areas and non-Basque-speaking areas.¹² In Model D, instruction is in Basque, and Castilian is studied as another subject at all levels. Lastly, schools which follow the MEC British Council model are bilingual schools in Castilian and English.

In the Basque country, the languages of instruction are Basque and Castilian, depending on the linguistic model followed by the school. Thus, Model A establishes instruction in Castilian with Basque as a second language, while in Model D it is the reverse. There are two other models in the Basque Country, Model B, in which both languages have equal weighting and Model X, in which all the instruction is in Castilian.

The study of a foreign language is compulsory for all students in primary and secondary education. In the majority of schools, the first foreign language that students



study is English. In addition, in the third cycle of primary education, the education authorities can add a second foreign language.

Effective Practices

Most effective practices for fostering reading and introducing students to books are those of a systematic and ongoing nature, such as reading books (preferably complete texts) and taking part in oral or written activities for reading comprehension, and the interchange of meanings, opinions, and ideas about texts. Occasional activities (exhibitions, meetings with authors, reading promotion campaigns) reinforce the day-to-day work but do not in themselves guarantee the habit of reading.

Reading Disabilities

Diagnostic Testing Screening

The classroom teacher is responsible for assessment and making the first diagnosis based on observations and specific tests. When the disabilities are considered serious, the educational psychologist intervenes.

Instruction for Children with Reading Disabilities

In general, reading instruction begins when students are in the preprimary stage of education, and reading abilities are strengthened at the end of the first cycle in primary education. The fact that Castilian is written as it is pronounced greatly facilitates the learning process of reading and writing.

In some autonomous communities, specific guidance is provided to improve reading comprehension, and students with disabilities are provided with specialist support in specific classrooms in accordance with the timetable arrangements in the school.

Special Education

In accordance with the Organic Law on Education, the education authorities must provide the necessary resources for students who require special education because of specific learning disabilities, high intellectual abilities, late integration into the education system, personal problems, or academic record, so that these students can achieve the maximum possible development of their personal abilities and the general objectives established for all students. From the time their needs are identified, students with special needs are provided with comprehensive support governed by the principles of standardization and social inclusion. Furthermore, these students are guaranteed equality of access to education and continuance in the education system, as necessary in the different stages of education.

Teachers and Teacher Education

Teacher Education and Training

At present, it is necessary to have successfully completed a 3-year diploma course at a university in order to become a primary teacher. Trainee teachers spend several months in schools in both the second and third years of the education program.

Spain

To be certified as a teacher in the state education system, it is necessary to pass a competitive state examination and complete a 1-year course as a civil servant trainee teacher under an experienced teacher tutor, and receive a positive assessment from the school leadership team. To become a teacher in the private education sector, it is necessary to have an appropriate degree and a work contract. Universities provide education leading to degrees which are recognized throughout the country, subject to the generally applicable regulations established by the government. Degrees are issued on behalf of the monarch by the rector of the university in which they were obtained.

Teacher in-service Education

Teachers are provided with ongoing in-service education through Teacher Training Centers or state-subsidized training plans for language teachers.

Examinations and Assessments

National or Regional Examinations

The Institute of Evaluation, in collaboration with the education authorities, prepares longterm plans for the evaluation of the education system. Within this framework, general evaluations are carried out to obtain representative data both on the students and the schools in the autonomous communities and of the entire country. These formative evaluations of the key competencies in the curriculum are carried out in the fourth year of primary education and the second year of secondary education.

The education authorities, within the framework of their respective competencies, also carry out whatever evaluation plans they consider appropriate. The autonomous communities have the responsibility to evaluate schools, taking into account the socioeconomic and cultural contexts of the parents and the students enrolled, the school environment, and the resources available. Within this same framework and for the purpose of improving a school's performance, they also may prepare plans for the evaluation of school leadership.

Monitoring Individual Student Progress

Primary teachers evaluate individual student progress. The evaluation of student achievement, in reading as well as other subjects, is ongoing and global and takes into account the student's progress in all areas and elements of the curriculum. The evaluation criteria specified for a content area are used as the basis for determining the level of the key competencies attained. When a student's progress is not adequate, remedial measures are established. These measures should be adopted at any time in the cycle as soon as the difficulties are detected, and are designed to guarantee the acquisition of essential skills in order to continue the educational process.

The schools use the results of the evaluations to plan reinforcement measures so as to guarantee student achievement in the key competencies during the third cycle of primary education. In addition to evaluating instruction and teacher performance, the results also allow, where appropriate, the actions developed in the first two cycles of the stage to be analyzed, evaluated, and redirected.



At the end of the primary stage, a report is prepared for each student on the degree of acquisition of learning skills, in particular those which most affect their educational progress and any other aspects that are deemed relevant in order to guarantee individual support.

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Bo Palaszewski National Agency for Education

Sweden

Language and Literacy

Swedish is the majority language in Sweden, and, therefore, is spoken in all areas of society. Everyone has the opportunity to learn Swedish, as well as a foreign language and their mother-tongue or minority language.

There are five official minority languages: Sami, Finnish, Meänkieli, Romani chib, and Jiddisch. Among Nordic immigrants, the Finnish, with approximately 200,000 people, constitute the largest group. Fewer than 100,000 people speak the other Nordic languages.¹ Arabic, Persian, Spanish, and languages from the former Yugoslavia also are spoken in Sweden. Sign language is the first language of approximately 10,000 people, in addition to being the language of instruction at five schools that specialize in educating children who are deaf.² Since Sweden is a small country in terms of population and depends heavily on international trade, the use of English is widespread both in business and academia.

Emphasis on Literacy

There is a nationwide system of libraries open to the public, and almost all school children have access to a school library. Throughout the country there are a variety of governmental initiatives to promote reading literacy. For example, the Swedish Arts Council provides extensive support to promote different reading literacy projects, and the Swedish National Agency for School Improvement (Myndigheten för skolutveckling) organizes a network of local representatives for language development. Another governmental initiative is the publication of subsidized books through the program *A Book for All*. In connection with World Book Day, selected students receive their own copy of a novel. Furthermore, many local authorities give each newborn child a children's book.

Overview of the Education System

Parliament and the government define curricula, national objectives, and guidelines for state schooling in Sweden. The national budget includes grants to the municipalities for their various functions in regard to education. Swedish schools are goal directed, and the government guides education decisions by establishing goals in the Swedish Education Act that relate to curricula, course syllabi, and schedules.

Within the goals and frameworks, each individual municipality is free to decide how its schools should be managed. A local school plan must describe how schooling is to be

funded, organized, developed, and evaluated. The head of each school is obliged to draw up a work plan, in consultation with teachers and other staff, based on the curriculum, national objectives, and the municipal local school plan. In 2003, public and household expenditures on education, not including tertiary education, represented 4.5% of the Gross Domestic Product, 7% for all educational levels.³

Municipalities are obliged to organize and provide preschool for all children from the year they reach age 6 until they enter compulsory schooling. The Education Act stipulates that all children and young people are entitled to an education of equivalent value.⁴ All students enjoy this right, irrespective of gender, geographical place of residence, social background, or economic conditions. The Education Act also gives adults the right to an education. This can be provided through either municipal adult education or adult education for those who have a mental disability.

The Swedish National Agency for Education (Skolverket) monitors, evaluates, provides follow up, and supervises all aspects of the formal school system, as well as adult education. The Swedish National Agency for School Improvement supports local development of work quality and improvement of learning environments, promotes the development of professional competence among educators, and supports the widened use of information communications technology in education. It also is responsible for the national program for school leader education.

