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ABSTRACT

This set of education indicators for the World Bank's East Asia and Pacific Region is designed to provide key policy-oriented data for World Bank staff and clients. The framework is divided into six main chapters: (1) the demographic, social and economic context of education; (2) financial and human resources invested in education; (3) access to education, participation, progression and graduation rates; (4) the learning environment and the organization of schools; (5) student achievement; and (6) social and labor market outcomes of education. The chapters include relevant comparative indicators for developing countries. The education indicators draw on data available from electronic and published data bases within the World Bank, including EdStats, World Development Indicators, Statistical Information Management and Analysis (SIMA), special studies, and Economic Sector Work. They also draw from Organisation for Economic Co-operation and Development (OECD) sources, particularly the World Education Indicators sample, United Nations Agencies, especially UNESCO and the United Nations Development Program, United States Agency for International Development (USAID) Global Education Database, International Labor Organization, International Monetary Fund, Third International Mathematics and Science Study (TIMSS), and client country information systems. The following countries are included: Australia, Cambodia, China, Fiji, Hong Kong, Indonesia, Japan, Kiribati, Korea DPR, Republic of Korea, Lao PDR, Malaysia, Marshall Islands, Federated States of Micronesia, Mongolia, Myanmar, New Zealand, Papua New Guinea, Philippines, Samoa, Singapore, Solomon Islands, Thailand, Tonga, Vanuatu, and Vietnam. Depending on availability, data were collected with a periodicity of five years, starting in 1980 through 1995 and including the last available year. Indicators include economically active population by gender and level of educational attainment; educational attainment by age, gender, and rural or urban areas; employment ratios of youth by level of educational attainment; net enrollment by income quintile; and fertility rates by level of education.

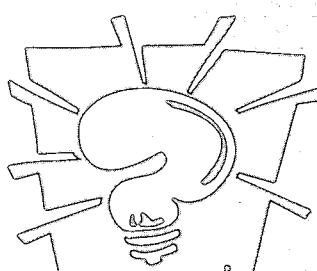
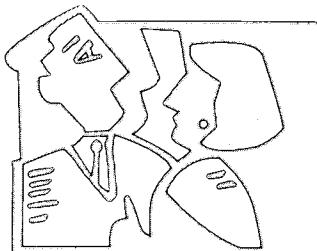
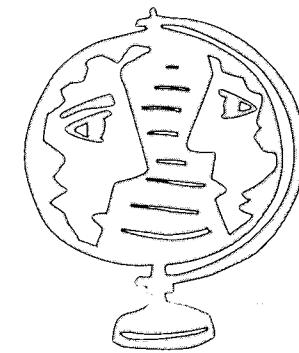
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EDUCATION INDICATORS FOR EAST ASIA AND PACIFIC

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EDUCATION
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Introduction

Framework:

This set of education indicators for the World Bank's East Asia and Pacific Region is designed to provide key policy-oriented data for World Bank staff and clients.

The framework is similar to the thematic organization of OECD's "Education at Glance" series in that it is divided into the following six main chapters: the demographic, social and economic context of education; financial and human resources invested in education; access to education, participation, progression and graduation rates; the learning environment and the organization of schools; student achievement; and social and labor market outcomes of education.

Within these chapters we have also included relevant comparative indicators for developing countries and adapted others to data availability. For instance, in the chapter on the demographic, social and economic context of education, we included country income level, human development index level, and the adult illiteracy rate. Another departure from the OECD framework is that countries were organized in three groups by low income, middle income and high income economies.

Sources:

The education indicators draw on data available from electronic and published data bases within the World Bank, including EdStats, World Development Indicators, SIMA, special studies and Economic Sector Work.

They also draw from OECD sources, particularly the World Education Indicators sample, United Nation Agencies, especially UNESCO and the United Nations Development Program, USAID's Global Education Database, the International Labor Organization, the International Monetary Fund, TIMSS, and client country information systems.

Coverage:

The following countries are included: Australia, Cambodia, China, Fiji, Hong Kong, Indonesia, Japan, Kiribati, Korea DPR, Rep. of Korea, Lao PDR, Malaysia, Marshall Islands, Fed. States of Micronesia, Mongolia,

Myanmar, New Zealand, Papua New Guinea, Philippines, Samoa, Singapore, Solomon Islands, Thailand, Tonga, Vanuatu and Vietnam.

Periodicity:

Depending on availability, data were collected with a periodicity of five years, starting in 1980 through 1995 and including the last available year.

Rationale:

The indicators are organized under six chapters:

1. Demographic, social and economic context of education

In order to interpret differences in educational structures, processes and outcomes between countries, the conditions under which education systems operate need to be taken into account.

Such conditions include social and economic variables of the countries, such as income level, human development index, and adult illiteracy. Demographic variables that illustrate the demand for education at different levels of the education system are included, measured by the relative size of the traditional school age population and the forecasts of the proportion of the population aged 6 to 25 up to the year 2020. And finally, the attainment profiles of different sections of the population and labor force.

2. Financial and human resources invested in education

Education can foster economic growth, productivity, personal and social development, and a reduction of social inequality. But, as with any investment, there are costs. This chapter provides a comparative examination of cost patterns across the region.

Indicators include: Educational expenditure relative to GNP; overall level of public resources invested in education, public investment by level of education, public vs. private investment in education; educational expenditure per student in relation to GDP per capita by level of education; expenditure for research and development; public expenditure by resource category; staff employed in education and the ratio of students to teaching staff at the different levels of education.

3. Access to education, participation, progression and graduates

A well-educated population has become a defining characteristic of a modern society. Education is seen as a means for instilling personal and democratic values, as well as a means for developing productive and socially capable individuals. In this context, societies have an interest in providing equal gender access to a wide range of educational opportunities.

Information on enrollment rates at various levels of education and on the expected duration of schooling can provide a picture of the structure of the different educational systems. Access, participation, progression and number of graduates at different levels of education also represent achievements and outputs of the educational system.

4. The learning environment and the organization of schools

Indicators of financial and human resources devoted to education, such as expenditure per student and student/teaching staff ratios are often used as a proxy for the quality of education. But more needs to be said about the learning environment and the quality and efficiency of schools, about the organization and management of the schools and about the way in which instruction is organized and delivered. Equally, more understanding is needed about whether schools are attracting qualified and committed teachers and supporting them with competitive salaries and sustained professional development.

Many of these aspects are not easily captured as enrollments or expenditure are. It is particularly difficult to monitor the work of teachers since most of it takes place inside the school and classroom. However, a certain number of national, school and classroom level characteristics are starting to be assessed, using data reported by those involved in the schooling process or data drawn from policy statements and guidelines. Nonetheless, much needs to be done in this direction.

At the national level, such characteristics include the distribution of decision-making authority across administrative levels or the salaries and working conditions of teachers, including the teaching load and the hours of work. At the school level, aspects such as the time allocated to different parts of the curriculum, the way in which student progress is monitored, and the way in which students are allocated to classes or groups, can be assessed. We tried to include some of these characteristics depending on available data.

5. Student achievement

There is a growing demand for indicators on student performance in order to make education accountable, to provide tools for school improvement, and to allow standards to be monitored. These indicators focus on student performance in mathematics and science following TIMSS results for fourth and eighth grades.

6. Social and labor market outcomes of education

Education, social outcomes and the job market are closely connected. On the one hand, education contributes to increased knowledge, which translates into technological improvements and aggregate productivity gains. On the other hand, it increases the skills and knowledge of men and women, allowing them to better accomplish particular tasks and adapt to changing job requirements.

Indicators include economically active population by gender and level of educational attainment; educational attainment by age, gender and rural or urban areas; employment ratios of youth by level of educational attainment; net enrollment by income quintile; and fertility rates by level of education.

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We will like to acknowledge that this is a joint effort of the East Asian Region (EASHD) and the Education Group of the Human Development Network (HDNED), in particular, the Effective Schools and Teachers thematic group and EdStats. The team included Clementina Acedo, Mitsue Uemura (HDNED), Christopher J. Thomas, Yoko Nagashima and Kathy Li Tow Ngow (EASHD).

EdStats will incorporate this set of education indicators in their electronic data base and is funding this publication.



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1. Demographic, Social and Economic Context of Education

Table 1.1
East Asia and Pacific Countries by Income Level, 1997

Income Level	East Asia and Pacific Countries	GNP per capita (US\$), 1997
Low-Income Economies	Cambodia	300
	Lao PDR	400
	Mongolia	390
	Myanmar ¹	
Middle-Income Economies	Vietnam	320
	China	860
	Fiji	2,470
	Indonesia	1,110
	Kiribati	910
	Korea, Dem. Rep. ²	
	Malaysia	4,680
	Marshall Islands	1,770
	Micronesia, Fed. States	1,980
	Papua New Guinea	940
	Philippines	1,220
	Samoa	1,150
	Solomon Islands	900
	Thailand	2,800
	Tonga	1,830
High-Income Economies	Vanuatu	1,310
	Australia	20,540
	Hong Kong	25,280
	Japan	37,850
	Korea, Rep.	10,550
	New Zealand	16,480
	Singapore	32,940

Notes: * Countries are listed by alphabetical order within the same level of income group.

Low-income economies: <\$785

Middle-income economies: \$786-9,655

High-income economies: >\$9,556

¹ Estimated to be low income (\$785 or less) in World Development Report (WDR).

² Estimated to be lower middle income (\$786 to \$3,125) in WDR.

Source: World Bank 1998b

Table 1.2
Human Development Index, 1995

Country	Human Development Index ¹ 1995	Educational Attainment Index ² 1995	Combined First-, Second- and Third-Level Gross Enrollment Ratio (%) 1995		Life Expectancy at Birth (years) ⁴ 1995	Real GDP per capita (PPP\$) ⁵ 1995
			Adult Literacy ³ (Age 15+) (%) 1995	First-, Second- and Third-Level Gross Enrollment Ratio (%) 1995		
Cambodia	0.422	64	65.0	62	52.9	1,110
Lao PDR	0.465	74	56.6	50	52.2	2,571
Mongolia	0.669	73	82.9	53	64.8	3,916
Myanmar	0.481	71	83.1	48	58.9	1,130
Vietnam	0.560	80	93.7	55	66.4	1,236
China	0.650	76	81.5	64	69.2	2,935
Fiji	0.869	87	91.6	78	72.1	6,159
Indonesia	0.679	77	83.8	62	64.0	3,971
Korea, Dem. Rep.	0.766	88	95.0	75	71.6	4,058
Malaysia	0.834	76	83.5	61	71.4	9,572
Papua New Guinea	0.507	61	72.2	37	56.8	2,500
Philippines	0.677	90	94.6	80	67.4	2,762
Samoa	0.694	90	98.0	74	68.4	2,948
Solomon Islands	0.560	57	62.0	47	71.1	2,230
Thailand	0.838	81	93.8	55	69.5	7,742
Vanuatu	0.559	60	64.0	52	66.3	2,507
Australia	0.932	92	99.0	79	78.2	19,632
Hong Kong	0.909	84	92.2	67	79.0	22,950
Japan	0.940	92	99.0	78	79.9	21,930
Korea, Rep.	0.894	93	98.0	83	71.7	11,594
New Zealand	0.939	97	99.0	94	76.6	17,267
Singapore	0.896	83	91.1	68	77.1	22,604

Notes: ¹ The Human Development Index is based on three indicators; longevity, as measured by life expectancy at birth; educational attainment, as measured by a combination of adult literacy (two-thirds weight) and the combined first-, second- and third-level gross enrollment ratio (one-third weight); and standard of living, as measured by real GDP per capita (PPP\$).

² Educational Attainment Index (EAI) is calculated using the following formula:

$$\text{EAI} = [2 \times (\text{Adult Literacy Rate}) + 1 \times (\text{Combined First-, Second- and Third Level Gross Enrollment Ratio})]/3$$

³ Adult Literacy: The percentage of people aged 15 and above who can, with understanding, both read and write a short, simple statement on their everyday life.

⁴ Life expectancy at birth: The number of years a newborn infant would live if prevailing patterns of mortality at the time of birth were to stay the same throughout the child's life.

⁵ Real GDP per capita (PPP\$): The GDP per capita of a country converted into US dollars on the basis of the purchasing power parity of the country's currency. The system of purchasing power parities has been developed by the United Nations International Comparison Programme to make more accurate international comparison of GDP and its components than those based on official exchange rates, which can be subject to considerable fluctuation.

Source: UNDP 1998

Table 1.3
Adult Illiteracy Rates* by Gender, 1995.

Country	Total (%)	Male (%)	Female (%)
Cambodia ^{1**}	34.7	20.3	46.6
Lao PDR	43.4	30.6	55.6
Mongolia	17.1	11.4	22.8
Myanmar	16.9	11.3	22.3
Vietnam	6.3	3.5	8.8
China	18.5	10.1	27.3
Fiji	8.4	6.2	10.7
Indonesia	16.2	10.4	22.0
Kiribati ^{1***}	10.0		
Malaysia	16.5	10.9	21.9
Marshall Islands ^{1***}	9.3		
Papua New Guinea	27.8	19.0	37.3
Philippines	5.4	5.0	5.7
Thailand	6.2	4.0	8.4
Vanuatu ^{1***}	30.0		
Hong Kong	7.8	4.0	11.8
Korea, Rep.	2.0	0.7	3.3
Singapore	8.9	4.1	13.7

Notes: *Adult illiteracy rate is estimated number of adult illiterates (15 years and over) expressed as a percentage of the population in the corresponding age-group (UNESCO World Education Report).

Data in *italic* refer to years other than 1995 (see below).

** 1994 data

*** 1990 data.

Sources: All data except those numbered (see below) are from UNESCO 1998b

¹ World Bank, Statistical Information Management and Analysis (SIMA)

Table 1.4**Educational Attainment by Gender, Age, and Level of Education, Various Years from 1980 to 1996**

Country	Year	Sex	Age Group	Total Population	Highest Level Attained					
					No Schooling (%)	First Level		Secondary Level		Post Secondary (%)
						Incompleted (%)	Completed (%)	S-1 (%)	S-2 (%)	
Cambodia	1993	MF	5+	8,664,920	30.5	47.0	—>	16.2	4.1	1.0
			F 5+	4,571,987	37.8	46.1	—>	12.1	2.7	0.5
Myanmar	1983	MF	15-24	7,023,736	30.2	42.2		25.8		1.8
			25-64	12,607,749	53.5	28.9		15.4		2.2
	F	15-24	3,567,828	32.5	44.8			21.0		1.6
		25-64	6,402,293	58.1	30.3			9.9		1.6
Vietnam	1989	MF	15-24	12,819,851	6.3	80.8		12.3		0.4
			25-54	19,867,221	8.2	74.9		13.4		3.2
	F	15-24	6,563,565	6.7	80.6			12.0		0.4
		25-54	10,569,925	11.3	75.0			11.2		2.3
China	1990	MF	15-24	245,919,500	5.7	35.2		57.3		1.7
			25-64	508,596,200	23.7	36.1		38.0		2.2
Fiji	1986	MF	15-24	145,678	1.6	15.6	17.2			
			25-64	267,733	8.9	35.0	25.0	26.6		4.6
	F	15-24	73,000	1.6	13.5	16.9	65.3			2.8
		25-64	137,551	12.4	34.5	26.3	23.4			3.5
Indonesia	1990	MF	15-24	35,055,345	19.0	39.5		40.8		0.6
			25-64	71,746,574	51.8	27.7		18.0		2.5
	F	15-24	17,951,600	21.8	40.3			37.2		0.7
		25-64	36,352,602	60.0	25.0			13.4		1.6
Malaysia	1996	MF	25+	9,654,600	16.7	13.0	20.6	19.3	23.5	6.8
			F 25+	4,766,700	23.6	13.3	19.1	17.2	21.4	5.5
Papua New Guinea	1980	MF	15-24	558,762	46.1	14.7	23.2	15.0	1.0	
			25+	1,135,783	82.6	8.2	5.0	3.9	0.3	—>
	F	15-24	256,742	55.1	13.2	20.3		10.9	0.4	
		25+	551,886	87.3	7.2	3.6		1.8	0.0	—>
Philippines	1995	MF	25+	42,700,000	3.7	20.7	15.1	17.2	21.2	21.9
			F 25+	21,339,000	4.2	19.4	15.3	17.0	20.2	23.8
Samoa	1981	MF	15-24	35,277	1.3	84.8	2.9	3.6	6.6	0.9
			25-64	44,207	2.6	55.9	2.5	11.8	24.8	2.2
	F	15-24	16,830	1.2	88.2	2.8	2.5	4.7		0.6
		25-64	22,142	2.6	56.4	1.9	11.9	24.8		2.3
Thailand	1990	MF	6+	49,076,100	10.7	69.6	—>	13.7	—>	5.1
			F 6+	24,835,200	12.8	70.0	—>	11.4	—>	5.1

Country	Year	Sex	Age Group	Total Population	Highest Level Attained						
					No Schooling (%)	First Level		Secondary Level		Post Secondary (%)	
						Incompleted (%)	Completed (%)	S-1 (%)	S-2 (%)		
Tonga	1986	MF	25-34	10,855	6.0	16.0	→	72.0	→	4.1	
			35+	23,056	11.3	43.4	→	41.2	→	2.2	
Vanuatu	1989	MF	25-34	5,672	5.7	15.9	→	73.3	→	3.4	
			35+	12,065	12.4	45.8	→	38.7	→	1.3	
Hong Kong	1996	MF	25+	4,197,007	11.4	26.9	→	18.6	28.6	14.5	
			15-24	18,807,208	0.1	19.4		64.9		15.0	
Japan	1990	MF	25-64	67,096,768	0.1	26.5		47.9		23.9	
			65+	14,894,595	0.8	65.2	→	25.3	→	6.9	
			15-24	9,216,794	0.1	16.0		65.8		17.6	
			25-64	33,718,670	0.1	27.1		51.3		19.9	
			65+	8,906,958	1.1	68.1	→	25.5	→	3.4	
Korea, Rep.	1995	MF	20-24	4,161,474	0.2	0.0	0.4	3.1	51.8	44.4	
			25-64	23,525,456	3.6	0.7	15.9	16.7	39.8	23.2	
New Zealand	1991	MF	20-24	2,021,400	0.1	0.0	0.4	2.8	55.8	40.7	
			25-64	11,703,470	5.7	1.0	20.6	19.0	38.1	15.6	
		F	25+	1,992,354	0.0	36.8	→	16.3	7.8	39.1	
			25+	1,029,375	0.0	39.5	→	19.6	8.0	32.9	

Notes:

General Note: → persons whose level of education has not been stated are included in the total population. Their percentage distribution, although not shown in the table, can be derived by subtracting the sum of the other percentage distribution from 100.

China → Not including persons whose level of education is unknown.

Japan → The distribution by level of education does not take into account those still attending school.

Singapore → Second cycle of secondary education includes "polytechnic". Post-secondary education refers to universities only.

The six levels of educational attainment are conceptually based on the categories of the International Standard Classification of Education and defined as follows:

No Schooling. This term applies to those who have completed less than one year of schooling.

First level not completed. This category includes all those who completed at least one year of education at the first level but who did not complete the final grade at this level. The duration of education at the first level may vary depending on the country.

First level completed. Those who completed the final grade of education at the first level but did not go on to second level studies are included in this group.

S-1: Entered second level, first stage. This group comprises those whose level of educational attainment was limited to the first stage of education at the second level.

S-2: Entered second level, second stage. This group consists of those who moved to the second stage of second level education but did not proceed to studies at the third level.

Post-secondary. Anyone who undertook third level studies, whether or not they completed the full course, would be counted in this group.

Sources:

All data except those for Vanuatu are from UNESCO 1998a and 1997

Vanuatu: World Bank 1995d

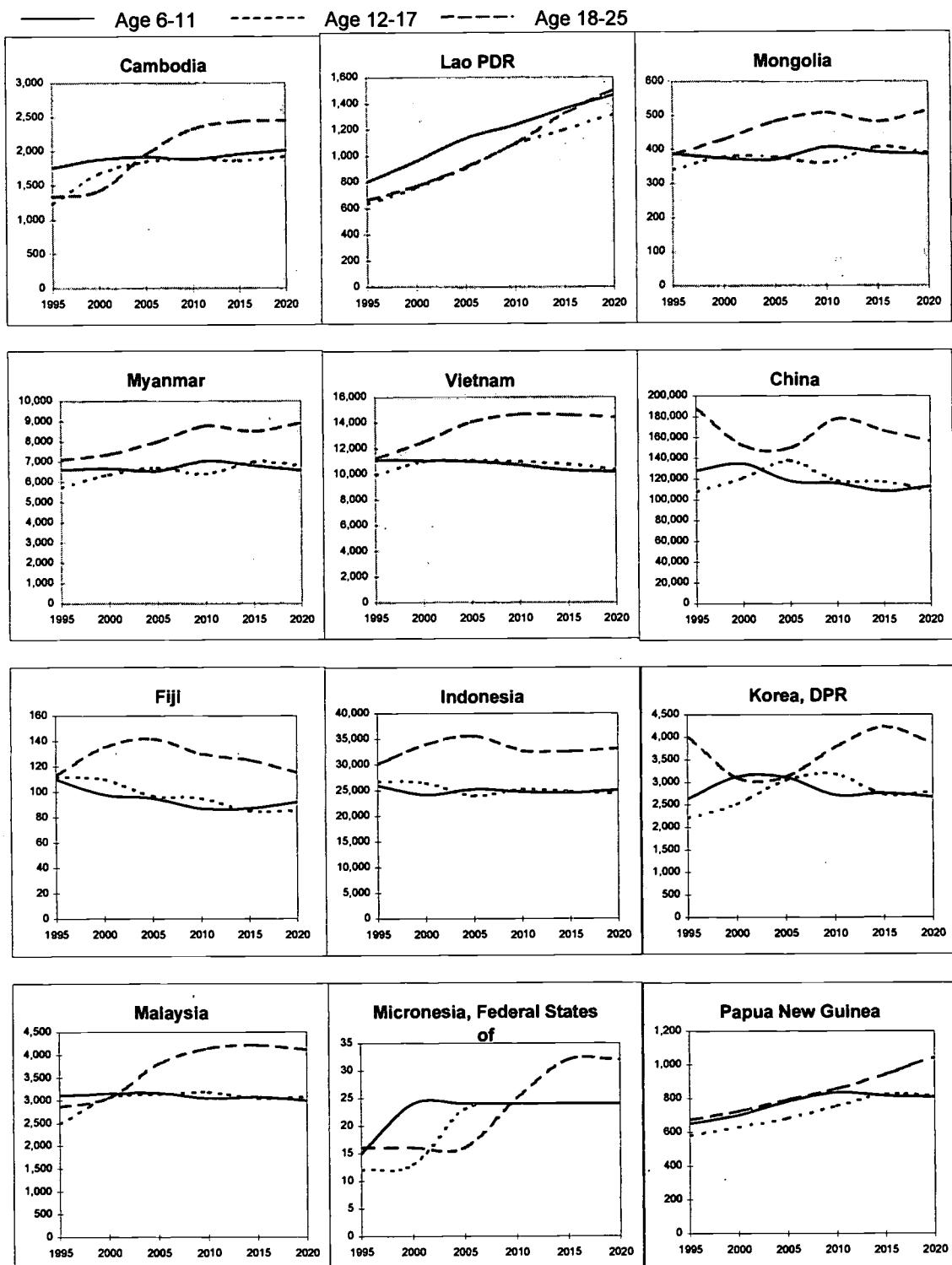
Table 1.5
Population Projections for School-Age Groups from 2000 to 2020 (thousands)

	Projected					
	1995	2000	2005	2010	2015	2020
Cambodia						
Primary school entry age, 6	316	321	314	320	333	341
Primary school age, 6-11	1,761	1,882	1,916	1,886	1,959	2,014
Secondary school age, 12-17	1,230	1,674	1,843	1,895	1,861	1,923
Age 18 - 25	1,338	1,419	1,949	2,325	2,432	2,443
Lao, PDR						
Primary school entry age, 6	147	179	199	219	238	256
Primary school age, 6-11	803	960	1,134	1,235	1,358	1,466
Secondary school age, 12-17	634	758	905	1,087	1,196	1,315
Age 18 - 25	663	767	914	1,093	1,319	1,504
Mongolia						
Primary school entry age, 6	67	59	69	65	67	61
Primary school age, 6-11	388	375	370	407	392	386
Secondary school age, 12-17	341	378	378	360	406	390
Age 18 - 25	385	430	482	508	481	515
Myanmar						
Primary school entry age, 6	1,190	1,055	1,173	1,144	1,125	1,061
Primary school age, 6-11	6,621	6,664	6,548	7,036	6,804	6,582
Secondary school age, 12-17	5,710	6,372	6,705	6,398	6,983	6,798
Age 18 - 25	7,112	7,366	7,982	8,761	8,509	8,910
Vietnam						
Primary school entry age, 6	1,861	1,844	1,811	1,745	1,679	1,744
Primary school age, 6-11	11,087	11,071	10,986	10,708	10,297	10,191
Secondary school age, 12-17	9,936	10,967	11,059	10,989	10,755	10,360
Age 18 - 25	11,204	12,510	14,049	14,661	14,597	14,418
China						
Primary school entry age, 6	24,974	19,981	20,042	17,940	18,641	19,040
Primary school age, 6-11	128,504	134,855	117,997	115,831	108,359	113,026
Secondary school age, 12-17	107,947	121,139	137,634	118,169	117,387	108,052
Age 18 - 25	188,835	152,172	149,854	177,573	166,734	156,133
Fiji						
Primary school entry age, 6	17	16	15	14	15	16
Primary school age, 6-11	110	98	95	87	87	92
Secondary school age, 12-17	112	110	97	95	85	85
Age 18 - 25	113	135	142	130	125	115
Indonesia						
Primary school entry age, 6	3,909	4,211	4,160	4,056	4,160	4,199
Primary school age, 6-11	25,974	24,151	25,263	24,710	24,540	25,068
Secondary school age, 12-17	26,770	26,548	23,949	25,184	24,760	24,394
Age 18 - 25	30,105	33,929	35,588	32,735	32,562	33,098
Korea, DPR						
Primary school entry age, 6	496	546	455	472	437	465
Primary school age, 6-11	2,638	3,125	3,109	2,721	2,762	2,670
Secondary school age, 12-17	2,208	2,515	3,041	3,180	2,731	2,784
Age 18 - 25	4,032	3,103	3,120	3,767	4,221	3,870
Malaysia						
Primary school entry age, 6	520	538	506	516	504	493
Primary school age, 6-11	3,109	3,157	3,164	3,042	3,071	2,993
Secondary school age, 12-17	2,492	3,062	3,139	3,186	3,040	3,075
Age 18 - 25	2,861	3,059	3,802	4,145	4,216	4,114

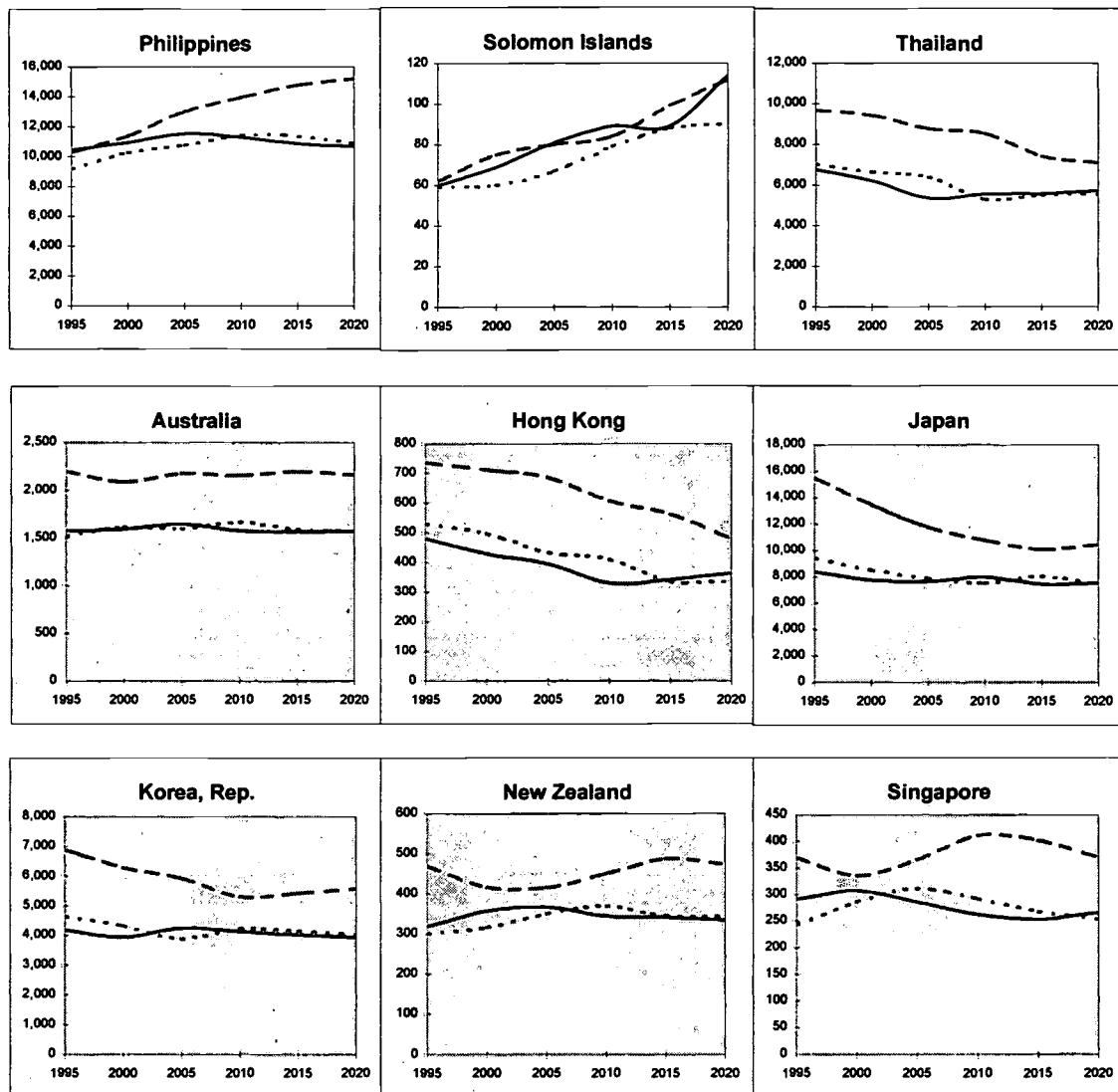
	Projected					
	1995	2000	2005	2010	2015	2020
Micronesia, Federal States of						
Primary school entry age, 6	4	4	4	4	4	4
Primary school age, 6-11	15	24	24	24	24	24
Secondary school age, 12-17	12	13	23	24	24	24
Age 18 - 25	16	16	16	25	32	32
Papua New Guinea						
Primary school entry age, 6	113	124	140	138	134	137
Primary school age, 6-11	653	701	782	836	816	808
Secondary school age, 12-17	578	632	683	755	826	814
Age 18 - 25	674	723	793	859	943	1,046
Philippines						
Primary school entry age, 6	1,772	1,897	1,925	1,812	1,828	1,701
Primary school age, 6-11	10,441	10,941	11,530	11,293	10,863	10,679
Secondary school age, 12-17	9,157	10,252	10,755	11,434	11,377	10,853
Age 18 - 25	10,272	11,390	12,970	13,943	14,783	15,197
Solomon Islands						
Primary school entry age, 6	10	12	14	15	14	27
Primary school age, 6-11	60	69	81	89	89	114
Secondary school age, 12-17	59	60	67	79	88	90
Age 18 - 25	62	75	80	84	99	112
Thailand						
Primary school entry age, 6	1,172	911	928	913	958	936
Primary school age, 6-11	6,764	6,223	5,330	5,541	5,570	5,716
Secondary school age, 12-17	7,037	6,642	6,378	5,280	5,487	5,515
Age 18 - 25	9,672	9,415	8,768	8,532	7,412	7,088
Australia						
Primary school entry age, 6	252	275	265	261	262	262
Primary school age, 6-11	1,575	1,591	1,644	1,576	1,567	1,571
Secondary school age, 12-17	1,524	1,612	1,594	1,663	1,589	1,568
Age 18 - 25	2,198	2,087	2,170	2,152	2,193	2,159
Hong Kong						
Primary school entry age, 6	71	72	57	55	60	61
Primary school age, 6-11	481	429	395	330	342	364
Secondary school age, 12-17	530	498	432	410	336	337
Age 18 - 25	737	712	686	607	563	481
Japan						
Primary school entry age, 6	1,343	1,237	1,364	1,237	1,274	1,219
Primary school age, 6-11	8,382	7,741	7,637	7,960	7,451	7,536
Secondary school age, 12-17	9,435	8,521	7,862	7,527	8,036	7,452
Age 18 - 25	15,494	13,473	11,767	10,798	10,089	10,454
Korea, Rep.						
Primary school entry age, 6	616	704	698	677	661	646
Primary school age, 6-11	4,182	3,940	4,240	4,130	4,012	3,926
Secondary school age, 12-17	4,629	4,321	3,878	4,224	4,150	4,031
Age 18 - 25	6,895	6,284	5,927	5,294	5,416	5,573
New Zealand						
Primary school entry age, 6	55	62	58	58	55	57
Primary school age, 6-11	318	357	366	344	341	334
Secondary school age, 12-17	300	316	350	369	345	343
Age 18 - 25	469	417	415	450	487	474
Singapore						
Primary school entry age, 6	53	49	45	41	43	45
Primary school age, 6-11	291	307	286	262	253	266
Secondary school age, 12-17	242	286	311	292	268	253
Age 18 - 25	370	338	365	410	402	370

Source: World Bank, EdStats

Figure 1
Population Projections for School-Age Groups from 2000 to 2020, (thousands)



— Age 6-11 - - - - Age 12-17 - - - - Age 18-25



Source: World Bank, EdStats

Table 1.6
Distribution of the Population and of the Labor Force, 25 to 64 Years of Age, by Level of Educational Attainment, 1996

Country	Population					Labor Force				
	Below Upper Secondary Education (%)	Upper Secondary Education (%)	Non- University Tertiary Education (%)	University- Level Education (%)	Total (%)	Below Upper Secondary Education (%)	Upper Secondary Education (%)	Non- University Tertiary Education (%)	University- Level Education (%)	Total (%)
Indonesia	81	15	2	2	100					
Malaysia	67	26	x	7	100	62	29	x	9	100
Thailand	87	3	5	6	100	86	3	5	7	100
Australia	43	32	10	15	100	37	35	11	17	100
Korea	39	42	x	19	100	38	41	x	21	100
New Zealand	40	35	14	11	100	35	38	15	13	100

Note: x Data included in another category/column of the table.

Source: OECD 1998

2. Financial and Human Resources Invested in Education

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Table 2.1
Total Public Expenditure on Education As a % of GNP, and Public Expenditure Per Student by Level of Education (% of GNP per capita), 1980-1996.

Country	Public Spending on Education, Total (% of GNP)					Public Expenditure per Student by Level of Education (% of GNP per capita)															
	1980	1985	1990	1994	1995	1996	1980	1985	1990	1995	1996	1980	1985	1990	1995	1996	1980	1985	1990	1995	1996
Cambodia *							2.9					22.6					24.5	25.0			
Lao PDR	2.3	2.4	2.5					4.9										61.7	55	60.6	
Mongolia	7.8	8.6	5.2	5.6	6.4		63.8	73.3					35.6	46.5				96.4	132.0	68.3	52.5
Myanmar	1.7	2.0	2.4	1.3	1.3								10.0					36.2			21
Vietnam			1.8	2.7	2.7																
China	2.5	2.6	2.3	2.6	2.3	2.3	3.8	4.6	5.3	5.3	5.5	14.0	14.0				245.4	133.7	102.1	66.1	65.9
Fiji	5.9	6.0	4.7	5.4			16.2	18.9	12.4			25.8					37.4	79.8			
Indonesia *	1.7	3.7	1.1	1.3	1.4	1.4		12.6				23.3	5.9	6.6				18.7	12.9		
Kiribati	7.5	6.7	6.0	6.3	6.3		14.6	12.7													
Malaysia	6.0	6.6	5.4	5.3	5.3	5.2	12.0	15.2	10.5	11.2		21.0	22				148.9	138.2	122.9	77	
Micronesia, Fed. Sts.								73.3													
Papua New Guinea *	4.7	6.9		2.5	2.2	3.2	5.8	4.9	8.6			65									
Philippines	1.7	1.4	2.9									4.3	2.2								
Samoa			4.2																		
Solomon Islands	5.6	4.7	4.2																		
Thailand *	3.4	3.6	3.6	3.8	4.2		8.8	15.5	13.4	16.0		15.3	11				60.2	39.9		30.7	
Tonga	4.4	4.8		4.7			10.5	10.2	10.5			7.9						54.4	98.1		
Vanuatu			4.4	5.1	4.9							50.7	49								
Australia	5.5	5.6	5.4	5.6	5.6			17.4	17.4			44.7	37.8	38.1	18.8		51.3	66.2	55.7	30	
Hong Kong	2.4	2.8	2.8	2.8			7.0	8.0	8.0	8.0		8.2	11	12.5			45.5	44.3	51.3	52	
Japan	5.8	5.0	4.7	3.8	3.8		14.8	14.3	14.9	19.3		16.6	16.8	19			21.0	52.2	49.0	16	
Korea, Rep.	3.7	4.5	3.5	3.7	3.7		10.4	13.9	12.0	12		9.2	10.7	9.9	12.9		15.9	10.9	5.8	6.0	
New Zealand	5.8	4.7	6.5	6.7	6.7		15.1	15.8	17.7	16.6	17.6	13.6	11.4	15.5	23	23.3	59.8	41.8	70.6	39	44.8
Singapore	2.8	4.4	3.1	3.3	3		6.8	9.4	8.2	7.8	14.0	11.0	13			40.6	59.8	37.5	28.2		

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Notes:

Data in *italic* refer to the most recent data within two years of the indicated year.