Structure of the Education System

The formal school system in Sweden consists of preschool, compulsory school (ages 7 to 16), and upper-secondary school (ages 16 to 19). The 40-week academic school year runs from the end of August to early in June.

The 9-year compulsory school is for all children between the ages of 7 and 16. If parents prefer, children may start school at age 6. Compulsory schooling can be national, municipal, or independent (friskolor), although more than 90% of all students attend municipal schools.⁵ These include compulsory schools; special schools for children with impaired sight, hearing, or speech; and schools for children with mental disabilities. Sami children, who belong to the indigenous population of Northern Europe, are entitled to education in Sami schools with an ethnic emphasis for the first 6 years of compulsory school.

Approximately 7% of students in compulsory school attend one of the independent schools that are open to all and approved by the National Agency for Education.⁶ Independent schools receive municipal grants based on the number of students per academic year. Instruction in independent schools shares the same goals as in municipal schools but may have a distinct profile. Independent schools often have a specialization that differs from municipal compulsory schools, such as a particular educational approach (e.g., Montessori or Waldorf), linguistic or ethnic orientation, or a specific religious character.

Nearly all students (98%) who attend compulsory school continue directly to uppersecondary school and complete their studies within 3 or 4 years.⁷ The majority of students attend municipal upper-secondary schools, while about one tenth attend independent schools. Upper-secondary school is divided into 17 different, 3-year national programs, all of which are intended to provide a broad-based education and result in general eligibility for further studies in higher education. In addition to the national programs, there also are specially designed and individualized programs. Upper-secondary schools for children with mental disabilities provide vocational education in specially designed national or individual programs similar to the regular upper-secondary school but with fewer programs available and a focus on training. The programs in the upper-secondary school for those with mental disabilities take 4 years to complete.

Role of Preprimary Education

Municipalities must provide parents with childcare and day care for children, ages 1 to 12. Almost all children, age 6, (95%) attend voluntary preschool classes designed to prepare them for the first grade of compulsory schooling. Children who have yet to start school or preschool classes can attend regular preschools, family day care, and open preschools. In the 2004–05 school year, some 77% of all children, ages 1 to 5, attended preschool. The preschool curriculum emphasizes the idea that language and learning are intertwined. A primary goal of preschool is to stimulate each child's language development, taking advantage of the child's curiosity to encourage an interest in the written language. Children with a mother tongue other than Swedish receive an opportunity to develop both their Swedish language and their mother tongue.

Reading Curriculum in the Primary Grades

General goals of schooling are outlined in the curriculum for preschool classes, compulsory schools, and leisure time centers. In the syllabi, the goals are categorized as "goals to aim for" and "goals to be attained" for each subject. Goals related to literacy development are stated in terms of those to be attained by the fifth year in school. Currently, however, the Swedish government has proposed introducing goals in the third year.

In studying Swedish, students have the opportunity to use and develop their ability to speak, listen, read, and write, as well as experience and learn from literature, film, and theater. Language and literature are of great importance in developing a sense of personal identity. The goals for learning Swedish also encourage the development of students' ability to speak and write well and foster their respect and understanding of different forms of expression in speech and writing.

Summary of National Curriculum

The syllabi for Swedish as a mother tongue and Swedish as a second language share the same overarching goals, while Swedish as a second language emphasizes the functionality of the Swedish language. The main difference between the two subjects is in the instructional approach.

In compulsory schools, the goals for Swedish specify that students should acquire knowledge of the Swedish language and its ongoing development, structure, origins, and history, as well as develop their understanding of why people write and speak differently.

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Students should develop the ability to read, understand, interpret, and experience different texts, and adapt their reading to the purpose and character of the text. Through exposure to literature and authors from different times and in different forms from Sweden, the Nordic area, and other parts of the world, students have an opportunity to understand cultural diversity and develop their imagination and desire to learn, as well as read on their own for personal enjoyment. Students also should learn the correct way to speak and write the language and have the confidence, desire, and ability to express themselves in many different contexts.

Through their writing, students should acquire an instrument for thinking, learning, and communicating. Students should deepen their insight into basic patterns and grammatical structures in the language, as well as develop their ability to apply the standards of written language in different contexts. Based on their own critical reflection and communication with others, students should develop their ability to improve texts they have written.

By the end of the fifth year in compulsory school, students should have attained the following goals:

- Read with fluency, understand events and meaning in fiction and nonfiction written for children and young adults, and be able to discuss their experiences from reading, as well as reflect on texts;
- Produce texts for different purposes as a tool for learning and communication;
- Give an oral presentation so that the contents are understandable and brought to life; and
- Apply the most common rules of the written language and the most common rules of spelling, as well as be able to use dictionaries.

Upon completion of grade 9, the reading skills attained correspond broadly with the definition of adult literacy used in the International Adult Literacy Study, "...using printed and written information to function in society, to achieve one's goals and to develop one's knowledge and potential." ⁸ Goals that students should have attained by the end of the ninth year in school include the following:

- Actively take part in conversations and discussions, as well as share the thoughts of others, and present work orally so that the contents are clear and understandable;
- Read literature appropriate to their age from Sweden, the Nordic area, and other countries, as well as read nonfiction and newspaper articles on general subjects, and be able to reproduce the contents coherently and reflect on what they have read;
- Reflect on and make connections between literary works and how people live and think, and reflect on authors' intent and the effect on the reader;
- Appreciate, reflect on, and evaluate the contents and means of expression used in pictures, films, and theater;

- Write different kinds of texts, by hand and using computers, so that the contents • are clear, applying the standards of written language; and
- Have knowledge of the language in order to observe both one's own and others' use of language.

Mandated Materials for Reading Instruction

In general, there are a rich variety of materials to use in reading instruction, limited only by the availability of financial resources. There are no standard lists or recommendations for educational materials at any level. Teachers are free to choose any reading series or graded readers available on the market, according to policies set by the local school authorities and existing financial circumstances. The same is true for other textbooks and instructional materials.

Reading Instruction in the Primary Grades

Reading instruction normally begins in first grade at age 7. Reading is not taught as a separate subject, although it makes up, combined with writing, a major part of the teaching of Swedish in the early grades. In teaching Swedish, language and literature are treated as a whole. For this reason, Swedish cannot be divided into predetermined parts, building upon each other in a given sequence. On the other hand, both reading and writing are seen as essential in all subjects. Therefore, teachers have an equal responsibility for students' development of literacy skills and must be aware of the importance of language for learning, although learning Swedish is their main responsibility.

In line with the decentralization of the school system, there are no overall rules regarding grouping for instruction. Some schools work in mixed-age groups particularly with 6- to 10-year-old students (grades 0-1 to 3). Others have homogeneous groups with regard to age. Grouping criteria vary in different subjects. Ability grouping only may be used occasionally, such as for beginning reading instruction. Typical class size in the lower grades ranges between 20 and 25 students per class, but there is wide variation among schools and municipalities in this regard.

Instructional Time

Swedish students are entitled to 1,490 hours of instruction in Swedish and Swedish as a second language throughout the nine grades of compulsory school. Schools decide how these hours should be distributed across the grades. Such wide limits of discretion apply to all subjects. Besides Swedish, English is compulsory from grade 4 or earlier in some schools, adding 480 hours to the total number of hours spent on language activities. Foreign language options in grades 6 or 7 comprise 320 hours, the most common being German, French, and Spanish.

Instructional Materials

By tradition, Sweden has a wide variety of high-quality children's books for all grade levels. Many teachers choose a model of working with beginning reading, which combines



children's books with graded readers and also uses the texts children have produced themselves either independently or in conjunction with books.