* 1985 data on Primary, Secondary and Tertiary refer to "mid-1980s", year not specified (source: Tan and Mingat 1992).

Sources:

All data except those specified below are from World Bank, EdStats.

- Cambodia*: 1986 data on Total (Total Public Expenditure on Education As a % of GNP) from UNESCO 1998a. 1985 data from Tan and Mingat 1992.
Lao PDR: 1995 data from UNESCO 1998b. 1996 data on Total from UNESCO 1998a.
Mongolia: 1995 data on Total from UNESCO 1998b. 1996 data on Total from UNESCO 1998a. 1985 and 1990 data on Primary from World Bank, SIMA.
Myanmar: 1994 data from USAID, GED. 1995 data from UNESCO 1998b.
Vietnam: 1990 and 1994 data from USAID, GED. 1995 data from UNESCO 1998b.
China: 1995 data on Total from UNESCO 1997. 1996 data on Total from UNESCO 1998a. All data on Secondary from UNESCO 1998b.
Fiji: 1985 data on Total from USAID, GED. 1995 data on Total from UNESCO 1998b. 1990 data on Primary, Secondary and Tertiary from World Bank 1995a
Indonesia: 1985 data from Tan and Mingat 1992. 1995 and 1996 data on Total from UNESCO 1998a.
Kiribati: 1990 data on Total from USAID, GED. 1994 data from UNESCO 1997. 1995 data from UNESCO 1998b.
Malaysia: 1995 data on Total, Secondary and Tertiary from UNESCO 1998b. 1996 data on Total from UNESCO 1998a.
Papua New Guinea: 1980 data from Lockheed, Verspoor and et al. 1991. 1985 data from Tan and Mingat 1992.
Philippines: 1994 and 1996 data from World Bank 1999a. 1995 data from UNESCO 1997.
Solomon Islands: 1985 data from USAID, GED.
Thailand: 1985 data from Tan and Mingat 1992. 1995 data on Total from UNESCO 1997. 1995 data on Secondary from UNESCO 1998b.
Tonga: 1995 data from UNESCO 1998b.
Vanuatu: All data on Total from UNESCO 1997. Data on Primary from World Bank, SIMA. 1995 data on Secondary from UNESCO 1998b.
Australia: 1994 data on Total from UNESCO 1998a. 1995 data on Total and Tertiary from UNESCO 1998b.
Hong Kong: 1980, 1985, 1990 and 1995 data on Total from UNESCO 1997. 1994 data on Total from USAID, GED. 1985 data on Secondary and 1995 data on Tertiary from UNESCO 1998b.
Japan: 1994 data on Total from USAID, GED. 1995 data on Total, Secondary and Tertiary from UNESCO 1998b.
Korea, Rep.: 1994 data on Total from UNESCO 1997. 1995 data on Total from UNESCO 1998b.
New Zealand: 1994 data from UNESCO 1997. 1995 data on Total, Secondary and Tertiary from UNESCO 1998b.
Singapore: 1995 data on Total from UNESCO 1997. 1980 and 1985 data on Secondary from Komenan 1987. 1995 data on Secondary from UNESCO 1998b.

- Mongolia:* 1985, 1990 and 1994 data on Total (Total Public Expenditure as a % of Total Government Expenditure) refer to expenditure of the Central government only.
- Myanmar:* 1995 data on Total refers to expenditure of the Ministry of Education only.
- Vietnam:* 1990 data on Expenditure by Levels of Education and unspecified refer to 1991 data.
- Fiji:* 1994 data refer to 1993 data.
- Kiribati:* For the 1995 data on Expenditure by Level of Education, the percentages are calculated for this study, using the data from the source below. Expenditure on Secondary level includes provision of secondary education Government schools, assistance to mission schools (identified as secondary schools), and expenditure on vocational and technical institutions. Expenditure on Tertiary includes teacher training and contribution to University of South Pacific in Fiji. Support to non-formal education, expenditure to policy & administration, conduct and provision of exams, curriculum, texts, teacher resources, and library & archival services are not included in any categories in this study.
- Malaysia:* 1990 and 1994 data on Total refer to expenditure of Ministry of education only.
- Philippines:* For the data on Expenditure by Level of Education for the years of 1990, 1994, and 1995, the percentages are calculated, using expenditure to only elementary, secondary, and higher education, for this study. Thus, expenditure to technical/vocational, others, and DECS Central Administration, through appear on the original source, are not included in this table.
- All data except those specified below are from USAID, GED.
- Cambodia:* All data from World Bank 1998c
- Lao PDR:* 1980 and 1985 data on Total (Total Public Expenditure on Education As a % of Total Government Expenditure) from Lockheed, Verspoor et al. 1991. 1990 data on Total from World Bank 1995b. 1994 and 1995 data on Total from World Bank 1997a. 1990 and 1994 data on Expenditure by Level of Education from World Bank 1997a. 1995 data on Expenditure by Level of Education from UNESCO 1998a.
- Mongolia:* All data on Total from UNESCO 1998a. 1980, 1985, 1990 and 1995 data on Expenditure by Level of Education from UNESCO 1998a.
- Myanmar:* 1980 and 1985 data on Total from Tan and Mingat 1982. 1995 data on Total from UNESCO 1998b.
- Vietnam:* 1995 data on Total from UNESCO 1998b. All data on Expenditure by Level of Education from World Bank 1998g.
- China:* 1996 data on Total from UNESCO 1998a. 1995 data on Expenditure by Level of Education from UNESCO 1998a.
- Fiji:* 1996 data on Total from World Bank 1998e. 1994 data on Expenditure by Level of Education from World Bank 1995a
- Indonesia:* 1985, 1990 and 1994 data on Total from World Bank 1998d. 1985 and 1996 data on Total from UNESCO 1998a. All data on Expenditure by Level of Education from World Bank 1998d.
- Kiribati:* 1995 data on Total from UNESCO 1998b. 1996 data on Total from World Bank 1998f. 1995 data on Expenditure by Level of Education from World Bank 1998f
- Malaysia:* 1995 data on Total from UNESCO 1998b.
- Marshall Islands:* World Bank 1998e.
- Papua New Guinea:* 1980 data on Total from Lockheed, Verspoor et al. 1991. 1985 data on Total from Tan and Mingat 1992. 1990 data on Total from World Bank 1992. Data on Expenditure by Level of Education from Tan and Mingat 1992.
- Philippines:* 1994, 1995 and 1996 data on Total from World Bank 1999a. 1990, 1994 and 1995 data on Expenditure by Level of Education from World Bank 1999a.
- Samoa:* 1996 data from World Bank 1998e.
- Solomon Islands:* 1986 data from World Bank 1998e.
- Thailand:* 1980 data on Expenditure by Level of Education from Komenan 1987. 1995 data on Expenditure by Level of Education from UNESCO 1998a.
- Tonga:* 1995 data from UNESCO 1998b. 1996 data from World Bank 1998e.
- Vanuatu:* 1990 and 1994 data on Total from World Bank 1995d. 1995 data on Total from World Bank 1998e.
- Australia:* All 1994 data from UNESCO 1998a. 1995 data from UNESCO 1998b.
- Japan:* 1980 data on Total from Lockheed, Verspoor et al. 1991. 1995 data on Total from UNESCO 1998b. 1980 data on Expenditure by Level of Education from Komenan 1987. 1994 data on Expenditure by Level of Education from UNESCO 1998a.
- Korea, Rep.:* 1980 and 1985 data on Total from Tan and Mingat 1982. 1990 data on Total from Republic of Korea, Ministry of Education 1997. 1995 data on Total from UNESCO 1998a. 1995 data on Expenditure by Level of Education from UNESCO 1998a.
- New Zealand:* 1995 data on Total from UNESCO 1998b. 1995 data on Expenditure by Level of Education from UNESCO 1998a.
- Singapore:* 1985 data on Total from World Bank 1999b.

Table 2.3 a
Distribution of Public and Private Sources of Initial Funds* for Educational Institutions, 1995

Country	Primary and Secondary Education		Tertiary Education		All Level of Education Combined	
	Public Sources (%)	Private Sources (%)	Public Sources (%)	Private Sources (%)	Public Sources (%)	Private Sources (%)
Vietnam	46.6	53.4	80.6	19.5	56.8	43.2
Indonesia	68.2	31.8	46.3	53.7	64.5	35.5
Malaysia	98.0	2.0	96.0	4.0	98.0	2.0
Philippines	60.6	39.4	45.7	54.3	60.7	39.3
Australia	87.0	13.0	73.0	27.0	82.0	18.0
Japan	93.6	6.3	46.4	53.5	77.2	22.7
Korea, Rep.	75.2	24.8	16.0	84.0	59.4	40.6

Notes: * Initial Funds mean the original source of expenditures before public-to-public or private-to-public transfers have occurred.

Malaysia: 1996 data

Philippines: 1994 data.

Japan: 1994 data

Korea, Rep.: 1994 data

Percentages for Philippines and Vietnam are calculated for this study, using the raw data from the sources below.

Sources: All data except those specified below are from OECD 1998.

Vietnam: World Bank 1998g

Indonesia: World Bank 1998d

Philippines: World Bank 1999a

Japan: OECD 1997

Korea, Rep. : OECD 1997

Table 2.3 b
Educational Expenditure from Public and Private Sources on Educational Institutions as Percentage of GDP by Level of Education, 1995

Country	Primary and Secondary Education			Tertiary Education			All Level of Education Combined (including pre-primary and undistributed) (%)
	Primary and Secondary Secondary (%)	Primary (%)	Secondary (%)	All Tertiary (%)	Non- University (%)	University- Level (%)	
Indonesia			1.4				
Malaysia	3.4	1.6	1.8	1.2	0.4	0.8	5.1
Australia	3.7	1.6	2.1	1.8	0.3	1.5	5.6
Japan	3.1	1.3	1.7	1	0.1	0.9	4.7
Korea, Rep	3.8	1.7	2.2	1.9	0.4	1.5	6.2

Note: Data for Malaysia refer to 1996 data.

Source: OECD 1998

Table 2.3 c
Direct Expenditure for Institutions and Transfers to the Private Sector as a Percentage of Total Government Expenditure on Tertiary Education, 1995

Country	Direct Expenditure for Institutions (%)	Transfer to the Private Sector for Educational Purposes				Total (%)	
		Financial Aid to Students					
		Scholarships/other Grants to Households (%)	Student Loans (%)	Total (%)			
China	100	n	n	n	n	100	
Malaysia	95	2	3	5	n	5	
Australia	78	13	9	22	n	22	
Japan		a			n		
Korea, Rep.	97.1	2.6	n	2.9	n	2.9	
New Zealand	64	14	22	36	a	36	

Notes: a = Data not applicable because the category does not apply

n = Magnitude is either negligible or zero

Data for Malaysia refer to 1996 data

Korea, Rep.: 1994 data.

Sources: All data except those for Korea are from OECD 1998.

Korea, Rep.: OECD 1997.

Table 2.4
Expenditure for Research and Experimental Development (R&D)*, Various Years from 1985 to 1995

Country	Year	Expenditure for R&D			Annual average per R&D Scientist or Engineer, US\$ **
		As % of GNP	Per Capita, US\$ **		
Mongolia	1995	0.0	0.0		1.1
Vietnam ¹	1985	0.4	0.4		1,106.7
China	1995	0.5	2.9		8,101.6
Fiji	1986	0.3	4.4		93,176.1
Indonesia	1995	0.1	1.0		
Malaysia	1992	0.4	11.4		132,383.3
Philippines ***	1992	0.2	1.8		11,572.2
Thailand	1995	0.1	3.6		30,106.5
Australia	1994	1.7	299.8		94,703.6
Hong Kong	1995	0.3	69.0		702,509.3
Japan	1994	2.9	1,065.8		168,939.6
Korea Rep.	1994	2.8	220.5		83,636.4
New Zealand	1993	1.1	128.1		71,947.6
Singapore	1995	1.1	341.5		125,296.4

Notes: * In general, Research and Experimental Development (R&D) is defined as any creative systematic activity undertaken in order to increase the stock of knowledge, including knowledge to devise new applications. It includes fundamental research (i.e. experimental or theoretical work undertaken with no immediate practical purpose in mind), applied research in such fields as agriculture, medicine, industrial chemistry, etc. (i.e. research directed primarily towards a special practical aim or objective) and experimental development work leading to new devices, products or processes.

The measurement of R&D expenditure is calculated on the basis of intramural current expenditure, including overheads, and intramural capital expenditure. The sum of the intramural expenditures incurred by the national institutions provides the total domestic expenditure which is the information presented at the international level.

** Expenditures, in national currency in the original source, are converted in US\$, according to the official exchange rates in the appropriate years, utilizing the Global Development Finance & World Development Indicators (GDF&WDI) central database in the Statistical Information Management and Analysis (SIMA), the World Bank, except Vietnam (see note 1 below).

*** Provisional or estimated data

¹ Expenditures are converted in US\$, based on the exchange rate in the appropriate year from the International Monetary Fund: International Financial Statistics, SIMA, the World Bank.

Source: UNESCO 1998a

Table 2.5
Public Expenditure by Purpose, Various Years from 1980 to 1996

Country Currency	Year	Total (000 000)	Administration Other than Personnel (%)	Emoluments			Teaching Materials (%)	Scholarships (%)	Total Meals and Board (%)	Welfare services Of which School (%)	Other Expenditure (%)	Subsidies Not Distributed (%)
				Administrative Staff (%)	Teaching Staff (%)	Other Personnel (%)						
Laos PDR Kip	1992 1993	16,050 35,505	/. 8.5	13.0 4.3	65.0 75.0	0.1 0.1	78.0 79.3	0.4 5.5	10.4 5.9	0.0 1.1	11.0 0.6	0.0 0.2
Mongolia Tugrik	1994	15,384	5.3				36.8					
Myanmar Kyat	1994	4,438	/. 4.				56.8					
China Yuan	1990 1995	9,418 18,416	7.7 7.6				56.1 55.3	4.7 5.8	4.4 3.3	4.1 3.4	23.1 24.6	— —>
Fiji Dollar	1981 1989	35,652 82	/. 2.6				69.7 69.7	/. /.	/. /.	/. /.	30.3 30.3	— —>
Indonesia Rupiah	1992 1995	38,870 3,635,290	/. 124	—> 6.4			86.5 82.2	0.2 3.9	2.0 2.2	0.7 1.0	2.3 0.5	1.9 8.6
Kiribati Australian Dollar	1980 1985	3 15.6	9.1 15.6				84.0 58.3				14.8 14.8	11.7 11.7
Malaysia Ringgit	1990 1991 1994	4 6 6	16.1 17.8 17.8				60.6 55.1	5.6 5.0	6.9 0.6	6.1 7.5	5.9 7.3	2.7 13.9
Philippines Peso	1980 1985 1990	4,023 7,026 27,010	16.4 2.0 /. 1.2	—> 3.1 3.6 11.0	57.5 65.0 58.4 61.7	5.8 3.0 1.2 0.9	2.5 2.1 1.4 0.8	2.7 2.5 4.3 2.1	2.7 2.1 4.3 0.9	3.9 2.3 2.9 0.1	11.3 15.0 17.8	
Samoa Tala	1990	14	6.4		72.3	1.0	84.3	0.7		1.4	0.7	— 7.3
Solomon Islands Dollom Isl. Dollar	1979 1991	3 24	5.7 0.4	—> 71.9	62.9 72.3		8.8 3.9	11.1 13.7	9.3 10.2	2.2 —		
Thailand Bant	1980 1985	15,867 33,830	4.5 4.2				80.3 83.6	4.6 4.2	5.3 0.4	0.9 0.7	0.9 0.1	— —>
Tonga Pa'anga	1980 1985	64,702 108,485	5.7 6.3				62.0 61.6	5.3 5.0	4.0 4.5	0.1 0.1	5.0 0.1	1.8 3.4
	1994 1995	111,084 1,339	8.4 2.4				68.2 5.1	4.5 4.5	3.6 77.8	0.5 3.5	5.9 8.4	5.9 9.1
	1980 1985	1,339 4	0.5 8.3				57.8 1.5		2.4 67.6	1.7 1.7		14.4 7.1

Country Currency	Year	Total (000 000)	Administration Other than Personnel (%)	Emoluments			Scholarships (%)	Total Welfare services (%)	Of which School Meals and Board (%)	Other Expenditure (%)	Subsidies Not Distributed (%)
				Administrative Staff (%)	Teaching Staff (%)	Other Personnel (%)					
Vanuatu Vatu	1992	9	/.	/.	70.7	0.4	4.7	0.3	0.3	16.8	7.0
Australia Dollar	1990	831	/.	4.9	68.3	3.5	89.8	/.	/.	10.2	-
Hong Kong Dollar	1988	1,120	0.3	/.	76.7	1.1	81.6	/.	/.	6.2	16.4
Japan Yen	1990	12,583	17,889	/.	/.	/.	/.	5.3	2.2	-	-
Korea, Republic of Won	1994	23,768	3,036	15.2	52.8	23.1	75.9	1.3	0.7	9.0	11.0
New Zealand Dollar	1980	6,180	6,180	10.6	→	72.9	1.8	0.4	1.1	-	14.0
Singapore Dollar	1992	18,561,875	19,327,828	10.0	→	69.2	1.4	0.0	0.1	9.5	-
Tonga	1993	19,382,143	19,382,143	5.3	7.1	69.4	0.7	2.5	0.5	12.4	1.1
Vanuatu	1994	11,370,573	11,370,573	10.2	10.2	61.2	71.4	1.1	0.8	3.7	6.1
Vanuatu	1995	1,171	1,171	1.5	10.2	61.2	73.5	77	7.1	-	-
Vanuatu	1990	2,911,881	5,495,204	5.3	7.1	69.4	0.7	2.5	0.5	19.2	-
Vanuatu	1990	16,699,194	16,699,194	13.5	10.2	61.2	71.4	1.1	0.8	13.6	-
Vanuatu	1992	5,107	5,107	11.2	1.2	40.4	73.5	-	-	-	-
Vanuatu	1990	587	587	1.6	→	34.4	5.0	1.7	0.3	7.5	43.1

Notes:
→ When the symbol / is shown without an explanatory note, the corresponding data are included under other expenditure. Also, several countries are shown with the symbol ... due to the fact that the questionnaire reply did not clearly indicate whether the relevant expenditure was nil or was included under other categories.

Magnitude nil

/. Data included elsewhere under another category

Australia: For 1986 and 1990, expenditure on administration other than personnel is included with total emoluments. For 1994, not including preprimary education. For 1994, other personnel includes emoluments of administrative staff.

China: Expenditure on specialized second level and technical/vocational schools is not included.

Indonesia: Expenditure of the ministry of Education only.

Lao PDR: Expenditure on administration other than personnel is included with total emoluments.

Malaysia: For 1991 and 1994, data refer to expenditure of the Ministry of Education only. For 1991, expenditure on administration other than personnel is included with total emoluments.

Myanmar: Expenditure of the Ministry of Education only.

Philippines: Except for 1985, expenditure on administration other than personnel is included with total emoluments. For 1990, figures on current expenditure refer to the allocated budget.

Thailand: For 1995, Ministry of Education only, and not including expenditures on universities.

Tonga: For 1992, capital expenditure is included and expenditure on administration other than personnel is included with total emoluments.

Vanuatu, Republic of: For 1990, expenditure on administration other than personnel is included with total emoluments.

UNESCO 1997 and 1998.

Source:

Table 2.6 a
Number of Teaching Staff in Preprimary* Level, 1980-1996

Country	Preprimary Level									
	Total Number					% Female				
	1980	1985	1990	1995	1996	1980	1985	1990	1995	1996
Cambodia	630	2,398	2,959	1,954	1,899	100	82	100	99	
Lao PDR	252	1,327		2,173		100	100		100	100
Mongolia	1,813	2,205	3,747	5,274	5,541	100			99	100
Vietnam	57,605	65,718	65,400	75,034		100	100			
China	410,700	549,900	749,600	875,063	888,596	82	96	96	95	94
Fiji	196	308	375			100	99			
Indonesia	37,100	58,341		96,466						
Korea, Dem. Rep.						100				
Malaysia		9,056	10,773	20,352			98		99	
Papua New Guinea				53					66	
Philippines		4,636	9,644	13,578						
Thailand		33,119	64,628							
Vanuatu	49					100				
Hong Kong	5,177	6,959	7,595	8,438		98	98		99	
Japan	110,037	107,606	109,753	102,992	103,518	88	88	89	94	94
Korea, Rep.	3,339	9,281	18,511	21,098	22,205	85	90	94	100	100
New Zealand		1,459		9,236			99		95	
Singapore		684				100				

Notes: * The data refer to *preprimary education*, e.g. kindergarten, nursery schools as well as infant classes attached to schools at higher levels. Day nurseries, child care and play centres, etc. are excluded. Unless otherwise stated, data cover both public and private establishments. Figures on teaching staff refer, in general, to both full-time and part-time teachers. The enrolment in private institutions (aided or unaided) as a percentage of the total number of children enrolled in education preceding the first level is also shown. In some cases, the data given should be considered as an approximate indication of the importance of education preceding the first level since complete data are not available. (UNESCO 1998, Statistical Yearbook).

Data in *italic* refer to the most recent data within two years of the indicated year (see below for details).

Cambodia: 1995 data refers to 1994 data.

Indonesia: 1995 data refers to 1994 data.

Malaysia: 1995 data refers to 1994 data.

New Zealand: 1980 and 1985 data do not include licensed child care centres.

Japan: 1995 and 1996 data include full time only.

Sources: All data except those specified below are from UNESCO 1998a.

Cambodia: 1985 data on % Female from UNESCO 1998b.

Lao PDR: 1995 data on % Female from UNESCO 1998b.

Korea, Dem. Rep.: 1985 data on % Female from UNESCO 1998b.

Malaysia: 1995 data on % Female from UNESCO 1998b.

Philippines: 1995 data on Total Number from World Bank 1999a

Hong Kong: 1995 data on % Female from UNESCO 1998b.

New Zealand: 1995 data on % Female from UNESCO 1998b.

Singapore: UNESCO 1997

Table 2.6 c
Number of Teaching Staff in Secondary Level, 1980-1996

Country	General					Secondary Level					Vocational					
	1980	1985	1990	1995	1996	1980	1985	1990	1995	1996	1980	1985	1990	1995	1996	
Cambodia	699	8,033	16,408	16,971	28	28	27	289	868	289	20	20	59	56	21	
Lao PDR	3,784	8,032	12,027	14,712	10,717	26	38	39	39	1,842	1,817	495	668	28	29	
Mongolia	13,800	12,323	12,503	12,503	67	66	67	68	806	491	505	806	29	29		
Myanmar	30,048	51,827	65,188	66	69	74	74	17,814	15,814	17,814	15,814	25	29	30	34	
Vietnam	148,973	177,344	179,486	179,541	58	63	63	64	114,200	268,800	400,100	641,330	690,088	25	29	
China	3,019,700	2,651,600	3,032,600	3,334,242	3,464,759	25	28	32	36	37	235	285	257	26	25	
Fiji	2,254	2,669	480,464	624,407	43	44	47	33	37	39	120,221	211,655	25	27		
Indonesia	261,864	480,464	70	88	172	240	215	43	50	40	71	60	59	8	37	
Kiribati														20	10	
Korea, Dem. Rep.														25		
Malaysia	46,163	56,931	71,439	84,062	86,605	46	48	52	58	61	1,462	1,699	2,961	4,610	4,916	
Papua New Guinea	1,586	1,464	1,814	2,453	34	29	33	33	33	33	499	499	22	24	35	
Philippines	85,779	99,468	121,887	154,705	95	95	95	95	95	95	35	35	37	32	38	
Samoa	475	715	665	45	46	45	47	45	47	47	37	37	37	46	38	
Solomon Islands	196	270	320	31	22	31	22	31	22	31	32	32	32	8	8	
Thailand	70,201	102,763	106,264	57	45	49	31	45	49	31	45	58	45	45	43	
Tonga	770	767														
Vanuatu	140															
Australia	85,340	105,955	103,298	101,365	101,708	45	48	50	52	53	45	45	45	43	51	
Hong Kong, China	17,800	20,159	22,777	52	52	51	51	34	34	34	759	759	759	25		
Japan	603,100	603,100														
Korea, Rep.	82,338	109,123	145,613	148,606	150,508	28	32	37	41	42	27,208	31,819	35,111	42,233	42,439	
New Zealand	13,278	18,663	20,331	21,134	41	46	53	56	59	59	1,023	1,382	1,212	24	24	
Singapore	8,275	8,562	9,197	10,354	56	58	63	63	63	63						

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Notes:

Vietnam: 1990 data on General Total Number refers to 1991 data. 1990 data on % Female is provisional or estimated data (UNESCO).

Malaysia: 1996 data on % female are provisional or estimated data (UNESCO). For 1995 and 1996, public education only.

Australia: 1990, 1995 and 1996 data are expressed in full-time equivalent.

Hong Kong: 1985 data refer to 1984 data. For 1990 and 1995, general education does not include international schools.

Japan: 1985 data refer to 1984 data.

Singapore: 1995 and 1996 data on Vocational include full-time only.

Sources:

All data except those specified below are from World Bank, SIMA.

Cambodia: 1996 data from UNESCO 1998a. 1985 data on % Female from UNESCO 1998b.

Lao PDR: 1996 data from UNESCO 1998a. 1985 data on % Female from UNESCO 1998b.

Mongolia: 1995 and 1996 data from UNESCO 1998a.

Myanmar: 1995 data on % Female from UNESCO 1998b.

Vietnam: 1990 and 1995 data on Vocational Total Number and % Female from UNESCO 1998a.

China: 1995 and 1996 data on General Total Number and % Female from World Bank 1997b.

Fiji: 1995 data on % Female from UNESCO 1998b.

Indonesia: 1985 and 1995 data on % Female from UNESCO 1998b.

Kiribati: 1995 and 1996 data from UNESCO 1998a.

Korea, Dem. Rep.: UNESCO 1998b.

Malaysia: 1995 and 1996 data from UNESCO 1998a.

Papua New Guinea: 1985, 1990 and 1985 data on General and % Female from Papua New Guinea, Department of Education 1996.

Philippines: 1996 data from UNESCO 1998a. 1985 data on % Female from UNESCO 1998b.

Samoa: 1995 and 1996 data on General Total Number and % Female from UNESCO 1998a. 1985 data on % Female from UNESCO 1998b.

Solomon Islands: 1990 data from World Bank 1995c. 1985 data on % Female from UNESCO 1998b.

Tonga: 1995 data on % Female from UNESCO 1998b.

Vanuatu: 1995 data on % Female from UNESCO 1998b.

Australia: 1995 and 1996 data from UNESCO 1998a.

Hong Kong: 1985 data on General Total Number from Komenan 1987. 1990 and 1995 data from UNESCO 1998a. 1985 data on % Female from UNESCO 1998b.

Japan: 1985 data from Komenan 1987. 1995 data from UNESCO 1998b.

Korea, Rep.: 1985 and 1996 data from UNESCO 1998a.

New Zealand: 1996 data from UNESCO 1998a. 1995 data from UNESCO 1998b.

Singapore: 1995 and 1996 data on General Total Number and % Female, on Vocational Total Number from UNESCO 1998a.

Notes:

*. Data included elsewhere under another category
 Data in italic refers to 1991 data (Fiji).*

The data in the table refer to teaching staff in all institutions, both public and private, at the third level of education. For most countries and territories data are shown separately by type of institution: (a) universities and equivalent degree-granting institutions; (b) distance-learning university institutions; (c) other third level educational institutions - these include all other education at the third level in non-university institutions (teacher training colleges, technical colleges, etc.).

China: 1996 data on % Female is provisional or estimated data (UNESCO). All data refer to full-time teachers only.

Malaysia: In 1990, data on Female students in other third level institutions do not include a part of vocational education.

Samoa: Data includes Secondary Teachers College, Primary Teachers College, and National University of Samoa.

Papua New Guinea: 1980 data on All, Total Number, is provisional or estimated data (UNESCO).

Australia: Until 1990, data do not include Vocational Education and Training Institutes and data on teaching staff are expressed in full-time equivalents.

Hong Kong: Data on 'other third level institutions' in 1980 to Hong Kong Polytechnic only.

New Zealand: Data on universities and equivalent degree granting institutions for students in 1980 for teaching staff in all years include distance learning institutions.

Sources:

All data except those specified below are from UNESCO 1998a

Fiji: 1990 data from World Bank 1995a

Philippines: 1996 data from World Bank 1999a

Samoa: 1990 data from World Bank 1993

Table 2.7
Student Teacher Ratio in Primary and Secondary Level, 1980-1996

Country	Primary Level					Secondary Level				
	1980	1985	1990	1995	1996	1980	1985	1990	1995	1996
Cambodia	43.8	37.5	32.6	45.0	44.4	25.5	38.8	15.2	18.2	19.3
Lao PDR	29.8	24.9	28.2	30.1	30.0	19.2	11.2	13.1	13.0	16.8
Mongolia	32.0	30.2	28.1	24.8	30.9	23.2	21.8	18.7	18.4	14.7
Myanmar	51.6	53.8	48.3	48.0		34.1	23.0	12.8		
Vietnam	38.6	34.5	35.1	34.2		25.8	22.7	18.0	27.5	
China	26.6	24.9	21.9	23.3	23.7	17.9	17.0	14.6	15.8	16.4
Fiji	28.3	29.0	33.6			19.5	15.3	19.8		
Indonesia	32.4	25.3	23.2	23.0	22.4	14.9	15.3	15.2	14.2	18.3
Kiribati	30.4	29.2	28.6	27.3	23.6	15.8	13.7	12.2	14.4	16.8
Malaysia	27.3	24.1	20.4	20.0	19.6	22.8	22.1	19.6	18.3	18.6
Papua New Guinea	31.4	30.3	31.7	38.4		21.6	22.8	25.5	26.5	
Philippines	30.4	30.9	32.9	33.6	36.4	34.1	32.3	33.1	36.1	34.4
Samoa	23.0	20.8		24.3					18.5	
Solomon Islands	25.1	25.9	19.4	24.1		15.7	19.4	17.5		
Thailand	24.7	19.3	22.1	20.0	21.0	23.0	17.6	16.7	20.2	21.8
Tonga	24.3	22.9	24.0	22.3			18.1	17.7	18.4	
Vanuatu	23.6		31.6	31.0		13.1		18.3	19.0	
Australia	18.8	15.9	16.5	16.3	18.1	12.9	12.1	12.4	12.6	12.7
Hong Kong	30.1	27.6	26.9	23.7		29.3	24.0	21.4	20.1	
Japan	25.1	23.9	20.7	19.4	19.7	17.2	17.9	16.7	14.2	15.9
Korea, Rep.	47.5	38.3	35.6	31.8	31.2	39.1	35.0	25.2	24.7	24.3
New Zealand	16.7	19.9	18.0	18.0	22.0	26.3	18.8	16.3	13.9	16.1
Singapore	30.8	26.8	25.8	25.0	25.0	19.4	20.4	20.8	20.8	20.1

Note: Data in *italic* refer to the most recent data within two years of the indicated year.

Singapore: 1985 data on Secondary is data from "mid-1980s", year not specified.

Sources: All data except those specified below are from USAID, GED.

Cambodia: 1995 data on Primary from World Bank, SIMA. 1996 data on Primary, and all data on Secondary from World Bank, EdStats.

Lao PDR: 1990 data on Primary from World Bank, SIMA. 1990 and 1996 data on Secondary and 1995 data from World Bank, EdStats. 1996 data on Primary from UNESCO 1998a.

Mongolia: 1980 data on Primary from UNESCO 1998a. 1985 and 1990 data on Secondary and 1996 data from World Bank, EdStats.

Myanmar: 1995 data from UNESCO 1998b

Vietnam: All data on Secondary from World Bank, EdStats.

Fiji: 1990 data on Secondary from World Bank, EdStats.

Indonesia: 1995 data on Primary from UNESCO 1998b. 1996 data from OECD 1998. 1990 and 1995 data on Secondary from World Bank, EdStats.

Kiribati: 1995 data on Secondary and 1996 data from World Bank, EdStats.

Malaysia: 1996 data on Secondary from OECD 1998.

Papua New Guinea: 1990 data on Secondary from World bank, EdStats. 1995 data on Secondary from Papua New Guinea, Department of Education 1996.

Solomon Islands: 1985 and 1990 data on Secondary and 1995 data from World Bank, EdStats.

Thailand: 1995 data on Primary from UNESCO 1998b. 1996 data from OECD 1998. 1980 and 1995 data on Secondary from World Bank, EdStats.

Tonga: 1995 data from World Bank, EdStats.

Vanuatu: 1990 data from World Bank, EdStats. 1995 data from UNESCO 1998b.

Australia: 1996 data on Primary from OECD 1998. 1995 and 1996 data on Secondary from World Bank, EdStats.

Hong Kong: 1990 data on Secondary from World Bank, EdStats.

Japan: 1996 data from OECD 1998. 1995 data on Secondary from World Bank, EdStats.

Korea, Rep.: 1996 data from OECD 1998

New Zealand: 1995 data on Primary from UNESCO 1998b. 1996 data from OECD 1998. 1985, 1990 and 1995 data on Secondary from World Bank, EdStats.

Singapore: 1995 and 1996 data on Primary from UNESCO 1998a. 1985 data on Secondary from Tan and Mingat 1992. 1990, 1995 and 1996 data on Secondary from World Bank, EdStats.

3. Access to Education, Participation, Progression and Graduates

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Table 3.1
Structure of Education Systems

Country	Compulsory Education		Primary		Secondary		First cycle		Second cycle	
	Age limits	Duration (years)	Starting age	Ending age						
Cambodia	6-12	6	6	11	12	17	12	14	15	17
Lao PDR	6-15	5	6	10	11	16	11	13	14	16
Mongolia	8-16	8	8	11	12	17	12	15	16	17
Myanmar	5-10	5	5	9	10	15	10	13	14	15
Vietnam	6-11	5	6	10	11	17	11	14	15	17
China	7-15	9	7	11	12	16	12	14	15	16
Fiji	6-15	8	6	11	12	17				
Indonesia	7-15	9	7	12	13	18	13	15	16	18
Kiribati	6-15	9	6	12	13	17				
Korea, Dem. Rep.	5-15	10	6	9	10	15				
Malaysia *			6	11	12	18	12	14	15	18
Papua New Guinea *			7	12	13	18	13	16	17	18
Philippines	6-12	6	7	12	13	16				
Samoa ¹	5-14	9	5	12	13	17	13	15	16	17
Solomon Islands *			6	11	12	16	12	14	15	16
Thailand	7-15	6	6	11	12	17	12	14	15	17
Tonga	6-14	8	6	11	12	18				
Vanuatu	6-12	6	6	11	12	18	12	15	16	18
Australia	6-15	10	5	11	12	17	12	15	16	17
Hong Kong	7-15	9	6	11	12	18	12	16	17	18
Japan	6-15	9	6	11	12	17	12	14	15	17
Korea, Rep.	6-15	9	6	11	12	17	12	14	15	17
New Zealand	6-16	10	5	10	11	17	11	14	15	17
Singapore *			6	11	12	18	12	15	16	18

Note:

Blanks indicate data not available, according to UNESCO.

* Education is not compulsory, according to the various sources obtained from World Bank staff.

Structural Changes in Education Systems (from UNESCO Statistical Yearbook 1998):

Cambodia: Duration of the First level was changed from 4 to 5 in 1986/87, then to 6 years in 1996/97.

Mongolia: Duration of the First level (Primary) was changed from 3 to 4 years in 1996/97.

Duration of the General education at the Second level (Secondary) was changed from 5+2 to 4+2 in 1996/97.

Samoa: Duration of the First level was changed from 7 to 8 in 1995.

Australia: Duration of the General education at the second level was changed from 3+3 to 4+2 in 1993. Duration of the First level was changed from 6 to 7 in 1995.

Singapore: Duration of the General education at the second level was changed from 4+2 to 4+3 in 1981.

Source:

All data except the data on compulsory for Samoa are from UNESCO web site (<http://www.unesco.org>).

¹ Postlethwaite (Ed.) 1995.