Use of Technology

A goal stated in the syllabus for Swedish instruction is to develop the student's ability to use computers as an aid and the ability to use different opportunities to obtain information. Through the use of technology, students should acquire knowledge of the language and the functions of the media, as well as develop their ability to interpret, critically examine, and evaluate different sources and their contents.

The use of technology in beginning reading varies widely, depending on the interest of teachers and the availability of financial resources at each school. However, various types of computer programs are available for all grade levels. At the lower grades, there are computer programs for training in language awareness, reading, and writing. The computer is used frequently as a writing tool. Students are encouraged from an early age to seek information on the Internet in working on various assignments. The computer is considered to be a particularly valuable tool in special education for students with reading and writing disabilities.

Role of Reading Specialists

Specialized reading instruction can be organized in a number of ways, depending on the reading specialists' assessment of students' needs. Specialists may opt for one-onone sessions for a number of hours per week, small-group instruction, or individual assistance within the classroom, depending on resources and personal preferences.

Second-language Instruction

Students with a mother tongue other than Swedish have the opportunity to take Swedish as a second language, regardless of their age. The goal is for students to acquire a functional mastery of the Swedish language comparable to that of students who have Swedish as a mother tongue. Ultimately, students should attain a first-language level in Swedish, since the ability to use Swedish in speech and writing is a prerequisite for students in their future lives and activities in a Swedish-speaking environment. Through Swedish as a second language, the school should provide students with experiences that help them develop their ability to speak and listen and also read and write in different situations.

Reading Disabilities

Instruction for Children with Reading Disabilities

The identification of students with reading difficulties has typically been a responsibility of the first-grade classroom teacher. In recent years, many municipalities have set up special education teams that offer advice to both teachers and parents, in-service training for teachers, and short-term assistance at local schools. In addition, there are regional centers with specialists who can diagnose dyslexia and other reading disabilities and give advice on instructional materials and aids. When dyslexia is diagnosed, the child has the right to get special assistance, in terms of materials, computer programs, and instruction.

Special Education

Most students with a need for special support are taught in regular classes in compulsory and upper-secondary schools. There also are a certain number of special remedial classes for students with functional disabilities, and students with social and emotional problems. A "special school" is a 10-year program for children who are deaf or partially deaf with secondary disabilities. The program adheres, as closely as possible, to the education children receive in regular compulsory schools. Compulsory schooling for students with learning disabilities comprises compulsory school and training school.

Teachers and Teacher Education

In the 2003–04 school year, 80% of compulsory school teachers were female.⁹ At uppersecondary school, there were equal percentages of male and female teachers. Most teachers work full time, with a student-teacher ratio of about 13 students per teacher.¹⁰ There has been a shortage of trained teachers throughout the 1990s, so that by the 2005–06 school year, 16% of the compulsory school teachers did not have formal qualifications to teach.¹¹

Teacher training in Sweden has undergone a number of reforms. After 1988 (and until 2001), there was no specialized training for the lowest grades. Instead, teachers were trained to teach grades 1 to 7, with an orientation either in mathematics and science or language and social studies. Further specialization was offered for teachers of grades 4 to 9 (with an overlap in grades 4 to 7) with three combinations of subjects: mathematics and science, Swedish and foreign languages, and social studies. In 2001, a new teachertraining program was launched, providing a high degree of individual choice with regard to the combination of subjects. All teacher training is conducted at the university level, which requires an upper-secondary school certificate (9 years of compulsory in addition to 3 years of upper-secondary school). Because of the general decentralization of the education system, universities have a high degree of freedom in arranging training in accordance with the framework set up by the government. A large part of training is arranged in mixed groups, where students choosing different subjects and age levels (6 to 18 years) study together, particularly in courses dealing with instructional matters and teaching practice. Teacher training takes from 3¹/₂ to 5 years to complete, with teachers of lower grades receiving the shortest amount of training and teachers of older students receiving longer training.

Because specialization in teaching literacy and mathematics in the early years has been optional until recently, teachers in grades 1 through 7 are not necessarily trained as reading teachers.¹² The majority of these teachers obtained at least some training as a part of pre-service education. In the new teacher-training program implemented in 2006, all teachers in grades 1 through 7 obtain training as reading teachers.

Teacher In-service Education

Teachers are expected to attend a minimum of 13 days (104 working hours) per year of in-service training. It is the responsibility of the school head to provide opportunities for this training. Courses, lectures, and study visits are provided by universities and



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other institutions, as well as by freelance consultants. A school or a school district also can organize tailor-made arrangements with universities for in-service opportunities. Teachers may apply for grants from the Swedish National Agency for School Improvement or various foundations to attend national or international conferences and meetings.

Examinations and Assessments

National or Regional Examinations

At the end of grade 9, national tests are administered to assess student achievement levels in three subjects: Swedish (including Swedish as a second language), English, and mathematics. The tests provide support for teachers in setting marks for the school-leaving certificate. Students are administered national tests in the same subjects at the end of the fifth grade. Although these earlier tests are not compulsory, they are widely used as an indicator of progress. The national tests in two subjects, Swedish and Agency for Education and updated regularly. National tests in two subjects, Swedish and Mathematics, are currently to be introduced around 2008 for students in grade 3.

Standardized Tests

There are diagnostic materials for students prior to grade 6 in Swedish and mathematics and for grades 6 to 9 in Swedish, English, and mathematics. The diagnostic materials are intended to highlight individual student's strengths and weaknesses in each subject respectively. The diagnostic materials for grades 6 to 9 also are intended to provide an indication of a student's chances of achieving the objectives for grade 9 and indicate how far the student has progressed in relation to the goals and objectives. In addition to test materials supplied by the National Agency for Education, several reading achievement tests, spelling tests, screening tests, and diagnostic materials are available on the market. In general, reading achievement tests cover areas such as recognition of chains of letters, words, or sentences; decoding of words; and comprehension of words, sentences, and short texts. Computerized tests also exist for language awareness, reading words and sentences, spelling, and other similar language related skills.

Monitoring Individual Student Progress

Progression from year to year in compulsory school is automatic, and at no point are students required to pass examinations before moving to the next grade. Grades are awarded from grade 8 of compulsory school. In accordance with the National Curriculum, the grading system is goal related, with grades based on students' knowledge and achievement of goals specified in the syllabi. In compulsory school, there are three passing grades used both in grade 8 and in the school-leaving certificate in grade 9: Pass, Pass with Distinction, and Pass with Special Distinction.

Each local school decides the arrangement for the assessment of progress in different subjects. For reading and writing, a number of schools use standardized screening tests to determine the general literacy level of the school (usually in the middle grades, 4 or 5) or in the lower grades to identify students with difficulties. Teachers also are free to use

other tests if they choose a diagnostic teaching model. In some municipalities, language awareness is tested among 6-year-old students before they enter first grade.

At least once a term, the teacher, the student, and his or her parent(s) or guardian(s) meet to discuss the student's progress and how learning can be stimulated and supported. The student is the focus of this meeting, but this meeting also provides an opportunity for teachers and parents to become acquainted. Everyone taking part in the meeting should be familiar with the content of the curriculum and syllabi, as well as the objectives and the working plan of the local school. These meetings take the place of annual reports or marks until grade 8, but they continue throughout compulsory school.

Suggested Readings

These three websites contain relevant information about education in Sweden, some of it also in English.