Table 3.2
School Life Expectancy*, 1985 & 1995

Country	Total		Male		Female	
	1985	1995	1985	1995	1985	1995
Lao, PDR		6.9		8.2		5.7
Mongolia		7.2		6.2		8.1
Indonesia	9.8	10.0	10.3	10.4	9.2	9.5
Philippines	10.0	11.0	9.9	11.0	10.1	11.0
Samoa		11.5		11.4		11.7
Australia	12.5	16.2	12.5	16.3	12.5	16.1
Hong Kong	12.1	12.6	12.2	12.6	12.1	12.7
Japan	12.9	14.0		14.2		13.8
Korea	13.2	14.5	13.8	15.1	12.5	13.9
New Zealand	13.7	16.4	13.8	16.0	13.6	16.7

Note: *School life expectancy, or expected number of years of formal education, is the number of years a child is expected to remain at school, or university, including years spent on repetition. It is the sum of the age-specific enrolment ratios for primary, secondary, and tertiary education.

Source: UNESCO 1998b

Table 3.3
Student Gross Enrollment Ratio* in Preprimary Level, 1980-1996**

Country	Gross Enrollment Ratio (%)				
	1980	1985	1990	1995	1996
Cambodia	3	11	5	5	5
Lao PDR	2	6	7	7	8
Mongolia	25	28	39	23	25
Vietnam	35	33	28	35	36
China	13	20	23	29	29
Fiji	9	7	13	15	
Indonesia	12	15	18	19	20
Kiribati			33		
Malaysia	23	37	31	58	59
Papua New Guinea	0	1	0	1	1
Philippines	4	6	12	13	11
Samoa	22	20	16	27	37
Thailand	10	18	44	58	63
Australia	68	71	71	73	78
Hong Kong, China	81	92	80	84	85
Japan	41	46	48	49	49
Korea, Rep.	8	42	55	85	88
New Zealand	73	91	74	77	77
Singapore	13	20	21	19	19

Notes:

* Gross enrollment ratio is the ratio of total enrollment, regardless of age, to the population of the age group that officially corresponds to the level of education shown. Estimates are based on the International Standard Classification of Education (ICSED). (World Bank, SIMA).

** Preprimary education refers to the initial stage of organized instruction designed primarily to introduce very young children to a school-type environment. (World Bank, SIMA).

According to UNESCO, the data refer to pre-primary education, e.g. kindergartens, nursery schools and infant classes attached to schools at higher levels. Day nurseries, child care and play centres, etc. are excluded.

Kiribati: The enrolment ratio is calculated for this study, based on enrollments and number of 3 - 5 year olds by island, using the data from the original source. Data on 2 out of 19 islands are not available; therefore, not included in this table.

Sources:

All data except those specified below are from World Bank, SIMA.

Cambodia: 1995 data from UNESCO 1998b. 1996 data from UNESCO 1998a.

Lao PDR: 1995 data from UNESCO 1998b. 1996 data from UNESCO 1998a.

Mongolia: 1996 data from UNESCO 1998a.

China: 1996 data from UNESCO 1998a.

Fiji: 1995 data from UNESCO 1998b.

Indonesia: 1995 data from UNESCO 1998b.

Kiribati: 1990 data from Governments of New Zealand and United Kingdom 1992

Thailand: 1996 data from UNESCO 1998a.

Australia: 1996 data from UNESCO 1998a.

Japan: 1996 data from UNESCO 1998a.

Korea, Rep.: 1996 data from UNESCO 1998a.

New Zealand: 1996 data from UNESCO 1998a.

China: 1996 data from UNESCO 1998a
Fiji: 1985 data from UNESCO 1998b
Indonesia: 1995 data from UNESCO 1998b
Kiribati: Governments of New Zealand and United Kingdom 1992
Malaysia: 1995 data on Total Net from UNESCO 1998a. 1995 data on Male Net and Female Net from UNESCO 1998b
Papua New Guinea : 1985 data from UNESCO 1998b
Philippines: 1996 data from UNESCO 1998a
Samoa: 1995 data on Gross from UNESCO 1998b. 1990, 1995 and 1996 data on Gross, and 1985 and 1996 data on Net from UNESCO 1998a. 1995 and 1990 data on Male Net and Female Net from Government of Western Samoa, Ministry of Women Affairs 1993.
Solomon Islands: 1995 data from UNESCO 1998b
Thailand: 1996 data from UNESCO 1998a. 1995 data on Female Gross from Lockhead, Verspoor et al. 1991.
Vanuatu: 1995 data from UNESCO 1998b
Australia: 1996 data from UNESCO 1998a
Hong Kong: 1985 data on Net from UNESCO 1998b
Japan: 1995 data on Net from UNESCO 1998b. 1996 data from UNESCO 1998a
Korea, Rep.: 1995 and 1996 data on Total Gross from UNESCO 1998a. 1995 data on Total Net, Male and Female from UNESCO 1998b
New Zealand: 1996 data from UNESCO 1998a
Singapore: 1990, 1995 and 1996 data from UNESCO 1998a

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Table 3.4 b
Cohort Reaching Grade 5 (%) and Progression to Secondary School (%), 1980-1995.

Country	Cohort Reaching Grade 5 (%)*					Progression to Secondary School (%)**			
	1980	1985	1990	1994	1995	1980	1985	1990	1995
Cambodia				49.6	50	70	49		53
Lao PDR	22	20		53	53	68	79	63	
Mongolia						97	98		
Vietnam	57	62.3				93	94		
China	62.4	71.4	85.8	92.1	94	65	65	70	
Fiji	93.6	93.9	87	87					
Indonesia	75.5	84.5	83.6	89.6	89	58	54	50	
Kiribati	90.5	84.6	97.9	89.7	89	13	13	23	
Malaysia	96.8	99.8	98.2	94	99				
Papua New Guinea	73.2	69.0	59.1	59.2	59	37	38	36	38
Philippines	63.6	70	75.2	70		82	84	100	
Samoa		87.2			85	96			
Solomon Islands	68.9		85	81	81				
Thailand		86.5	88.4			45	38	48	
Tonga	100	91.7	83.5		92	65	62	76	
Vanuatu			60.9	61		21		25	
Australia	97.4	98.1	98.7	98.9		64	65	64	
Hong Kong	98.9	100	99.8	100	100	90	91		
Japan	100	100		100		100	100	100	
Korea, Rep.	93.9	99.1	99.5	99.8	100	97	99	99	99
New Zealand	93.5	93.2	87.3	96		100	99		
Singapore	97.2	99.7	99.9			82	77		

Notes:

* Cohort reaching grade 5 (%) is the percentage of children starting primary school who eventually attain Grade 5 (Grade 4 if the duration of primary education is four years). (UNESCO Statistical Yearbook)

** Progression to secondary school (general) is the number of new entrants in the first grade of secondary school (general) divided by the number of children enrolled in the final grade of primary school in the previous year (according to the country's duration of primary education). (UNESCO Statistical Yearbook).

Data in *italic* refer to the most recent data within two years of the indicated year (applied for this study).

Sources:

All data on Cohort Reaching Grade 5 except those specified below are from USAID, GED.

All 1995 data from UNESCO 1998a

Lao PDR: 1980 and 1985 data from Komenan 1987

Vietnam: 1980 data from Komenan 1987

Fiji: 1994 data from UNESCO 1998b

Malaysia: 1994 data from UNESCO 1998b

Solomon Islands: 1994 data from UNESCO 1998b

Vanuatu: 1994 data from UNESCO 1998b

All data on Progression to Secondary School are from World Bank, EdStats.

Table 3.4 c
Percentage of Repeaters in Primary Education*, 1985 & 1995

Country	Total (%)		Male (%)		Female (%)	
	1985	1995	1985	1995	1985	1995
Cambodia		30		31		30
Lao, PDR	27	26		27		25
Mongolia		1		1		0
China	7	2		2		2
Fiji	3		4		2	
Indonesia	11	8		8		7
Kiribati	3	0	3	0	3	0
Philippines	2		2		2	
Samoa		2				
Solomon Islands	8	8	8	8	7	8
Vanuatu		13		14		11
Hong Kong	2	1	2		2	
New Zealand	3	4	3	4	3	4
Singapore	1		1		1	

Note: * Percentage of repeaters: Total number of pupils who are enrolled in the same grade as the previous year, expressed as a percentage of the total enrolment in primary education (UNESCO, World Education Report).

Source: UNESCO 1998b.

- Lao PDR: 1990 data from World Bank, EdStats. 1995 data from UNESCO 1998b. 1996 data from UNESCO 1998a
 Mongolia: All 1986 data, and 1990 data on Male and Female from UNESCO 1998a. 1985 data on Male and Female from UNESCO 1998b
 Myanmar: 1995 data on Male and Female from UNESCO 1998b
 Fiji: 1990 and 1995 data from UNESCO 1998b
 Indonesia: 1995 data from UNESCO 1998b
 Kiribati: All data from Governments of New Zealand and United Kingdom 1992
 Papua New Guinea: 1985 on Total from World Bank, EdStats. 1985 data on Male and Female from UNESCO 1998b
 Philippines: 1986 data from World Bank, EdStats.
 Samoa: All 1985 data and 1995 data from UNESCO 1998b. 1990 data from World Bank, EdStats. 1995 data from UNESCO 1998a
 Solomon Islands: 1995 data from UNESCO 1998b
 Thailand: 1996 data from World bank, EdStats
 Vanuatu: 1985 and 1990 data from World Bank, EdStats
 Australia: 1996 data from UNESCO 1998a
 Hong Kong: 1985 data on Net from UNESCO 1998b
 Japan: 1995 and 1998 data on Total Gross from World Bank, EdStats. 1995 data on Total Nat. Male and Female from UNESCO 1998b
 Korea, Rep.: 1996 data from UNESCO 1998a
 New Zealand: 1996 data from UNESCO 1998a
 Singapore: 1996 data from World Bank, EdStats

Table 3.5 b

Net Enrolment Rates for the Ages with the Highest Upper Secondary Enrollment and Gross Enrollment Rates in Upper Secondary Education at Typical Ages, based on Head Counts, 1996

Country	Net Enrollment Rates at Ages with the Highest Upper Secondary Enrollment			Gross Enrollment Rate at Typical Age		Percentage of Students Enrolled who are Older than the Typical Age		
	All Programmes	General Programmes	Vocational and Technical Programmes			General Programmes (%)	Vocational and Technical Programmes (%)	
	Age	Percentage of Persons Enrolled (%)	Age	Percentage of Persons Enrolled (%)	Age	Percentage of Persons Enrolled (%)	General Programmes (%)	Vocational and Technical Programmes (%)
China						15	20	
Indonesia	17	29	17	18	17	11	21	12
Malaysia	15	67	15	61	16	8	60	7
Philippines	16	32	16	32	a	a	65	a
Thailand	16	44	16	26	15	23	49	19
Australia	16	78	16	64	18	19	73	73
Japan	15	100	15	73	15	28	73	28
Korea	16	95	16	55	16	40	54	39
New Zealand	16	97	16	81	17	16	83	77
							13	79

Notes: Thailand: Data refer to 1997

a Data not applicable because the category does not apply

n Magnitude is either negligible or zero.

Indonesia: Students and personnel in Islamic schools are excluded.

Australia: Private vocational education and some government-funded "Industry Training Institutions" for vocational education are not included.

Source: OECD 1998

Table 3.5 c

**Number of New Entrants to Lower and Upper Secondary Education per 100 Persons
at the Typical Age and Number of Lower Secondary Graduates per 100 Persons at
the Typical Age, 1996**

	New Entrants				Graduates		
	Lower Secondary Education		Upper Secondary Education		Lower Secondary Education		
	Age	M + W	Age	M + W	M + W	Men	Women
China	12 to 13	89	15 to 16	36	71	75	66
Indonesia	13	56	16	38	41	43	40
Malaysia	12	99	15	69	74	71	77
Philippines	13	90	16	64	81	80	82
Thailand	12	76	15	52	86	87	86

Note: *Thailand: Data refer to 1997*

Source: OECD 1998

Table 3.5 d
**Ratio of Upper Secondary Graduates to Population at Typical Age of Graduation
(times 100) by Type of Programme, 1996**

Country	Total			General			Vocational and Apprenticeship		
	M + W	Men	Women	M + W	Men	Women	M + W	Men	Women
China	37	43	30	14	16	11	23	27	19
Indonesia	30	32	27	19	20	18	11	12	9
Malaysia	41	35	48	37	29	45	5	7	2
Philippines	63	61	65	63	61	65	a	a	a
Thailand	46	44	48	32	29	35	14	14	14
Japan	99	96	102	73	69	76	26	27	26
Korea	91	91	91	54	57	50	37	33	41
New Zealand	93	86	99	63	59	67	30	27	33

Note: a Data not applicable because the category does not apply.

Source: OECD 1998

Table 3.6 c

**Ratio of Tertiary Graduates to Population at the Typical Age of Graduation
(times 100) by Type of Programme and Gender, 1996**

Country	Non-University Tertiary Programmes			Short First University Degree Programmes (e.g. US Bachelor's)			Long First University Degree Programmes (e.g. German Diploma or Italian Laurea)			Second University Degree Programmes (e.g. US Master's)			Ph.D. or Equivalent		
	M + W	Men	Women	M + W	Men	Women	M + W	Men	Women	M + W	Men	Women	M + W	Men	Women
China	7			2			x			0.1			n	n	n
Indonesia	3	3	3	6	7	5	x	x	x						
Malaysia	12	12	12	4	4	4	n	n	n	0.8	0.6	1.0	n	n	n
Philippines	18	19	17							0.8	0.9	0.8			
Thailand	10	12	8	7	7	8				12.2	11.2	13.1	0.8	1.0	0.6
Australia				36	29	43	x	x	x	1.9	3.1	0.7	0.4	0.7	0.1
Japan	30	18	43	23	31	15	x	x	x	3.2	4.5	2.0	0.5	0.9	0.2
Korea	20	18	22	26	29	22	x	x	x	12.1	12.6	11.7	0.6	0.7	0.5
New Zealand	16	11	21	24	20	28	7	6	7						

Notes: n Magnitude is either negligible or zero

x Data included in another category/column of the table.

Thailand: Data refer to 1997

Source: OECD 1998

Table 3.7
Private Enrollment as Percentage of Total Enrollment*: Preprimary, Primary and Secondary General, 1985 & 1995

Country	Preprimary (%)		Primary (%)		Secondary General (%)	
	1985	1995	1985	1995	1985	1995
Lao PDR	-	11	-	2.1	-	0
Mongolia	-	-	-	-	-	-
Myanmar	-	-	-	-	-	-
Vietnam	-	-	-	-	-	-
China	-	-	-	-	-	-
Fiji	100	100	95.5	96	88	87
Indonesia	100	100	17.3	17.7	44.9	36.9
Kiribati			1	-	47.1	77
Malaysia	45	42	0.3	0.4	8	5
Papua New Guinea	100	41	1.4	1.8	4	3
Philippines	61	53	6.0	7.4	41	30.8
Samoa				13.1	25	42.6
Solomon Islands		9	7.4	10.6		17
Thailand	41	26	9	12.3	12	6
Tonga			7.3	6.9	83.1	80
Australia	26	27	23.4	25.4	28.8	19.7
Hong Kong	100	100	10.2	10.3	86.3	11.5
Japan	75	80	0.5	0.8	11.3	14.1
Korea, Rep.	54	78	1	2	32.3	29.5
New Zealand			2.0	2.5	4.5	3.9
Singapore	69		23.8	31.1	28	

Notes:

* Enrollment in private schools, at the level specified, expressed as a percentage of the total enrollment at the same level. Government-aided schools are considered as private if they are privately managed. (UNESCO World Education Report 1998)

- magnitude nil.

Data in italic refer to the most recent data within two years of the indicated year.

Fiji: Schools, although largely government-financed, are managed by community; therefore, identified as "private".

Sources:

All data on Preprimary are from UNESCO 1998b

All data on Primary and Secondary except those specified below are from World Bank, EdStats.

Lao PDR: 1995 data on Secondary from UNESCO 1998b

Fiji: 1985 data on Secondary and 1995 data from UNESCO 1998b

Kiribati: 1995 data from UNESCO 1998b

Malaysia: 1985 on Primary from Tan and Mingat 1992. Data on Secondary from UNESCO 1998b

Papua New Guinea: Data on Secondary from UNESCO 1998b

Philippines: 1985 data on Secondary from UNESCO 1998b

Samoa: 1985 data on Secondary from UNESCO 1998b

Solomon Islands: 1995 data on Secondary from UNESCO 1998b

Thailand: 1985 data on Primary and data on Secondary from UNESCO 1998b

Tonga: 1995 data on Secondary from UNESCO 1998b

Korea: Data on Primary from UNESCO 1998b

Singapore: 1985 data on Secondary from UNESCO 1998b

4. Learning Environment and the Organization of Schools

Table 4.1 a
**Average Teaching Hours Per Week of Primary- and
Secondary-School Teachers, in Selected Countries,
1994.**

	Teaching Hours Per Week	
	Primary	Secondary
Thailand	25	30
Australia	23	20
Japan	18	14
Korea, Rep.	27	24

Note: The numbers are estimates from the original graph in the source.

Source: UNESCO 1998b

Table 4.1 b
Number of Teaching Hours Per Year in Public Institutions by Level of Education,
1996

Country	Teaching Time (1996)			
	Primary	Lower Secondary	Upper Secondary (General)	Upper Secondary (Vocational)
Indonesia	1140	912	912	912
Malaysia	762	778	778	813
Philippines	1117	1176	1176	a
Thailand	634	543	543	513
Korea		456	428	456
New Zealand	804	776	747	a

Notes: a Data not applicable because the category does not apply
 Blank indicates data not available.

New Zealand: Primary and lower secondary schools are required to be open for 394 half-days in a school year. There is no formal rule governing the number of lessons or the duration of a lesson. For this indicator, it is assumed that there are 5 teaching hours of 60 minutes in each teaching day (OECD).

Source: OECD 1998

Table 4.2
Intended Instruction Time per Subject as a Percentage of Total Intended Instruction Time for Students 12 to 14 Years of Age, 1996

Country	Reading and Writing	Mathematics	Science	Social Studies	Modern Foreign Languages	Technology	Arts Education	Physical Education	Religion	Vocational Skills	Other	Total Compulsory Part	Flexible Part
China	18	14	9	16	8	n	7	8	n	5	12	97	3
Indonesia	15	15	15	15	10	5	5	5	x	5	15	100	n
Malaysia	13	11	11	13	11	4	4	4	9	4	n	87	13
Philippines	11	11	11	11	11	14	7	4	a	4	11	93	7
Thailand	11	6	9	11	n	n	3	9	6	6	12	72	28
Australia (New South Wales)	12	12	12	9	2	5	5	7	4	n	9	77	23
Korea	14	12	12	11	12	9	8	9	n	5	80	20	
New Zealand	17	15	14	14	4	7	4	11	n	6	n	92	8

n Magnitude is either negligible or zero.

x Data included in another category/column of the table.

Reading and Writing: Reading and writing in the mother tongue; reading and writing in a second "mother tongue"; reading and writing in the tongue of the country as a second language (for non natives); language studies; public speaking; literature.