- Ministry of Education and Research http://www.sweden.gov.se
- Swedish National Agency for Education http://www.skolverket.se

Statistics Sweden http://www.scb.se

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Trinidad and Tobago

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Language and Literacy

The Republic of Trinidad and Tobago has a diverse tradition of language and culture. English, the official language of Trinidad and Tobago, is the language of instruction in schools and universities but is not widely spoken throughout the country. While English is typically reserved for formal situations, English-based Creole is the most commonly spoken language.¹ The English Creole vocabulary draws largely from English with input from other languages such as French, Spanish, Bhojpuri, and Arabic. Its structure, pronunciation, and grammar are also distinct from English.

The government of the Republic of Trinidad and Tobago officially has recognized Spanish as the country's first official foreign language. Spanish, and in some cases French, is available as part of the curriculum in secondary schools in Trinidad and Tobago. Hindi also is an integral part of the curriculum in all Hindu primary schools.

The majority of the population is East Indian and African (40.9% and 40.1%, respectively). One percent of the population is Chinese, European, or Middle Eastern.² Heritage languages from India and Africa, such as Arabic, Hindi, Sanskrit, and Yoruba, are used mainly during religious ceremonies.

Emphasis on Literacy

Trinidad and Tobago's rich oral tradition dates back to the period of slavery and indentureship and is expressed through various forms of communication, such as robber talk, folk storytelling, Koranic recitation, panchayat, talk tent, extempo, calypso, and rapso. These traditions are manifested in the richness of the Creole spoken throughout the country.³

Since 2004, the Centre of Excellence for Teacher Training has coordinated a literacy initiative that seeks to develop innovative approaches to reading instruction and promote action research to address reading problems. This program focuses on diagnostic and performance assessments, development of teaching and learning materials, teacher training, and the use of information technology in the delivery of the literacy curriculum. Sixty-one primary schools are targeted in the program's initial phase, as well as Infants (grade 1) to Standard 2 (grade 3).⁴

Libraries have long been partners in literacy development in Trinidad and Tobago. The library system is operated by The National Library and Information System Authority, which manages all libraries in the public sector, including public, special, and school libraries. Students and parents have access to 23 public libraries within the republic. Read-a-thons, read alouds by visiting authors, storytelling, and other reading activities are organized by librarians in the public system to generate interest in reading. School libraries have been established in most schools. At present, the Ministry of Education has undertaken initiatives to upgrade all school libraries.

Overview of the Education System

The education system in Trinidad and Tobago includes both publicly funded (government and government assisted) and privately funded schools. The country's education system falls mainly under the jurisdiction of two ministries: the Ministry of Education, and the Ministry of Science, Technology, and Tertiary Education. For the island of Tobago, the Tobago House of Assembly and the Ministry of Education share a collaborative relationship in order to ensure standardized practices in the education system.

The education system comprises five levels: preprimary, primary, secondary, postsecondary (advanced proficiency and technical/vocational programs), and tertiary (postsecondary education opportunities). The Ministry of Education is the administrative authority for preprimary through postsecondary education levels. The Ministry of Science, Technology, and Tertiary Education is responsibility for tertiary education (see Figure 1).

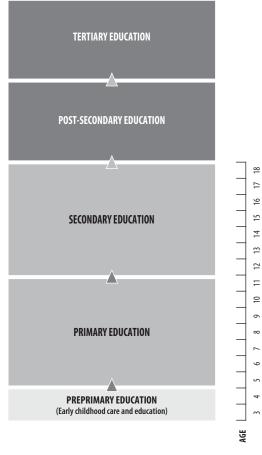
Structure of the Education System

Preprimary education in Trinidad and Tobago is not compulsory and encompasses preschools, nursery schools, and day care centers. Preprimary education is provided by the government, government-assisted schools, and private individuals. Between 2000 and 2004, enrollment in preprimary education increased from 50% to 70% of all eligible children. Baseline data for the 2004–05 school year indicated that there were 975 early childhood care and education centers for 29,685 preschoolers. The government has presented a policy for achieving universal access to early childhood care and education centers catering to an additional 30,000 preschoolers are already under construction.⁵

The Ministry of Education has established the curriculum for preprimary education and monitors its educational and developmental role.⁶ The preprimary program covers 2 years, with children typically entering the program at age 3. The educational curriculum at this level involves readiness for learning, play, music, sound, movement, visual creativity, and expression. Some programs focus on emergent written language acquisition and reading.

Primary education is compulsory for all students and addresses the educational needs of the school-age population between the ages of 5 and 12. Curriculum guides contain content specifications for language arts, mathematics, social studies, science, agricultural science, physical education and health, and arts and crafts.

Figure 1 Representation of the Education Sector in Trinidad and Tobago



SOURCE: Ministry of Education

Music and drama are included in the curriculum at some schools. Religious instruction is common among denominational schools. Spanish, the first official foreign language of Trinidad and Tobago, has been piloted in primary schools and is now being introduced into all schools.

The primary program culminates in the Secondary Education Assessment, as a measure of readiness for passage into the secondary level. A postprimary level of education has been phased out, although the school-leaving certification at that level still represents proof of basic education and attainment.

Secondary education is provided at secondary (Forms 1–5), junior-secondary (Forms 1–3), senior-comprehensive (Forms 4–5), and advanced-level (Form 6) schools. Continuation classes exist at senior-comprehensive schools for students repeating courses offered at upper-secondary levels (Forms 4–5).

The secondary level offers a wide range of subject choices and a great degree of program divergence. Students attending secondary schools possess widely varying levels of literary and numeric competence. At the secondary level, several youth development and apprenticeship centers offer technical and vocational education: residential and nonresidential, senior comprehensive schools, Service Volunteered for All life centers,



and the Youth Training Employment Partnership Programme. Of these institutions, only senior-comprehensive schools are managed by the Ministry of Education.

At the **tertiary** level, students pursue different kinds of education and training programs at a variety of institutions, including the University of the West Indies and the recently established University of Trinidad and Tobago. Other options of tertiary level education are provided by foreign universities in collaboration with local counterparts.

Education continues to be high on the national agenda and over the years has received a high proportion of the government's budgetary allocation. Between 2002 and 2005, the total expenditure on education increased from \$1.9 billion to \$3 billion Trinidad and Tobago dollars. Total expenditure for education expressed as a percentage of GDP continues to increase incrementally, increasing from 3.6% in 2002 to 4% over the 3-year period.⁷

Reading Curriculum in the Primary Grades

Reading Policy

Reading instruction in the primary grades is incorporated within the English languagearts curriculum. Reading programs are supported by a variety of reading and learning philosophies outlined in the curriculum for primary schools. Reading skills are taught separately during the first 4 years of primary school, even as the other language arts are being reinforced.

The main goal of the curriculum is for students to be able to communicate effectively through speech and writing. The curriculum stresses the interrelated nature of listening and speaking and their fundamental role in the development of reading and writing. A major goal or intended outcome of the curriculum is for students to read effectively, and for different purposes using a variety of materials presented through both print and electronic media.

Summary of National Curriculum

Since 1999, reading has been included within the English language-arts curriculum at the primary level. The former reading scheme was essentially skills based and endorsed multiple strategies for teaching reading.^{8, 9, 10} The current language-arts curriculum for primary schools represents a change in perspective to a holistic and integrated approach to language teaching and learning.^{11, 12}

The main goal of the English language-arts curriculum is for students to be able to communicate (speak and write) effectively through standard English. The curriculum emphasizes the interrelatedness of listening, speaking, reading, writing, and presentation skills. It recognizes that reading is not a single skill that can be taught in isolation from the other arts, nor can it be separated from the rest of the primary-school curriculum. Within the curriculum, however, reading skills are taught discretely, even as the other language arts are being reinforced. This is especially the case during the first 4 years of primary school.