Mathematics: Mathematics; mathematics with statistics; geometry.

Science: Science; physics; physical science; chemistry; biology; human biology; environmental science; agriculture/horticulture/forestry.

Social Studies: Social studies; community studies; contemporary studies; economics; environmental studies; geography; history; humanities; legal studies; liberal studies; studies of the own country; social sciences; ethical thinking; philosophy.

Modern Foreign Languages: Foreign languages.

Technology: Orientation in technology; including information technology; computer studies' construction/surveying; electronics; graphics and design; home economics; keyboard skills; word processing' workshop technology/design technology.

Arts: Arts; music; visual arts; practical art; drama; performance music; photography; drawing; creative handicraft; creative needlework.

Physical Education: Physical education; gymnastics; dance; health.

Religion: Religion; history of religions; religion culture.

Vocational: Vocational skills (preparation for specific occupation); techniques; domestic science; accountancy; business studies; career education; clothing and textiles; polytechnic programmes; secretarial studies; tourism and hospitality; sloyd (handicraft).

Other: Subjects that cannot be classified under one of the above headings.

Thailand: The data on vocational and technical programmes exclude practical work.

Australia: Data are for the New South Wales school system only and refer to general education. The subjects under "other" are chosen from Board of Studies syllabuses and from "School Courses" endorsed by the Board of Studies. Subjects include: history, geography, commerce, aboriginal studies, studies in society, studies of religion, languages other than English, technological and applied studies, creative arts and personal development, health and physical education.

Source: OECD 1998

Table 4.3 a
Annual Statutory Teachers' Salaries in Public Institutions at the Primary Level of Education, in equivalent US dollars converted using PPPs, 1996

Country	Starting salary/ minimum training	Salary after 15 years' experience/ minimum training	Salary at top of scale/ minimum training	Ratio of starting salary to per capita GDP	Ratio of salary after 15 years' experience to starting salary	Average Primary Teacher Salary as Multiple of GDP per capita ** ¹	Years from starting to top salary	Percentage additional bonus *	Salary after 15 years' experience per teaching hour	Salary after 15 years' experience per student enrolled
Cambodia						1.14				
Myanmar	3,040	4,384	6,802	0.9	1.3	1.82	34	21	4	196
Indonesia	9,240	15,342	21,940	0.8	1.4	1.7	2.09	29	7	790
Malaysia	7,090	7,318	7,412	2.1	2.1	1	2.43	22	32	7
Philippines	559	1,203	2,149	0.1	0.2	2.2	0.9	42	a	201
Thailand									2	57
Australia (New South Wales)	19,168	34,897	34,897	0.9	1.7	1.8		12	n	1,931
Hong Kong										
Japan	23,675	42,311	67,353	1.7	3.1	1.8	1.93	41	20	28
Korea	15,267	22,821	22,821	0.9	1.3	1.5	1.35	8		1,039
New Zealand							0.93			
Singapore										

* Percentage additional bonus is an average of two ratios: maximum bonus applicable to starting salary and maximum bonus applicable to salary at top of scale.

** 1993 for Cambodia, Hong Kong, Indonesia, Korea, Rep., Myanmar, New Zealand, Philippines, Singapore, and Thailand. 1992 for Japan and Malaysia.

a Data not applicable because the category does not apply
n Magnitude is either negligible or zero.

Notes:

Notes on Coverage:

Australia: New South Wales school system only.

New Zealand: Salaries do not include the additional remuneration teachers are entitled to when they take on senior positions or management responsibilities in addition to teaching duties. Bonuses refer to staffing incentive allowance (hard to staff schools), isolation allowance, and normal school allowance (where trainee teachers are provided under the supervision of a qualified teacher). Additional remuneration a teacher may be entitled to for extra/special duties performed or any additional bonuses available due to the nature of the school or position/tasks the teacher may be fulfilling is not included.

Notes on Interpretation:

Australia: Bonuses: Seniority accounts for 12 yearly salary increments for primary, lower secondary and upper secondary (general) teachers. Seniority accounts for 3 yearly salary increments for upper secondary (vocational) teachers. Performance criteria account for all other salary increments (associated with promotions positions).

New Zealand: Provision is made for performance based pay for teachers. This means that the salary level indicated at the top of the teaching scale is not necessarily the level at which the pay for a teacher with 15 years experience and minimum qualifications stops. It is not uncommon for a teacher at this level to get 3 or 4 performance units in addition to the basic salary. Performance units are worth \$NZ2,350 each. There is no upper limit on the number of performance units that may be awarded. Performance units are awarded at the discretion of the school. In total performance/management units account for about 20 percent of the total cost of teachers' remuneration.

Indonesia: The top of the salary scale is theoretical, including an increment for earning a Ph.D. There are almost no Ph.D. graduates teaching in primary schools.

Sources:

¹ Carnoy and Welmond 1996

All data except those specified below are from OECD 1998

Table 4.3 b
**Annual Statutory Teachers' Salaries in Public Institutions at the Lower Secondary Level of Education,
in equivalent US dollars converted using PPPs, 1996**

Country	Starting salary/ minimum training	Salary after '15 years' experience/ minimum training	Salary at top of scales/ minimum training	Ratio of starting salary/ per capita GDP	Ratio of experience to per capita GDP	Ratio of salary after 15 years' experience to starting salary	Ratio of salary after 15 years' experience to starting salary	Years from starting to top salary	Percentage additional bonus *	Salary after '15 years' experience per teaching hour	Salary after '15 years' experience per student enrolled
Indonesia	3,404	4,788	7,075	0.1	1.4	1.4	31	19	5	241	
Malaysia	17,682	27,956	38,673	1.6	2.6	1.6	22	7	36	1,508	
Philippines	7,090	7,318	7,412	2.1	2.1	1.0	22	32	2	220	
Thailand	559	1,203	2,149	0.1	0.2	2.2	42	a	2	58	
Australia (New South Wales)	19,166	34,897	34,897	0.9	1.7	1.8	12	n	93	1,673	
Korea	23,960	42,597	67,448	1.8	3.1	1.8	41	12	30	1,289	
New Zealand	14,998	23,393	23,393	0.9	1.3	1.6	8				

Notes: * Percentage additional bonus is an average of two ratios: maximum bonus applicable to starting salary and maximum bonus applicable to salary at top of scale.

a Data not applicable because the category does not apply

n Magnitude is either negligible or zero.

Notes on Coverage:

Australia: New South Wales school system only.

New Zealand: Salaries do not include the additional remuneration teachers are entitled to when they take on senior positions or management responsibilities in addition to teaching duties. Bonuses refer to staffing incentive allowance (hard to staff schools), isolation allowance, and normal school allowance (where trainee teachers are provided under the supervision of a qualified teacher). Additional remuneration a teacher may be entitled to for extra/special duties performed or any additional bonuses available due to the nature of the school or position/tasks the teacher may be fulfilling is not included.

Notes on Interpretation:

Australia: Bonuses: Seniority accounts for 12 yearly salary increments for primary, lower secondary and upper secondary (general) teachers. Seniority accounts for 3 yearly salary increments for upper secondary (vocational) teachers. Performance criteria account for all other salary increments (associated with promotions positions).

New Zealand: Provision is made for performance based pay for teachers. This means that the salary level indicated at the top of the teaching scale is not necessarily the level at which the pay for a teacher with 15 years experience and minimum qualifications stops. It is not uncommon for a teacher at this level to get 3 or 4 performance units in addition to the basic salary. Performance units are worth \$NZ2,350 each. There is no upper limit on the number of performance units that may be awarded. Performance units are awarded at the discretion of the school. In total performance/management units account for about 20 percent of the total cost of teachers' remuneration.

Indonesia: The top of the salary scale is theoretical, including an increment for earning a Ph.D. There are almost no Ph.D. graduates teaching in primary schools.

Source: OECD 1998

**Table 4.3 c
Annual Statutory Teachers' Salaries in Public Institutions at the Upper Secondary Level of Education, General Programmes, in equivalent US dollars converted using PPPs, 1996**

Country	Starting salary/ minimum training	Salary after 15 years' experience/ minimum training	Salary at top of scale/ minimum training	Ratio of starting salary to per capita GDP	Ratio of salary after 15 years' experience to starting salary per capita GDP	Ratio of salary after 15 years' experience to starting salary	Years from starting to top salary	Percentage additional bonus *	Salary after 15 years' experience per teaching hour	Salary after 15 years' experience per student enrolled
Indonesia	4,018	5,655	8,773	1.2	1.6	1.4	33	18	6	349
Malaysia	17,682	27,956	38,673	1.6	2.6	1.6	22	7	36	1,490
Philippines	7,090	7,318	7,412	2.1	2.1	1	22	32	a	188
Thailand	559	1,203	2,149	0.1	0.2	2.2	42	a	2	50
Australia (New South Wales)	19,166	34,897	34,897	0.9	1.7	1.8	12	n	100	1,844
Korea	23,960	42,597	67,448	1.8	3.1	1.8	41	8	32	1,701
New Zealand	14,730	23,965	23,965	0.8	1.4	1.6	8	4	4	1,701

* Percentage additional bonus is an average of two ratios: maximum bonus applicable to starting salary and maximum bonus applicable to salary at top of scale.

a Data not applicable because the category does not apply
n Magnitude is either negligible or zero.

Notes on Coverage:

Australia: New South Wales school system only.

New Zealand: Salaries do not include the additional remuneration teachers are entitled to when they take on senior positions or management responsibilities in addition to teaching duties. Bonuses refer to staffing incentive allowance (hard to staff schools), isolation allowance, and normal school allowance (where trainee teachers are provided under the supervision of a qualified teacher). Additional remuneration a teacher may be entitled to for extra/special duties performed or any additional bonuses available due to the nature of the school or position/tasks the teacher may be fulfilling is not included.

Notes on Interpretation:

Australia: Bonuses: Seniority accounts for 12 yearly salary increments for primary, lower secondary and upper secondary (general) teachers. Seniority accounts for 3 yearly salary increments for upper secondary (vocational) teachers. Performance criteria account for all other salary increments (associated with New Zealand). Provision is made for performance based pay for teachers. This means that the salary level indicated at the top of the teaching scale is not necessarily the level at which the pay for a teacher with 15 years experience and minimum qualifications stops. It is not uncommon for a teacher at this level to get 3 or 4 performance units in addition to the basic salary. Performance units are worth \$NZ2,350 each. There is no upper limit on the number of performance units that may be awarded. Performance units are awarded at the discretion of the school. In total performance/management units account for about 20 percent of the total cost of teachers' remuneration.

Indonesia: The top of the salary scale is theoretical, including an increment for earning a Ph.D. There are almost no Ph.D. graduates teaching in primary

OECD 1998

Source:

Table 4.3 d
Annual Statutory Teachers' Salaries in Public Institutions at the Upper Secondary Level of Education, Vocational Programmes,
In equivalent US dollars converted using PPPs, 1996

Country	Starting salary/ minimum training	Salary after 15 years' experience/ minimum training	Salary at top of scale/ minimum training	Ratio of starting salary to per capita GDP	Ratio of salary after 15 years' experience to per capita GDP	Years from starting to top salary	Ratio of salary after 15 years' experience to starting salary	Years from starting to top salary	Percentage additional bonus *	Salary after 15 years' experience per teaching hour	Salary after 15 years' experience per student enrolled
Indonesia	4,018	5,655	8,773	1.2	1.6	33	18	6	349	340	349
Malaysia	17,682	27,956	38,673	1.6	2.6	22	7	34	a	1,490	a
Philippines	a	a	a	a	a	a	a	a	2	50	50
Thailand	559	1,203	2,149	0.1	0.2	22	42	a	a	a	a
Australia (New South Wales)	31,249	36,388	36,388	1.5	1.8	1.2	3	n	n	m	m
Korea	24,626	43,453	68,400	1.8	3.2	1.8	41	95	1881	1881	1881

Notes: * Percentage additional bonus is an average of two ratios: maximum bonus applicable to starting salary and maximum bonus applicable to salary at top of scale.

a Data not applicable because the category does not apply
n Magnitude is either negligible or zero.

Notes on Coverage:

Australia: New South Wales school system only.

New Zealand: Salaries do not include the additional remuneration teachers are entitled to when they take on senior positions or management responsibilities in addition to teaching duties. Bonuses refer to staffing incentive allowance (hard to staff schools), isolation allowance, and normal school allowance (where trainee teachers are provided under the supervision of a qualified teacher). Additional remuneration a teacher may be entitled to for extra/special duties performed or any additional bonuses available due to the nature of the school or position/tasks the teacher may be fulfilling is not included.

Notes on Interpretation:

Australia: Bonuses: Seniority accounts for 12 yearly salary increments for primary, lower secondary and upper secondary (general) teachers. Seniority accounts for 3 yearly salary increments for upper secondary (vocational) teachers. Performance criteria account for all other salary increments (associated with promotions positions).

New Zealand: Provision is made for performance based pay for teachers. This means that the salary level indicated at the top of the teaching scale is not necessarily the level at which the pay for a teacher with 15 years experience and minimum qualifications stops. It is not uncommon for a teacher at this level to get 3 or 4 performance units in addition to the basic salary. Performance units are worth \$NZ2,350 each. There is no upper limit on the number of performance units that may be awarded. Performance units are awarded at the discretion of the school. In total performance/management units account for about 20 percent of the total cost of teachers' remuneration.

Indonesia: The top of the salary scale is theoretical, including an increment for earning a Ph.D. There are almost no Ph.D. graduates teaching in primary schools.

Source: OECD 1998

Table 4.4**Changes in Public Sector Teacher Real Salaries, 1980s and 1990s (index 1980=100)**

Country	Level	Year			
		1980	1982	1985	1988
Myanmar	Primary			100	106 (1993)
	Secondary			100	87 (1993)
Indonesia	Primary	100		158	134
Korea, Rep.	Public Primary			100	125 (1989)
	Public Secondary			100	141 (1993)
	Private University	100 (1978)		184 (1986)	196 (1989)
	Public University			100	200 (1993)
Hong Kong	Primary / Secondary	100	103 (1986)		142 (1994)
Singapore	Primary / Secondary			100	105 (1993)

Source: ILO 1996

Table 4.5
Percentage of Decisions Taken at Each Level of Government in Public Lower Secondary Education (%) , 1998

Country	Central	State	Provincial/ Regional	Sub- Regional	Local	School
China	21		3		30	46
Indonesia	63		7			30
Malaysia	82					18
Philippines	37		24			39
Thailand	55					45
Korea	37		31	7		25
New Zealand	34					66

Note: Blanks indicate that the level of government does not have primary responsibility for the types of decisions covered in this domain.

Level of decision-making:

Central Government: The central government consists of all bodies at the national level that make decisions or participate in different aspects of decision-making, including both administrative (government bureaucracy) and legislative bodies (e.g. parliament).

State Governments: The state is the first territorial unit below the nation in "federal" countries or countries with similar types of governmental structures. State governments are the governmental units that are the decision making bodies at this governmental level.

Provincial/Regional Authorities or Governments: The province or the region is the first territorial unit below the national level in countries that do not have a "federal" or similar type of governmental structure and the second territorial unit below the nation in countries with a "federal" or similar types of governmental structures. Provincial/regional authorities or governments are the decision making bodies at this governmental level.

Sub-Regional or Inter-Municipal Authorities or Governments: The sub-region is the second territorial unit below the nation in countries that do not have a "federal" or similar type of governmental structure. Sub-regional or inter-municipal authorities or governments are the decision-making bodies at this governmental level.

Local Authorities or Governments: The municipality or community is the smallest territorial unit in the nation with a governing authority. The local authority may be the education department within a general-purpose local government or it may be a special-purpose government whose sole area of authority is education.

School, School Board or Committee: The school attendance area is the territorial unit in which a school is located. This level applies to the individual school level only and includes school administrators and teachers or a school board or committee established exclusively for that individual school. The decision-making body- or bodies- for this school may be: i) an external school board, which includes residents of the larger community; ii) an internal school board, which could include headmasters, teachers, other school staff, parents and students; and iii) both an external and an internal school board. Parents and teachers were considered as an element of the school level.

Source: OECD 1998

Table 4.6
Different Types of Decision Taken at Different Levels of Government, Lower Secondary Education, 1998

Operation of Instruction									Personnel Management				Planning and Structures			
	School Attended by Students	Career of Students	Instruction Time	Choice of Text Books	Criteria for Grouping Students	Additional Support Activities for Students	Teaching Methods	Assessment of Students' Regular Work	Hiring of Principal	Hiring of Teacher	Hiring of non-Teaching Staff	Dismissal of Principal	Dismissal of Teacher	Dismissal of Non-teaching staff	Duties/ Conditions of Service, Principal	
China	◆	◆	■	○	◆	◆	◆	◆	△	◆	◆	◆	◆	◆	◆	◆
Malaysia	■	■	◆	◆	■	■	■	◆	◆	■	■	■	■	■	■	■
Indonesia	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Thailand	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Philippines	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
Korea	○	○	○	○	○	○	○	○	△	◆	◆	◆	◆	◆	◆	◆
New Zealand	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆

Decision taken in full autonomy									Decision taken in consultation or within framework				Resources			
	Central level		Intermediate levels		Local level		School		Central level		Intermediate levels		Local level		School	
China	■	●	▲	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Malaysia	■	■	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Indonesia	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Thailand	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Philippines	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
Korea	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
New Zealand	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○

Sources: OECD 1998

Table 4.7 a
Teacher's Report on Average Size of Mathematics Class, Fourth Grade*, 1994/1995
TIMSS Report

Country	1-20 Students		21-30 Students		31-40 Students		41 or More Students		Average Number of Students
	Percent of Student (%)	Mean Achievement							
Thailand	28 (4.1)	490 (5.4)	29 (4.9)	493 (10.9)	36 (5.7)	495 (11.4)	7 (5.2)	445 (1.7)	27 (2.0)
Australia	r 17(3.1)	551 (5.6)	64 (4.8)	546 (5.4)	19 (4.7)	543 (10.0)	0 (0.0)	~~	r 25(0.6)
Hong Kong	0 (0.4)	~~	13 (4.1)	573 (22.5)	74 (4.8)	590 (5.1)	13 (3.2)	608 (8.7)	36 (0.5)
Japan	3 (0.8)	593 (5.3)	29 (3.5)	595 (3.3)	67 (3.6)	598 (2.7)	1 (1.1)	~~	32 (0.4)
Korea	2 (1.0)	~~	6 (1.6)	583 (9.7)	24 (3.6)	602 (5.1)	69 (3.5)	617 (2.8)	43 (0.6)
New Zealand	13 (2.6)	500 (11.5)	37 (4.3)	490 (8.6)	50 (4.5)	507 (5.9)	0 (0.0)	~~	29 (0.5)
Singapore	0 (0.0)	~~	2 (0.8)	~~	68 (3.3)	620 (5.8)	30 (3.2)	646 (11.0)	39 (0.2)

Notes:

*Fourth grade in most countries.