Formal reading instruction begins in Infants Year 1 of primary school, at age 6. During the Infants Years 1 and 2, reading instruction focuses on mechanics, reading comprehension (literal), and study skills. An emphasis is placed on an appreciation of children's literature. Vocabulary development is added at Standards 1 and 2. From Standard 3 to 5, students are exposed to the three literary genres: poetry, prose, and drama. In these grades, the curriculum focuses on reading skills and strategies for deeper meaning, such as making inferences, predicting outcomes, and problem solving.

The English language-arts curriculum is prescribed for all students, regardless of ability level. Reading outcomes and objectives are described for all 7 years of the primary system. The curriculum identifies teaching and evaluation strategies for reading, recommends resources to enhance teaching and learning, and makes connections between language arts and other curriculum areas.

The curriculum emphasizes the following reading processes:

- Retrieving explicitly stated information;
- Making inferences;
- Interpreting and integrating ideas and information; and
- Evaluating content, language, and textual elements.

Reading purposes that are highlighted in the curriculum include enjoyment, acquisition of information, reading for literary experience, and forming critical language awareness.

Mandated Materials for Reading Instruction

A variety of textbooks and educational resources, both print and nonprint, is available for teaching reading. The Ministry of Education provides reading books and, in some instances, student workbooks for all students at the primary level. Computer software and educational games supplement traditional teaching methods in some schools.

Libraries play an important role in reading education in Trinidad and Tobago. Many schools have their own libraries, and, in quite a few instances, individual classrooms have their own libraries for students to select and borrow books.

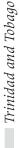
Reading Instruction in the Primary Grades

Instructional Time

The academic year runs from September to early July. There are three terms in the year, each lasting an average of 13 weeks. The number of school days per year ranges from a minimum of 185 days to a maximum of 195.

In a typical week at primary school, the total amount of instructional time prescribed is 25 hours. An average session at upper primary (Standard 4-5) is between 40 and 50 minutes. At Infants level 1, however, a lesson may last 15 minutes.

Students in Infants 1 and 2 receive approximately 10 to 15 lessons per week in language instruction. Those in Standards 1 to 5 receive between 15 and 20 lessons per week in language instruction, which includes reading, writing, listening, speaking, and viewing. Between 10–20% of instructional time for language is devoted to formal reading instruction. The average class size at the primary level is 19 students.





Instructional Materials

The Ministry of Education provides instructional materials including textbooks, manipulatives, and software for all primary schools in Trinidad and Tobago. Books for reading instruction include textbooks, workbooks, dictionaries, atlases, storybooks, guided reading programs, and phonics programs. Manipulatives include puzzles, games, globes, stickers, and reading-rods kits (color-coded interlocking cubes which have letters) used to build literacy skills.

Use of Technology

Computer software is available in a number of primary schools. Many teachers also use video, radio, CDS, and tape recorders during language and reading instruction. Audio books are used to supplement reading instruction for emergent readers, and are available along with Braillers and magnifying glasses for learners with visual impairments. However, traditional use of print media remains popular.

Role of Reading Specialists

Classroom teachers are responsible for teaching reading during all 7 years of primary education. With the implementation of the current reform initiative, reading specialists have begun to work alongside teachers in selected low-performing schools.

Second-language Instruction

The fact that standard English is the second language of many students who speak Englishbased Creole in Trinidad and Tobago, has implications for language learning and reading since all reading materials are in standard English. Therefore, the language-arts curriculum offers strategies for teaching English as a second language within the context of the Englishbased Creole. Despite these efforts, many readers remain challenged by English.

Reading Disabilities

In the primary system, students who have reading difficulties remain integrated within the class under the care of the regular classroom teachers. However, the Ministry of Education's Student Support Services division was created to address a situation where a teacher identifies a student with special learning needs. A multi-disciplinary team of officers from the division is located in each educational district to serve a cluster of schools. The division supplies educational psychologists and guidance officers, as well as diagnostic specialists. Attempts are made to diagnose dyslexia, visual impairment, and other disabilities that negatively affect learning in general. The intention is to make interventions at the time when learning problems are detected in order to eliminate the practice of promoting students who would face particular challenges in the next level. Eventually, no student will leave primary school with his or her reading difficulties unattended.

Diagnostic Testing

Screening for reading difficulties may be carried out by some primary schools, although few standardized screening tests are being utilized. However, the Ministry of Education in collaboration with the Ministry of Health has introduced a program of auditory and visual screening for all students entering primary schools. In addition, the Ministry of Education has embarked on a strategy to strengthen its guidance and support services. The Student Support Services division works with primary schools, particularly those identified as underperforming. Diagnostic tests are used by special educators to diagnose challenges to learning and to identify areas for special attention.

Teachers and Teacher Education

The Teaching Service Commission is responsible for the hiring of primary and secondary school teachers. All teachers are employed on a full-time basis. In the 2001–02 school year, 83% of primary-school teachers had a teacher's diploma or higher qualification. There are three times as many female teachers as male teachers at the primary level.¹³

To be registered as a teacher, a minimum of five ordinary level subjects at the secondary level must be completed, including mathematics and language arts, and teacher candidates must meet Caribbean Examination Council or General Certificate of Education qualifications. While teachers may enter the teaching service with this minimum qualification, they must complete a minimum of a 2-year course leading to a teacher's diploma at one of the three teachers colleges in order to be permanently appointed as a primary school teacher.

The University of Trinidad and Tobago recently introduced a 4-year Bachelor of Education degree to replace the teacher's diploma. In addition, the University of the West Indies offers a 3-year program. Graduate programs in education also are available at both universities. The curriculum for teacher training in these programs includes courses in educational theory, curriculum studies, and subject area content, with special education offered as an additional option.

Teacher In-service Education

In-service education is available to teachers through a series of workshops and seminars conducted by the Ministry of Education. There are no specifications for the number of hours required for in-service training. Workshops usually are organized by the different divisions of the Ministry of Education according to the needs identified or requests made by schools. These 1–2 day workshops, which are not mandatory, address areas such as teaching and learning strategies, writing, reading comprehension, and student assessment. Teachers usually attend several workshops during the school year.

Examinations and Assessments

National and Regional Examinations

The Ministry of Education conducts national examinations at Standards 1 and 3 in mathematics and language arts. The language-arts examination consists of reading, spelling, vocabulary, punctuation, grammar, comprehension, and creative writing. Four levels of performance are reported: Excellent (Level 4), Proficient (Level 3), Basic (Level 2), and Below Basic (Level 1). In addition, standardized scores (normal-curve equivalents) are used to report national, district, and school results. The results of these examinations



are used for school-based interventions, as well as comparisons by district, school, school type, and gender. The Ministry of Education uses national results to inform policy and curriculum development.

At Standard 5 the Secondary Entrance Assessment is conducted by the Caribbean Examination Council for the Ministry of Education. The components of this assessment include mathematics, language arts, and creative writing. Results from this assessment are used primarily for placement of students in secondary schools.

Monitoring Individual Student Progress

The Ministry of Education has implemented a system of continuous assessment at the primary school level. This facilitates the detection and remediation of learning deficits. Teachers assess students through teacher-constructed tests. The results of these tests are used as the basis for the assessment of students' academic performance during and at the end of the school year. These results also are used to guide instructional decisions by the teacher.

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United States

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Language and Literacy

English is the primary language in the United States. To hold a job that requires interaction with the general public, English is generally the only language that is necessary. English is also the language of instruction in most classrooms, with the exception of schools with language immersion programs, where a language other than English is used for instruction. Spanish is, by far, the second most widely spoken language in the United States, with about 28 million people over the age of 5 speaking Spanish at home.¹ The next most widely spoken language is Chinese, with about 2 million people in the United States speaking Chinese at home.

Libraries serve as a key resource to promote literacy. In fiscal year 2004, there were over 9,000 public libraries in the United States, supported by public funds and serving communities, districts, or regions.² Besides providing access to books and electronic resources, public libraries often provide special programs for children such as story hours and summer reading events. In addition, most elementary and secondary schools in the United States have library media centers that make available printed, audio-visual, and/or computer resources to students, teachers, and administrators.

There also are resources and programs at the national level that promote reading for enjoyment, many of which receive funding from the U.S. Department of Education. For example, Reading Is Fundamental is a nonprofit organization that provides inexpensive book distribution. The highest priority of this organization is reaching underserved children from birth to age 8. Another program, *Reading Rockets*, provides Public Broadcasting Service (PBS) television programs on videotape and DVD, online services (including the websites www.ReadingRockets.org and www.ColorinColorado.org), and professional development opportunities. Other PBs television programs that promote reading literacy include Sesame Street and Between the Lions.

Overview of the Education System

In the United States, government-financed public education is considered to be a national interest, a state responsibility, and locally operated. The goal of the U.S. Department of Education, which was elevated to a Cabinet-level department in 1980, is to ensure equal educational opportunities for every individual and to promote improvements in the quality and usefulness of education through federally supported research, evaluation, and sharing of information.³

The U.S. Constitution does not mention education as a federal function, thus, it remains a state responsibility. Each of the states and extra-state jurisdictions has established a state department of education, headed by a state superintendent or commissioner (with oversight from a state board of education). The role of the state education departments is to distribute federal and state financial resources, establish policy for graduation requirements and teacher certification requirements, provide curriculum guidance, conduct student assessments, and ensure that efficient and effective school opportunities are made available to every eligible child in the state.

States have delegated the operation of schools to local governments, which in turn have assigned the role to elected or appointed school boards. Local school boards raise funds, establish policy and operating regulations, and hire superintendents to manage and operate the district. Superintendents hire principals, teachers, and other staff and carry on the day-to-day activities of operating schools, with the oversight of the school board. The local district is responsible for curriculum decisions, standards implementation, facilities construction and maintenance, and operation of school programs. In the 2003–04 school year, there were 14,383 school districts in the United States.⁴ The variation in district size is reflected in the fact that 6% of the districts (850) contained 52% of the total students. Furthermore, 70% of the districts (10,124) contained only 17% of the students.

In 2001, Congress renewed the Elementary and Secondary Education Act (ESEA). This legislation provides funding for a variety of education programs, the main one being assistance to schools to improve the learning of children from low-income families. The renewed law is known as the No Child Left Behind Act of 2001 (NCLB). According to NCLB, beginning no later than the 2005–06 school year, a state must administer annual assessments in reading/language arts and math in each of grades 3 through 8 and at least once in grades 10 through 12.⁵ The law requires states to report, at the school level, on the achievement of students tested. Test results must be reported in terms of the percentages of students in at least three levels of academic achievement (e.g., basic, proficient, and advanced). Furthermore, assessment results must be disaggregated and reported by sex; major racial/ethnic groups; English language proficiency status; students with disabilities as compared to all other students; economically disadvantaged students as compared to students who are not economically disadvantaged; and migrant status. States are expected to apply sanctions to those schools not meeting federal requirements for student progress in achievement. While this legislation has brought about an increased education oversight and direction by the federal government, the U.S. education system continues to be decentralized.

In addition to the publicly funded and operated school systems, major religious denominations and other private groups operate schools in the United States. These schools charge a tuition fee and operate under their own rules and regulations. About 13% of elementary school students and 9% of secondary school students are enrolled in private schools.⁶

In recent years, a growing number of parents have elected to homeschool their children. Homeschooled children may be taught by one or both parents, by tutors who come into the home, or through virtual school programs available on the Internet. Accountability for homeschooling is coordinated with the state in which the family resides.⁷ In 2003, approximately 1.1 million school-age children were reported by their parents to be homeschooled.⁸

Structure of the Education System

In the 2003–04 school year, there were 95,726 public schools in the United States.⁹ Of these, 69% were elementary, 24% were secondary, and 6% were combined elementary/secondary. (Special education schools, alternative schools, and other special-purpose schools made up about 2% of these schools.) The average student enrollment in public schools was 521, with elementary schools averaging 476 students, secondary schools averaging 722 students, and combined elementary/secondary schools averaging 269 students.¹⁰ A special type of public school is a charter school. This is a publicly funded school that, in accordance with an enabling state statute, has been granted a charter exempting it from selected state or local rules and regulations.

In the 2001 school year, there were 29,273 private schools in the United States.¹¹ Of these, 60% were private elementary, 9% were private secondary, and 31% were private combined elementary/secondary schools.

Preprimary education (ages 3–4) varies from child-minding programs to programs that stimulate the development of reading and oral communication skills; awareness of size, shape, and color; development of manipulative skills; and the advancement of physical development. Most programs/schools are privately operated and not publicly funded. One exception is *Head Start*, which is supported financially by the U.S. Department of Health and Human Services but operates outside of the public education structure. *Head Start* provides preschool education for children from financially disadvantaged backgrounds. In addition, some states and districts are beginning to offer public preschool education. The Census Bureau estimated that 4,785,409 students were enrolled in nursery or preschool programs in 2005.¹² The United States has a gross enrollment ratio of 60% of the total relevant age group enrolled in preprimary education.¹³

The initial level of public education is normally called elementary (or primary) education and consists of some combination of kindergarten through grade 8 (κ -8). School grade patterns are a local option determined by the districts. The most common configuration of grades in elementary education is κ -6, with the typical child in kindergarten 5½ years old at the beginning of the school year.¹⁴ Nationally, almost 98%



of children attend kindergarten prior to first grade, with 60% of these children attending a full-day program.

Secondary education provides specific subject knowledge building on the general foundations developed during elementary school. Students normally start secondary school or high school at age 14 and attend for 4 years. Most school districts operate an intermediate school between the elementary and secondary school levels called a middle school or junior high school. Middle schools end at grade 8 and most often include grades 5–8, 6–8, or 7–8, while junior high schools typically include grades 7 to 9.

Figure 1 provides a detailed illustration of the structure of the U.S. education system.

Reading Curriculum in the Primary/Elementary Grades

Reading Policy

NCLB calls for all students to be reading on grade level by the 2013-14 school year. Through Title I, federal funding is provided to districts and schools with high numbers or high percentages of children from low-income families.¹⁵ In 2006, funding for Title I was \$12.7 billion.¹⁶ More than half of all public schools in the United States use Title I funds to provide additional academic support and learning opportunities to help low-achieving children master challenging curricula and meet state standards in core academic subjects. For example, funds support extra instruction in reading, as well as special preschool, afterschool, and summer programs to extend and reinforce the regular school curriculum. NCLB requires all districts and schools receiving Title I funds to meet state "adequate yearly progress" (AYP) goals for their total student populations and for specified demographic subgroups, such as economically disadvantaged students and students with disabilities.^{17,} ¹⁸ States must define minimum levels of improvement as measured by standardized tests chosen by the state. If a school receiving Title I funding fails to meet AYP goals for 2 or more consecutive years, it is designated "in need of improvement" and faces an increasing number of consequences (e.g., school transfer options, school restructuring) with increasing consecutive years of not meeting AYP goals.