Countries shown in italics did not satisfy one or more guidelines for sample participation rates, age/grade specifications, or classroom sampling procedures.

() Standard errors appear in parentheses. Because results are rounded to the nearest whole number, some differences may appear inconsistent.

A tilde (~) indicates insufficient data to report achievement.

An "r" indicates teacher response data available for 70-84% of students.

Source: IEA 1997a

Table 4.7 b
Teacher's Report on Average Size of Science Class, Fourth Grade*, 1994/1995
TIMSS Report

Country	1-20 Students		21-30 Students		31-40 Students		41 or More Students		Average Number of Students
	Percent of Student (%)	Mean Achievement							
<i>Thailand</i>	28 (4.2)	477 (5.3)	29 (5.0)	478 (11.2)	36 (5.7)	478 (11.9)	7 (5.2)	438 (2.7)	28 (2.0)
<i>Australia</i>	17(3.1)	582 (5.3)	64 (4.9)	558 (5.3)	19 (4.8)	555 (9.2)	0 (0.0)	—	25(0.6)
<i>Hong Kong</i>	0 (0.4)	—	13 (4.2)	516 (19.0)	74 (4.9)	536 (4.5)	13 (3.2)	559 (7.3)	36 (0.5)
<i>Japan</i>	3 (0.8)	577 (7.8)	29 (3.5)	570 (3.2)	67 (3.6)	575 (2.2)	1 (1.1)	—	32 (0.4)
<i>Korea</i>	2 (1.0)	—	6 (1.6)	574 (6.4)	24 (3.6)	590 (3.9)	69 (3.5)	602 (2.5)	43 (0.6)
<i>New Zealand</i>	13 (2.4)	539 (9.0)	37 (4.2)	516 (9.8)	50 (4.4)	543 (6.0)	0 (0.0)	—	29 (0.5)
<i>Singapore</i>	0 (0.0)	—	2 (0.8)	—	68 (3.3)	542 (5.5)	30 (3.2)	566 (10.5)	39 (0.2)

Notes:

*Fourth grade in most countries.

Countries shown in italics did not satisfy one or more guidelines for sample participation rates, age/grade specifications, or classroom sampling procedures.

() Standard errors appear in parentheses. Because results are rounded to the nearest whole number, some differences may appear inconsistent.

A tilde (~) indicates insufficient data to report achievement.

An "r" indicates teacher response data available for 70-84% of students.

Source:

IEA 1997b

Table 4.8 a
Teacher's Report on Average Size of Mathematics Class, Eighth Grade*, 1994/1995
TIMSS Report

Country	1-20 Students		21-30 Students		31-40 Students		41 or More Students	
	Percent of Student (%)	Mean Achievement	Percent of Student (%)	Mean Achievement	Percent of Student (%)	Mean Achievement	Percent of Student (%)	Mean Achievement
<i>Thailand</i>	xx	xx	xx	xx	xx	xx	xx	xx
<i>Australia</i>	13 (2.4)	497 (14.6)	71 (3.3)	528 (5.4)	16 (2.6)	583 (9.7)	1 (0.5)	---
Hong Kong	3 (1.9)	501 (63.7)	4 (2.2)	605 (35.3)	56 (5.7)	584 (10.7)	37 (5.9)	606 (10.1)
Japan	0 (0.2)	---	4 (1.4)	598 (8.5)	88 (2.0)	600 (2.2)	8 (1.5)	667 (10.1)
Korea	2 (1.2)	---	1 (1.0)	---	4 (1.5)	562 (6.6)	93 (2.0)	611 (2.6)
New Zealand	11 (2.2)	460 (6.8)	80 (3.8)	496 (6.9)	8 (2.7)	543 (18.4)	0 (0.0)	---
Singapore	1 (0.7)	---	10 (2.5)	645 (13.2)	72 (4.3)	640 (6.2)	18 (4.0)	656 (8.8)

Notes: *Eighth grade in most countries.

Countries shown in italics did not satisfy one or more guidelines for sample participation rates, age/grade specifications, or classroom sampling procedures.

() Standard errors appear in parentheses. Because results are rounded to the nearest whole number, some differences may appear inconsistent.

A tilde (~) indicates insufficient data to report achievement.

An "i" indicates teacher response data available for 70-84% of students.

An "x" indicates teacher response data available for <50% of students.

Source: IEA 1997c

Table 4.8 b
**Teacher's Report on Average Size of Science Class, Eighth Grade*, 1994/1995
TIMSS Report**

Country	1-20 Students		21-30 Students		31-40 Students		41 or More Students	
	Percent of Student (%)	Mean Achievement						
Hong Kong	0 (0.0)	~~	1 (1.2)	~~	57 (6.5)	520 (7.5)	42 (6.5)	530 (7.9)
Japan	0 (0.2)	~~	4 (1.4)	570 (6.6)	88 (2.0)	567 (1.6)	8 (1.5)	615 (10.2)
Korea	6 (1.8)	573 (9.0)	1 (0.7)	~~	5 (1.5)	536 (8.1)	89 (2.5)	566 (2.3)
New Zealand	7 (1.8)	501 (12.4)	75 (3.5)	522 (5.7)	18 (3.0)	556 (8.0)	1 (0.0)	~~
Singapore	0 (0.0)	~~	9 (2.4)	609 (15.7)	72 (4.2)	604 (7.3)	19 (4.0)	616 (7.7)

Notes:

*Eighth grade in most countries.

() Standard errors appear in parentheses. Because results are rounded to the nearest whole number, some differences may appear inconsistent.
 A tilde (~) indicates insufficient data to report achievement.

Source:

IEA 1997d

Table 4.9 a
Teacher's Reports About Classroom Organization During Mathematics Lessons, Fourth Grade*, 1994/1995

TIMSS Report

Country	Percent of Students Whose Teacher's Report Using Each Organizational Approach "Most or Every Lesson" (%)					
	Work Together as a Class with Students Responding to One Another	Work Together as Class with Teacher Teaching the Whole Class	Work Individually with Assistance from Teacher	Work Individually without Assistance from Teacher	Work in Pairs or Small Groups with Assistance from Teacher	Work in Pairs or Small Groups without Assistance from Teacher
Thailand	10	52	r 57	18	40	7
Australia	r 17	r 31	r 47	r 24	r 20	r 10
Hong Kong	5	39	49	1	3	1
Japan	50	78	34	25	7	2
Korea	50	77	57	37	30	20
New Zealand	20	16	47	25	47	24
Singapore	23	68	37	41	25	10

Notes: *Fourth grade in most countries.

Countries shown in italics did not satisfy one or more guidelines for sample participation rates, age/grade specifications, or classroom sampling procedures.

An "r" indicates teacher response data available for 70-84% of students.

Source: IEA 1997a

Table 4.9 b
Teacher's Reports About Classroom Organization During Science Lessons, Fourth Grade*, 1994/1995
TIMSS Report

Country	Percent of Students Whose Teacher's Report Using Each Organizational Approach "Most or Every Lesson" (%)					
	Work Together as a Class with Students Responding to One Another	Work Together as Class with Teacher Teaching the Whole Class	Work Individually with Assistance from Teacher	Work Individually without Assistance from Teacher	Work in Pairs or Small Groups with Assistance from Teacher	Work in Pairs or Small Groups without Assistance from Teacher
<i>Thailand</i>	r 6	r 49	r 41	r 8	r 34	r 13
Australia	r 15	r 24	r 12	r 6	r 28	r 19
Hong Kong	15	67	22	0	11	0
Japan	51	68	18	4	24	12
Korea	49	59	64	17	65	24
New Zealand	28	18	21	14	39	20
Singapore	21	67	51	15	43	18

Notes:

*Fourth grade in most countries.

Countries shown in italics did not satisfy one or more guidelines for sample participation rates, age/grade specifications, or classroom sampling procedures.

An "r" indicates teacher response data available for 70-84% of students.

Source:

IEA 1997b

Table 4.10 a
Teacher's Reports About Classroom Organization During Mathematics Lessons, Eighth Grade*, 1994/1995
TIMSS Report

Country	Percent of Students Whose Teacher's Report Using Each Organizational Approach "Most or Every Lesson" (%)					
	Work Together as a Class with Students Responding to One Another	Work Together as Class with Teacher Teaching the Whole Class	Work Individually with Assistance from Teacher	Work Individually without Assistance from Teacher	Work in Pairs or Small Groups with Assistance from Teacher	Work in Pairs or Small Groups without Assistance from Teacher
Thailand	r 19	s 58	r 41	r 18	r 22	r 5
Australia	r 14	r 46	r 64	r 27	r 25	r 9
Hong Kong	11	37	62	17	9	4
Japan	22	78	27	15	7	1
Korea	39	89	41	30	12	11
New Zealand	19	52	63	28	25	14
Singapore	15	61	48	27	50	6

Notes: *Eighth grade in most countries.

Countries shown in italics did not satisfy one or more guidelines for sample participation rates, age/grade specifications, or classroom sampling procedures.

An "r" indicates teacher response data available for 70-84% of students.

An "s" indicates teacher response data available for 50-69% of students.

Source: IEA 1997d

Table 4.10 b
Teacher's Reports About Classroom Organization During Science Lessons, Eighth Grade*, 1994/1995
TIMSS Report

Country	Percent of Students Whose Teacher's Report Using Each Organizational Approach "Most or Every Lesson" (%)					
	Work Together as a Class with Students Responding to One Another	Work Together as Class with Teacher Teaching the Whole Class	Work Individually with Assistance from Teacher	Work Individually without Assistance from Teacher	Work in Pairs or Small Groups with Assistance from Teacher	Work in Pairs or Small Groups without Assistance from Teacher
<i>Thailand</i>	r 16	r 38	r 33	r 10	r 32	s 11
Hong Kong	12	45	35	2	44	13
Japan	19	79	12	8	12	6
Korea	34	83	28	8	15	3
New Zealand	15	41	33	26	44	20
Singapore	12	59	41	17	40	19

Notes:

*Eighth grade in most countries.

Countries shown in italics did not satisfy one or more guidelines for sample participation rates, age/grade specifications, or classroom sampling procedures.

An "r" indicates teacher response data available for 70-84% of students.

An "s" indicates teacher response data available for 50-69% of students.

Source:

IEA 1997d

5. Student Achievement

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Table 5.1

Student Achievement in Mathematics and Science at the Fourth and Eighth Grade Levels*, 1994/1995

TIMSS Report

Country	Fourth Grade		Eighth Grade	
	Mathematics	Science	Mathematics	Science
Thailand	490	473	522	525
Australia	546	562	530	545
Hong Kong	587	533	588	522
Japan	597	574	605	571
Korea	611	597	607	565
New Zealand	499	531	508	525
Singapore	625	547	643	607
International Average	529	524	513	516

Note:

*Fourth and eighth grades in most countries.

Sources:

IEA 1997a, 1997b, 1997c, and 1997d

Table 5.2 a
**Gender Differences in Mathematics and Science Achievement at the Fourth Grade-Level*,
 1994/1995**
TIMSS Report

Country	Mathematics Achievement			Science Achievement		
	Boys Mean	Girls Mean	Difference Absolute Value	Boys Mean	Girls Mean	Difference Absolute Value
Thailand	485 (5.8)	496 (4.2)	11 (7.1)	471 (5.9)	474 (4.3)	3 (7.3)
Australia	547 (3.5)	545 (3.7)	2 (5.1)	569 (3.3)	556 (3.2)	13 (4.6)
Hong Kong	586 (4.7)	587 (4.2)	1 (6.3)	540 (4.1)	526 (3.8)	14 (5.6)
Japan	601 (2.5)	593 (2.2)	8 (3.3)	580 (2.0)	567 (2.0)	14 (2.9)
Korea	618 (2.5)	603 (2.6)	15 (3.6)	604 (2.2)	590 (2.5)	14 (3.9)
New Zealand	494 (5.7)	504 (4.3)	10 (7.1)	527 (6.1)	535 (4.8)	8 (7.7)
Singapore	620 (5.5)	630 (6.4)	10 (8.4)	549 (5.4)	545 (6.3)	4 (8.3)
International Average	537	535	3	537	527	9

Notes:

*Fourth grade in most countries.

() Standard errors appear in parentheses. Because results are rounded to the nearest whole number, some differences may appear inconsistent.

Sources:

IEA 1997a and 1997b

Table 5.2 b**Gender Differences in Mathematics and Science Achievement at the Eighth Grade-Level*, 1994/1995****TIMSS Report**

Country	Mathematics Achievement			Science Achievement		
	Boys Mean	Girls Mean	Difference Absolute Value	Boys Mean	Girls Mean	Difference Absolute Value
Thailand	517 (5.6)	526 (7.0)	9 (9.0)	524 (3.9)	526 (4.3)	2 (5.8)
Australia	527 (5.1)	532 (4.6)	5 (6.9)	550 (5.2)	540 (4.1)	10 (6.6)
Hong Kong	597 (7.7)	577 (7.7)	20 (10.9)	535 (5.5)	507 (5.1)	27 (7.5)
Japan	609 (2.6)	600 (2.1)	9 (3.3)	579 (2.4)	562 (2.0)	17 (3.1)
Korea	615 (3.2)	598 (3.4)	17 (4.7)	576 (2.7)	562 (2.0)	17 (3.1)
New Zealand	512 (5.9)	503 (5.3)	9 (7.9)	538 (5.4)	512 (5.2)	25 (7.6)
Singapore	642 (6.3)	645 (5.4)	2 (8.3)	612 (6.7)	603 (7.0)	9 (9.7)
International Average	519	512	8	525	509	17

Notes:

*Eighth grade in most countries.

() Standard errors appear in parentheses. Because results are rounded to the nearest whole number, some differences may appear inconsistent.

Sources:

IEA 1997c and 1997d

Table 5.3

Increases in Mathematics and Science Performance Between the Fourth and Eighth Grades* Based on Fourth-Grade Performance Estimated on the Eighth-Grade Scale, 1994/1995

TIMSS Report

Country	Mathematics			Science		
	Estimated Fourth-Grade Mean on Eighth- Grade Scale	Eighth- Grade Mean	Differences	Estimated Fourth-Grade Mean on Eighth-Grade Scale	Eighth- Grade Mean	Differences
Thailand	354 (9.1)	522 (5.7)	168 (10.7)	306 (15.2)	525 (3.7)	220 (15.6)
Australia	408 (8.4)	530 (4.0)	121 (9.3)	417 (14.4)	545 (3.9)	127 (14.9)
Hong Kong	447 (8.9)	588 (6.5)	141 (11.0)	381 (14.6)	522 (4.7)	142 (15.4)
Japan	457 (8.1)	605 (1.9)	148 (8.3)	431 (14.1)	571 (1.6)	140 (14.2)
Korea	471 (8.1)	607 (2.4)	137 (8.5)	460 (14.1)	565 (1.9)	105 (14.2)
New Zealand	362 (8.9)	508 (4.5)	146 (10.0)	378 (15.2)	525 (4.4)	147 (15.8)
Singapore	484 (9.4)	643 (4.9)	159 (10.6)	398 (15.2)	607 (5.5)	210 (16.2)

Notes:

*Fourth and eighth grades in most countries.

() Standard errors appear in parentheses. Because results are rounded to the nearest whole number, some differences may appear inconsistent.

Countries shown in italics did not satisfy one or more guidelines for sample participation rates, age/grade specifications, or classroom sampling procedures.

Provides an estimate of how the fourth-grade students would have performed on the eighth-grade scale. Since there are only 15 mathematics items and 18 science items in common in the tests given to the two grades, the estimate of the relationship is approximate.

The standard error for the fourth-grade estimate incorporates an added component to account for the uncertainty of this approximation.

Sources:

IEA 1997a and 1997b

Table 5.4 a**Students' Reports on Frequency with Which They Speak the Language of the Test at Home - Mathematics, Fourth Grade*, 1994/1995****TIMSS Report**

Country	Never		Sometimes		Always or Almost Always	
	Percent of Students (%)	Mean Achievement	Percent of Students (%)	Mean Achievement	Percent of Students (%)	Mean Achievement
<i>Thailand</i>	11 (1.6)	457 (10.8)	29 (2.4)	483 (4.9)	60 (2.9)	498 (5.3)
<i>Australia</i>	1 (0.2)		9 (0.9)	524 (10.9)	89 (1.0)	550 (2.8)
Korea	1 (0.1)		10 (0.7)	603 (4.6)	89 (0.7)	613 (2.3)
New Zealand	2 (0.2)		11 (1.0)	450 (8.0)	87 (1.1)	509 (4.3)
Singapore	9 (0.6)	567 (6.9)	71 (1.3)	618 (4.4)	20 (1.5)	676 (7.9)

Notes:

*Fourth grade in most countries.

(1) Standard errors appear in parentheses. Because results are rounded to the nearest whole number, some differences may appear inconsistent.

Countries shown in italics did not satisfy one or more guidelines for sample participation rates, age/grade specifications, or classroom sampling procedures.

Includes countries that participated in TIMSS achievement testing at both fourth and eighth grades.

Source:

IEA 1997a

Table 5.4 b**Students' Reports on Frequency with Which They Speak the Language of the Test at Home -****Science, Fourth Grade*, 1994/1995****TIMSS Report**

Country	Never		Sometimes		Always or Almost Always	
	Percent of Students (%)	Mean Achievement	Percent of Students (%)	Mean Achievement	Percent of Students (%)	Mean Achievement
<i>Thailand</i>	11 (1.6)	439 (12.3)	29 (2.4)	464 (5.2)	60 (2.9)	482 (5.4)
<i>Australia</i>	1 (0.2)		9 (0.9)	518 (7.9)	89 (1.0)	568 (2.6)
<i>Korea</i>	1 (0.1)		10 (0.7)	586 (4.2)	89 (0.7)	599 (2.0)
<i>New Zealand</i>	2 (0.2)		11 (1.0)	461 (7.7)	87 (1.1)	544 (4.8)
<i>Singapore</i>	9 (0.6)	486 (5.2)	71 (1.3)	538 (4.2)	20 (1.5)	607 (7.3)

Notes:

*Fourth grade in most countries.

() Standard errors appear in parentheses. Because results are rounded to the nearest whole number, some differences may appear inconsistent.

Countries shown in italics did not satisfy one or more guidelines for sample participation rates, age/grade specifications, or classroom sampling procedures.

Includes countries that participated in TIMSS achievement testing at both fourth and eighth grades.