NCLB contained two specific sections on reading. The *Early Reading First* program supports the development of early childhood centers of excellence that focus on all areas of development, especially on the early language, cognitive, and prereading skills that prepare children for continued school success, and that serve primarily children from low-income families.¹⁹ Through the second program, *Reading First*, assistance is provided to states and districts to establish scientifically based reading programs for students enrolled in kindergarten through grade 3.²⁰ Funds are allocated to states according to the proportion of children ages 5 to 17 who reside within the state and are from families with incomes below the poverty line. The state plans for the use of funding are subject to approval by a panel of reviewers. The criteria include the requirement that reading programs and materials be based on "scientifically based reading research," defined in the legislation as research that draws on systematic empirical methods, provides valid data, and has been accepted after rigorous and objective review.²¹ States, in turn, pass the funds on to districts that also have to present acceptable education plans to the state.

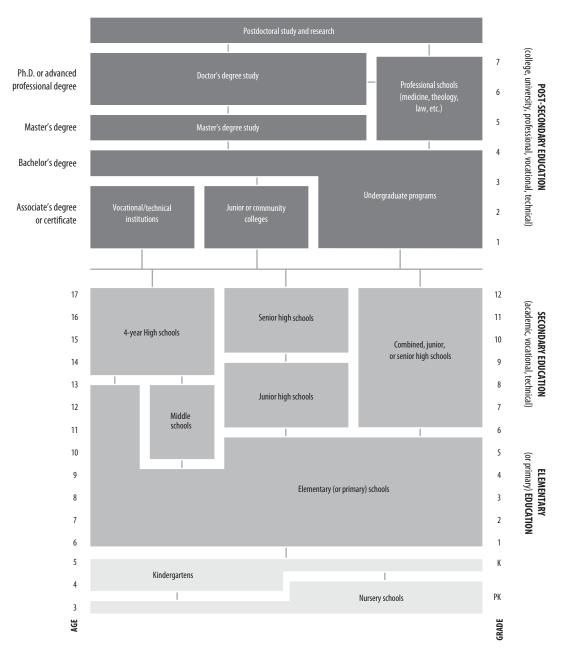


Figure 1 The Structure of Education in the United States

SOURCE: Snyder, T.D., Tan, A.G., & Hoffman, C.M. (2006). Digest of education statistics, 2005 (NCES 2006–030). U.S. Department of Education, National Center for Education Statistics. Washington, DC: U.S. Government Printing Office.

In 2005, funding for *Reading First* was about \$1 billion, serving approximately 4,700 schools in 1,400 school districts.²²

Reading Standards

There is no national curriculum for reading in the United States. States have each developed their own standards for reading. These are based, to varying degrees, on the standards developed by professional associations, a report from the National Reading Panel entitled *Teaching Children to Read*,²³ and widely accepted research findings.

State standards for reading differ in both content and level of specificity. Aspects of reading usually covered include phonemic awareness, phonics, fluency, comprehension, literature, vocabulary, and habits and attitudes. In kindergarten, students are expected to recognize or decode basic words.²⁴ Phonemic awareness and phonics are emphasized in kindergarten and first grade, receive less attention in second and third grade, and tend to disappear from the curriculum by fourth grade (except for students who are not yet reading well). In some sets of state standards, reading and writing standards are closely integrated. For example, an expectation might be that students use letter-sound correspondence to "decode/use words in context." All state standards have comprehension as the ultimate goal of reading instruction.

Reading Instruction in the Primary Grades

Guidelines for reading instruction at the state and district levels and for federal grant funding have increasingly emphasized approaches supported by rigorous research. The *Reading First* section of NCLB, requiring that proposed reading programs focus on strategies and professional development based on "scientifically based reading research," has provided much of the impetus for this trend.

Instructional Time

As in all other aspects of reading education in the United States, instructional time varies from state to state, district to district, and school to school. In some cases, states issue guidelines for the amount of instructional time spent on reading instruction. Usually, districts set the time frames. Often, the time frame of a language-arts block is 1½ to 2 hours in the morning, during which both reading and writing are taught. Sometimes the whole time is devoted solely to reading. Especially in the early grades, reading instruction is often given far more time than other subjects, such as social studies, science, art, and music.²⁵

Schools that use the major commercial reading programs spend time on phonemic awareness, phonics, vocabulary, fluency, and comprehension. In grades κ -2, the major portion of instruction is spent on the first three areas. As students move to the higher grades, comprehension is given more emphasis. Instruction at all levels involves retrieving explicit information from the text and making inferences. Emphasis on interpretation of text and critical thinking varies from program to program, school to school, and teacher to teacher.

Instructional Materials

Some states, notably Texas and California, have state requirements that textbooks be approved by schools and districts. While there are no specific federal criteria for program materials, states receiving *Reading First* funding sometimes use the guidelines established by the Institute for Development of Educational Achievement at the University of Oregon.²⁶

Reading texts are produced by a handful of large publishing companies. The commercial programs offer an array of components that can be selected to build a

program that has more or less emphasis on certain aspects of reading. For example, these may include charts and workbooks on phonics and phonemic awareness, texts of selections to be used in instruction, journals for writing about selections read in class, and books for self-selected pleasure reading that are keyed to specific grade ranges. Most commercial programs provide alternative methods for using the common program materials to address the needs of students with varying levels of reading achievement and English language proficiency. Some programs provide materials for small-group instruction. As many schools integrate reading instruction with writing instruction, most commercially developed reading programs include writing instruction in their core or main curriculum materials. Because they must satisfy the guidelines for adoption within two of the largest states, all the commercial core or main reading programs have more features in common than distinctive features. These programs lend a degree of cohesiveness to reading curricula across the country.

Use of Technology

Although technology is not widely used for reading instruction, some school systems have purchased computer-based systems that provide materials for diagnosis, instruction, practice, and assessment. There is a growing trend toward the use of technology, especially for monitoring student progress. Reading researchers, business leaders, and policy makers are beginning to call for more instruction in "new literacies," the ability to use computer-based resources such as the Internet to locate, select, and use information.²⁷

Role of Reading Specialists

The role of the reading specialist varies from district to district and school to school. In some schools, the reading specialist serves as a support for classroom teachers, providing materials and ideas, helping to organize students for instruction, assisting in diagnosis and assessment, and providing staff development. In other situations, the reading specialist works with individual students or small groups of students who are not achieving as expected.

Second-language Instruction

The population of school-age children that speaks a language other than English at home has increased substantially over time. Between 1979 and 2004, the number of school-age children (ages 5–17) who spoke a language other than English at home increased from 3.8 to 9.9 million, or from 9 to 19% of all children in this age group. The number of school-age children who spoke English with difficulty also increased, from 1.3 million (or 3% of all school-age children) to 2.8 million (or 5%) over the same time period.²⁸

A critical challenge facing κ -12 schools in the United States is teaching languageminority students to read and write well in English. Language-minority students who cannot read and write proficiently in English may struggle to participate fully in education and will likely face limited job opportunities and earning power.²⁹ For example, in 1999, 10% of young adults (18- to 24-year-olds not enrolled in grades κ -12) who spoke only English at home had not completed high school. The percentage was three



times higher for those who spoke a language other than English at home (31%), and five times higher among those who spoke English with difficulty (51%).³⁰ Among language minority groups, Spanish-speaking young adults were more likely than any other group not to have completed high school. In 1999, 39% of young adults who spoke Spanish at home had not completed high school (61% among Spanish speakers who spoke English with difficulty).

There are differing views on how best to teach these students to read. Some favor immersion in English and learning to read at the same time. Others are convinced that students should be taught to read proficiently in their native language first, and then learn to read in English.

Effective Practices

The What Works Clearinghouse was established in 2002 by the U.S. Department of Education's Institute of Education Sciences to provide educators, policy makers, researchers, and the public with a central and trusted source of scientific evidence of best practices in education. The clearinghouse aims to promote informed education decision making through a set of easily accessible databases and user-friendly reports that provide education consumers with high-quality reviews of the effectiveness of replicable educational interventions (programs, products, practices, and policies) intended to improve student outcomes. Relevant reviews in reading include curriculum-based interventions and teaching practices designed to improve the English language literacy or academic achievement of elementary school English language learners, interventions in early childhood education to improve school readiness, and interventions for beginning reading.

A report by the National Reading Panel entitled *Teaching Children to Read* was derived from an evidence-based assessment of the scientific research literature on reading.³¹ That report emphasized the importance of five factors in early reading: phonemic awareness, phonics, fluency, vocabulary, and comprehension. Much of the *Reading First* legislation was based on this report.

Reading Disabilities

The federal government provides guidelines for the education of students with learning disabilities in the Individuals with Disabilities Act (IDEA), reauthorized in 2004. The law provides procedures for diagnosing, planning programs, and monitoring progress of students with disabilities. Most schools use a battery of tests administered by a teacher, specialists, or a school psychologist to screen for reading problems. If a student is diagnosed as having a disability that affects learning, he or she must have an Individualized Education Program, which may require that reading instruction be adapted to address the specific learning needs of the student.

Research has found that high-quality evaluative and instructional approaches, begun early in a child's life, are important in helping children who are struggling to read and reducing referrals to special education. In the *Reading First* program, every school that receives funding must have a coordinated plan to use four types of reading assessments to guide instruction and program evaluation in the school: screening, progress monitoring, diagnostic, and outcome.^{32, 33} Students must be assessed for these four purposes in five core dimensions of reading instruction: phonemic awareness, phonics, vocabulary, reading comprehension, and fluency. A screening assessment is the "first alert" that a child will need extra help in reading. Progress monitoring assessments are used throughout the school year to evaluate whether the child is making adequate progress in learning to read. Diagnostic assessments provide more in-depth information on a student's skills and instructional needs to help plan more intensive or more targeted instruction. These comprehensive tests would generally be administered only when a child fails to make adequate progress in learning to read despite immediate, intensive interventions already put in place. Finally, outcome assessments are administered at the end of the school year so that the school can evaluate the effectiveness of its reading program and the school district can evaluate whether its students are meeting the goal of reading on grade level by grade 3.

Instruction for students identified as needing instructional intervention in reading is provided in different ways. Some schools use computers to provide additional instruction and practice. In some schools, reading teachers work with students having reading difficulties. In some situations, classroom paraprofessionals work with students who are achieving satisfactorily, while the teacher works with a small group of those students needing extra help. Extra help is usually provided in a small-group setting rather than one on one.

Teachers and Teacher Education

In the 2003 school year, more than 3 million teachers were employed in public elementary and secondary schools, including traditional public schools and charter schools. Forty-eight percent had a master's degree or higher educational attainment, and 82% had 4 or more years of teaching experience. Private schools employed 467,400 teachers. Thirty-five percent had a master's degree or higher educational attainment, and 68% had 4 or more years of teaching experience.³⁴

Most universities, both public and private, have a school of education that provides teacher education programs. The content and structure of teacher education programs is left to the discretion of the institutions offering them, with the understanding that students must meet state standards to become certified to teach. Following a 4-year program and a practicum (i.e., a time of supervised teaching experience), prospective teachers must then apply to individual states for certification or licensure. States vary in their licensure requirements.³⁵ Most states require satisfactory performance on a statewide test for teacher certification. These tests often assess knowledge of specific subject matter, general knowledge, and pedagogy. Some states are changing policy in this area as they endeavor to meet the requirements of NCLB.

NCLB requires that all students be taught by "highly qualified teachers." ³⁶ A highly qualified teacher is one who (a) holds a minimum of a bachelor's degree, (b) has obtained full state certification as a teacher or passed the state teacher licensing examination



and holds a license to teach in the state, (c) does not have certification or licensure requirements waived on an emergency, temporary, or provisional basis, and (d) has demonstrated competence in all of the academic subjects in which the teacher teaches in a manner determined by the state.

Requirements to be a reading specialist vary from state to state. Most states require additional course work in reading and related subjects, and some states require a master's degree.

Teacher In-service Education

Employed teachers are provided in-service education by the local district. Sometimes, the state determines what kind of assistance would be useful and then retains consultants to address those areas. In other instances, the district or school decides the content and format of in-service education. Usually 1 or 2 days in duration, these programs are offered (with pay) before students return to school at the beginning of the school year and/or during the year when students are not in attendance.

Examinations and Assessments

International

Through its participation in the International Association for the Evaluation of Educational Achievement (IEA), the United States has taken part in several international reading assessments of children: a 15-nation survey in 1970–71, the IEA Reading Literacy Study in 1990–91, and PIRLS in 2001 and 2006. In addition, participation in the OECD-sponsored Program for International Student Assessment (PISA) in 2000, 2003, and, most recently, in 2006 provided a reading literacy assessment of 15-year-olds.

National

The National Assessment of Educational Progress (NAEP), also known as "the Nation's Report Card," is the only nationally representative and continuing assessment of what America's students know and can do in various subject areas. Since 1969, these sample-based assessments have been conducted periodically in reading and other subject areas. NAEP provides results for populations of students (e.g., U.S. fourth graders or eighth-grade public-school students in a specific state) and subgroups of those populations (e.g., female students, Hispanic students). It does not provide scores for individual students or schools.

NCLB requires that NAEP reading assessments be given to national and state representative samples of students in grades 4 and 8 every 2 years. Results are reported in two ways—scale scores and achievement levels (Basic, Proficient, and Advanced)— so that student performance can be more easily understood. Results include reading achievement at the national level (4th, 8th, and 12th graders from public and private schools) and at the state level (4th and 8th graders from public schools), as well as trends in reading achievement.

The NAEP reading assessment examines students' abilities to construct and think about the meaning of what they read in different reading situations—reading for literary

experience, reading to be informed, and reading to perform a task.³⁷ The assessment is designed to examine the outcomes of reading instruction rather than its components and to reflect the increasingly rigorous literacy demands of employment, citizenship, and personal development.

State

As described previously in the Overview of the Education System section, NCLB requires states to test all students annually in grades 3–8 in reading (as well as mathematics), and provide detailed reports of the results. In some states, the consequences of the state assessments are high—for students, promotion to the next grade; for teachers, pay and promotion; for schools, monetary rewards or sanctions and even state takeover. The NCLB legislation requires states to use state assessments to monitor the progress of schools and to meet state-level requirements for adequate yearly progress. The legislation also requires state assessments to be aligned with the state subject area standards. Federal money is available to help states and districts improve the performance of poorly performing schools and to develop state assessments. Many states have developed their own tests, and some of these resemble NAEP. Others use commercial tests.

Classroom

Classroom assessments of reading are often part of a package of materials purchased with the textbooks. Commercial programs usually include diagnostic, formative, and summative assessments. Some districts and even some states provide classroom assessment tools, but it is usually up to the school or teacher to decide whether to use those tools. Due to the requirements of *Reading First*, many schools use the Dynamic Indicators of Basic Early Literacy Skills in the primary grades to track the progress of students in phonemic awareness, phonics, and fluency.

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