Source:

IEA 1997b

Table 5.5 a
Students' Reports on the Highest Level of Education of Either Parent¹-Mathematics*, Eighth Grade, 1994/1995
TIMSS Report

Country	Finished University		Finished Upper Secondary School But Not University		Finished Primary School But Not Upper Secondary School		Do Not Know	
	Percent of Students (%)	Mean Achievement	Percent of Students (%)	Mean Achievement	Percent of Students (%)	Mean Achievement	Percent of Students (%)	Mean Achievement
<i>Thailand</i>	9 (1.4)	571 (9.5)	14 (1.4)	543 (8.9)	73 (2.6)	513 (4.4)	3 (0.5)	524 (12.3)
<i>Australia</i>	28 (1.4)	572 (4.4)	37 (0.9)	528 (4.4)	24 (0.9)	510 (3.6)	11 (0.6)	494 (4.9)
<i>Hong Kong</i>	7 (1.0)	638 (8.6)	30 (1.2)	607 (6.6)	55 (1.8)	584 (5.9)	7 (0.7)	554 (12.6)
<i>Korea</i>	22 (1.3)	654 (5.1)	47 (1.3)	607 (2.8)	26 (1.1)	575 (4.2)	5 (0.5)	573 (9.3)
<i>New Zealand</i>	25 (1.3)	543 (6.0)	38 (1.1)	504 (4.4)	15 (0.8)	491 (5.7)	21 (1.1)	494 (5.4)
<i>Singapore</i>	8 (1.0)	692 (7.5)	69 (1.0)	645 (5.0)	23 (1.2)	623 (4.9)		

Notes:

* Eighth grade in most countries.

¹ The response categories were defined by each country to conform to their own educational system and may not be strictly comparable across countries.

In most countries, defined as completion of at least a 4-year degree program at a university or an equivalent institute of higher education.

Finished upper secondary school with or without some tertiary education not equivalent to a university degree. In most countries, finished secondary corresponds to completion of an upper-secondary track terminating after 11 to 13 years of schooling.

() Standard errors appear in parentheses. Because results are rounded to the nearest whole number, some totals may appear inconsistent. Countries shown in italics did not satisfy one or more guidelines for sample participation rates, age/grade specifications, or classroom sampling procedures.

Source: IEA 1997c

Table 5.5 b

Students' Reports on the Highest Level of Education of Either Parent¹ -Science, Eighth Grade*, 1994/1995

TIMSS Report

Country	Finished University		Finished Upper Secondary School But Not University		Finished Primary School But Not Upper Secondary School		Do Not Know	
	Percent of Students (%)	Mean Achievement	Percent of Students (%)	Mean Achievement	Percent of Students (%)	Mean Achievement	Percent of Students (%)	Mean Achievement
<i>Thailand</i>	9 (1.4)	557 (6.7)	14 (1.4)	540 (5.9)	73 (2.6)	519 (2.9)	3 (0.5)	522 (10.2)
<i>Australia</i>	28 (1.4)	587 (4.5)	37 (0.9)	544 (4.1)	24 (0.9)	527 (4.4)	11 (0.6)	499 (5.3)
<i>Hong Kong</i>	7 (1.0)	547 (8.6)	30 (1.2)	537 (5.1)	55 (1.8)	519 (4.7)	7 (0.7)	498 (8.5)
<i>Korea</i>	22 (1.3)	593 (3.9)	47 (1.3)	566 (2.4)	26 (1.1)	546 (3.4)	5 (0.5)	529 (7.1)
<i>New Zealand</i>	25 (1.3)	560 (5.5)	38 (1.1)	530 (4.4)	15 (0.8)	503 (6.0)	21 (1.1)	505 (5.8)
<i>Singapore</i>	8 (1.0)	661 (8.4)	69 (1.0)	612 (5.5)	23 (1.2)	578 (5.1)		

Notes: * Eighth grade in most countries.

¹ The response categories were defined by each country to conform to their own educational system and may not be strictly comparable across countries.

In most countries, defined as completion of at least a 4-year degree program at a university or an equivalent institute of higher education.

Finished upper secondary school with or without some tertiary education not equivalent to a university degree. In most countries, finished secondary corresponds to completion of an upper-secondary track terminating after 11 to 13 years of schooling.

() Standard errors appear in parentheses. Because results are rounded to the nearest whole number, some totals may appear inconsistent. Countries shown in italics did not satisfy one or more guidelines for sample participation rates, age/grade specifications, or classroom sampling procedures.

Source: IEA 1997d

6. Social and Labor Market Outcomes of Education

Table 6.1
Fertility Rates by Level of Education in Selected Countries, Various Years from 1984 to 1997

Measures of Current and Cumulative Fertility According to Respondents' Education, 1984*

	Total Marital Fertility Rate**, by Years of Education					Children ever Born***, by Years of Education					Difference (1)-(4)
	Zero (1)	One to Three (2)	Four to Six (3)	Seven or More (4)	Difference (1)-(4)	Zero (1)	One to Three (2)	Four to Six (3)	Seven or More (4)		
Fiji	5	5.1	5.2	4.6	0.4	6.9	7.1	6.1	5.6	5.6	1.3
Indonesia	5	5.5	5.5	5	0	5.2	6.1	5.6	4.5	4.5	0.7
Malaysia	6.2	6	5.8	4	2.2	6.3	6.2	5.9	3.7	3.7	2.6
Philippines	6.7	7.4	6.9	5	1.7	7	7.4	6.9	5.2	5.2	1.8
Thailand	5.5	5.7	5.4	3.2	2.3	6.4	6.6	6.5	4	4	2.4
Korea, Rep.	6.2	5.6	5	3.8	2.4	6	5.7	5.2	4	4	2

Notes:

* The source does not specify the year when the survey was conducted; therefore, this study refers to the year when the original source was published. (Original source is Ashurst, Hazel, Sundat Balkaran and J.B. Casterline 1984, *Socio-Economic Differentials in Recent Fertility. World Fertility Survey Comparative Studies, No. 33; Cross-National Summaries*. Voorburg, The Netherlands: International Statistical Institute.)

**Total Marital Fertility Rate measures fertility only among married women, specifically women for the first 25 years of marriage in the original study.

***Mean Number of Children Ever Born to Women Aged 40-49

Indonesia and Thailand: Children ever born based on ever married women aged 40-49, rather than on all women of these ages.

Source: United Nations 1987

Vietnam, 1992-1993: Mean Number of Children Ever Born to Married Women Aged 20-39 in Rural Vietnam

Age	Level of Schooling Completed by Women				
	No Schooling	Primary Incomplete	Lower secondary Incomplete	Upper Secondary Incomplete	Upper Secondary Completed
20-24	1.35	1.27	1.28	1.25	0.94
25-29	2.81	2.65	2.27	2.14	1.78
30-34	4.07	3.55	3.13	2.87	2.48
35-39	5.04	4.53	3.79	3.48	2.86
25-39	3.57	3.24	2.72	2.43	1.90

Source: Dollar, Glewwe, and Litvack (Eds.) 1998. (Original source: 1992-1993 Vietnam Living Standards Survey).

Indonesia, 1997

	Level of Education			
	No Education	Some Primary	Completed Primary	Some Secondary+
Total Fertility Rate to All women aged 15-49	2.66	3.23	2.96	2.55
Mean Number of Children Ever Born to Women aged 40-49	4.27	4.75	4.34	3.59

Source: Central Bureau of Statistics, State Ministry of Population/National Family Planning Coordinating Board, Ministry of Health, and Macro International Inc., 1998.

Papua New Guinea, 1996

	No Education	Level of Education				Total
		Grades 1-5	Grade 6	Grades 7+		
Total Fertility Rate for the Five-Years preceding the Survey	4.97	4.74	5.10	3.85	4.84	
Mean Number of Children Ever Born to Women aged 40-49	5.40	5.77	5.46	4.54	5.40	

Source: National Statistical Office, Papua New Guinea 1996.

Table 6.2 a
Net Enrollment Rates by Income Quintile in Vietnam, 1993

Vietnam: Net Enrollment Rates by Income Quintile, 1993

	Income Quintile				
	Poorest	II	III	IV	Richest
Primary	67.7	77.3	80.7	84.7	86.2
Lower Secondary	18.6	25.7	36.3	44.2	56.0
Upper Secondary	1.9	3.0	6.9	12.8	27.6
Post Secondary	0.0	0.4	1.0	1.9	7.0

Source: World Bank 1995e

Table 6.2 b
Level of Education Attainment at Ages 15 to 19 (%), by Income, Gender, and Urban and Rural, Indonesia, 1991 & 1994, and Philippines, 1993 *

Indonesia 1991

Grade**	All	Income			Gender		Urban	Rural	Male/ Urban	Male/ Rural	Female/ Urban	Female/ Rural
		Richest	Middle	Poorest	Male	Female						
1	97	99	99	95	98	97	99	97	99	98	99	96
2	96	99	98	93	97	96	98	96	98	97	98	94
3	94	98	96	89	95	93	97	93	97	94	97	91
4	91	97	93	84	92	90	95	89	96	91	95	87
5	88	97	91	78	89	86	94	84	95	86	93	82
6	83	95	87	71	85	82	91	80	93	82	90	77
7	52	80	56	28	57	47	71	42	76	47	67	37
8	47	75	51	25	51	44	67	38	71	42	63	34
9	40	66	42	19	42	37	57	31	59	34	55	28

Indonesia 1994

Grade**	All	Income			Gender		Urban	Rural	Male/ Urban	Male/ Rural	Female/ Urban	Female/ Rural
		Richest	Middle	Poorest	Male	Female						
1	98	100	99	96	98	98	99	97	99	98	99	97
2	97	99	98	94	97	97	99	96	99	96	99	96
3	95	98	96	91	95	95	97	93	98	93	97	94
4	92	97	95	86	92	92	96	90	96	90	97	89
5	88	96	92	79	88	88	94	85	94	85	95	85
6	85	95	88	73	85	85	92	80	91	81	94	80
7	53	80	57	29	55	51	73	42	75	44	71	39
8	49	77	53	25	50	48	70	37	71	39	68	36
9	42	69	45	19	43	41	63	30	64	31	62	28

Philippines 1993

Grade**	All	Income			Gender		Urban	Rural	Male/ Urban	Male/ Rural	Female/ Urban	Female/ Rural
		Richest	Middle	Poorest	Male	Female						
1	99	100	99	97	99	99	99	98	99	98	99	98
2	98	100	99	96	98	98	99	97	99	97	99	98
3	97	99	98	92	96	98	98	94	98	93	99	96
4	94	99	97	87	92	96	97	91	97	88	98	94
5	91	98	95	80	88	94	95	86	94	83	96	91
6	87	97	93	74	84	91	92	81	90	77	94	88
7	75	90	83	56	71	80	82	67	80	62	84	75
8	68	86	76	46	62	74	75	60	72	53	79	68
9	55	74	62	32	49	61	62	46	59	39	65	55

Note: * The raw data used in this study are contributed by the authors (see below), and the original source is Demographic Health Surveys (DHS).

** Grades in this table indicate completed grades, not years of schooling, nor grades enrolled.

Source: Filmer and Pritchett 1998.

Table 6.3
Economically Active Population by Level of Educational Attainment and Gender, Various Years from 1995 to 1997

Country (year)	Total Economically Active Population	No Schooling (%)	Education preceding the first level (%)	First Level (%)	Level of Education attainment				Level not Stated (%)	
					Second Level		Third Level			
					First Stage: leading to a first university degree or equivalent to a first university degree (%)	Second Stage (%)	First Stage: leading to an award not equivalent to a first university degree (%)	Second Stage (%)		
Indonesia ² (1996)	Total 76,514,727 77,930,236	9.2 6.0 12.3	23.9 23.2 24.7	36.3 36.4 36.3	14.1 15.3 13.0	13.9 16.0 11.8	1.3 1.6 1.0	1.2 1.6 0.0		
Australia ^{1 5 6} (1995)	Total 8,336,100 4,809,800 3,526,200	0.1 0.1 0.1			34.8 33.3 36.9	16.6 15.9 17.7	33.7 36.9 29.3	10.4 9.4 11.7	4.4 4.5 4.3	
Japan ² (1996)	Total 63,230,000 38,020,000 25,210,000	0.1 0.1 0.1		20.5 20.9 19.9	48.8 46.9 51.6	12.3 6.9 20.7		18.2 25.2 7.7		
Korea, Republic of ^{1 2 3} (1996)	Total 21,188,000 12,620,000 8,568,000	20.2 14.2 28.9			16.1 15.3 17.4	44.0 47.0 39.4	19.7 23.4 14.3			
New Zealand ^{2 7 8} (1997)	Total 1,813,000 1,005,000 808,000	22.3 23.1 21.3		0.6 0.6 0.5	11.8 10.1 13.7	12.0 11.0 13.4	37.6 38.8 36.0	10.3 10.6 9.8	3.4 3.8 2.7	
Singapore ^{2 4} (1996)	Total 1,801,900 1,054,600 747,400	4.3 3.3 5.9	11.1 12.4 9.3	9.4 10.5 7.8	14.0 16.2 10.9	30.5 26.8 35.8	18.9 18.8 19.1	11.6 12.0 11.2	0.2 0.2 0.1	

Notes:

Percentages in this table are calculated for this study, based on the raw data from the original source.

1 Excl. Armed forces.

2 Persons aged 15 years and over.

3 Excl. Resident foreigners.

4 June of each year.

5 Persons aged 15 to 64.

6 May of each year.

7 Civilian usually resident population.

8 March - May of each year.

The economically active population comprises all persons of either sex who furnish the supply of labour for the production of goods and services during a specified time-reference period.

Level of education attainment is based on the International Standard Classification of Education (ISCED), adopted in 1976 by UNESCO.

No schooling : Less than one year of schooling.

Education preceding the first level : Education delivered in kindergartens, nursery schools as well as in infant classes attached to primary schools.

First level : Programmes are designed to give the students a sound basic education in reading, writing and arithmetic along with an elementary understanding of other subjects such as national history, geography, natural science, social science, art, music and religious instruction. Children enter these programmes when they are 5 to 7 years old. Literacy programmes for adults are also to be classified under Level 1.

Second level, first stage : The basic programmes constituting the first level are continued, but usually on a more subject-oriented pattern. Some small beginnings of specialization may be seen at this level with some students having the opportunity to direct their attention more particularly to certain types of subjects, e.g. commercial or technical subjects. vocational programmes designed to train for a specific occupation and often associated to train for a specific occupation and often associated with relatively unskilled jobs, as well as apprenticeship programmes for skilled trades and crafts that provide specialization are found at this level. Also to be classified under Level 3 are programmes consisting of subject matter mainly with a specific vocational emphasis or apprenticeship programmes, with an entrance requirement of eight full years of education, or a combination of basic education and vocational experience that demonstrates the ability to handle the subject matter of that level.

Third level, first stage, leading to an award not equivalent to a first university degree : Programmes of this type are usually "practical" in orientation in what they are designed to prepare students for particular vocational fields in which they can qualify as high level technicians, teachers, nurses, production supervisors, etc.

Third level, first stage, leading to a first university degree or equivalent qualification: Programmes of this type comprise those leading to typical first university degrees such as "Bachelor's degree", a "license", etc., as well as those which lead to first professional degrees such as "Doctorates" awarded after completion of studies in medicine, engineering, law, etc.

Third level, second stage : Programmes leading to a post-graduate university degree or equivalent qualification. Programmes of this type generally require a first university degree or equivalent qualification for admission. They are intended to reflect specialization within a given subject area.

Education not definable by level : Programmes for which there are no entrance requirement.

ILO 1997

Source:

114

81

115

**Table 6.4
Employment/Population Ratios of Youths by Level of Educational Attainment and Age Group, 1996**

Country	Below upper secondary education (%)		Upper secondary education (%)		Non-university tertiary education (%)		University-level education (%)		All levels of education (%)			
	Age 15-19	Age 20-24	Age 15-19	Age 20-24	Age 25-29	Age 20-24	Age 25-29	Age 20-24	Age 25-29	Age 15-19	Age 20-24	Age 25-29
Malaysia	Total	42.7	74.9	70.8	19.8	77.5	78.7	x	x	38.2	87.9	29.5
	Men	51.3	93.3	96.5	20.5	87.3	97.0	x	x	40.3	91.8	34.5
	Women	32.2	51.8	43.0	19.1	68.4	60.1	x	x	36.0	83.5	24.2
Thailand	Total	45.2	82.3	84.6	26.2	52.5	86.7	42.8	86.5	72.8	91.7	40.1
	Men	47.5	90.4	95.0	27.4	58.0	94.1	38.5	91.6	71.2	94.2	41.9
	Women	42.8	74.0	74.0	25.2	46.8	76.0	48.1	81.6	74.2	89.6	38.1
Australia	Total	40.1	62.8	64.0	62.6	74.9	80.2	81.2	80.6	83.0	87.8	46.6
	Men	38.8	70.6	78.8	62.4	78.4	88.4	79.9	85.2	82.1	89.8	45.2
	Women	41.5	55.4	53.5	62.7	70.7	68.3	82.2	76.7	83.7	85.9	69.4
Korea	Total	3.5	66.3	65.7	29.9	55.3	64.0	x	x	76.8	76.4	10.3
	Men	3.6	78.4	88.4	21.8	49.9	82.8	x	x	68.1	88.2	7.9
	Women	3.4	46.9	40.8	36.9	59.5	44.9	x	x	79.2	63.2	12.7
New Zealand	Total	40.4	60.7	61.8	58.5	78.2	81.9	78.4	74.6	75.7	91.4	46.8
	Men	43.0	77.5	77.1	54.1	81.0	91.1	86.3	76.2	70.9	94.2	47.0
	Women	37.4	43.3	47.9	62.4	75.1	71.5	73.0	73.8	80.2	88.4	46.5

Note: x Data included in another category/column of the table.

Source: OECD 1998

Table 6.5
Unemployment Rates of Youth by Level of Educational Attainment and Age Group, 1996

Country	Below upper secondary education (%)		Upper secondary education (%)		Non-university tertiary education (%)		University-level education (%)		All Levels of education (%)			
	Age 15-19	Age 20-24	Age 25-29	Age 15-19	Age 20-24	Age 25-29	Age 20-24	Age 25-29	Age 20-24	Age 15-19	Age 20-24	Age 25-29
Malaysia	9.6	4.1	2.0	12.9	5.1	2.0	x	x	7.2	1.2	10.8	4.7
Thailand	4.4	2.8	1.9	6.6	3.6	1.2	5.9	3.7	10.8	2.6	4.6	3.5
Australia	22.6	19.8	12.0	16.5	10.1	7.1	8.2	5.9	6.7	4.2	20.4	11.9
Korea	9.8	7.6	3.0	6.7	5.3	3.0	x	x	7.7	4.0	7.5	5.9
New Zealand	17.3	14.7	10.8	11.2	7.6	3.5	10.8	6.1	6.3	2.3	15.1	9.6

Note: x Data included in another category/column of the table.

Source:

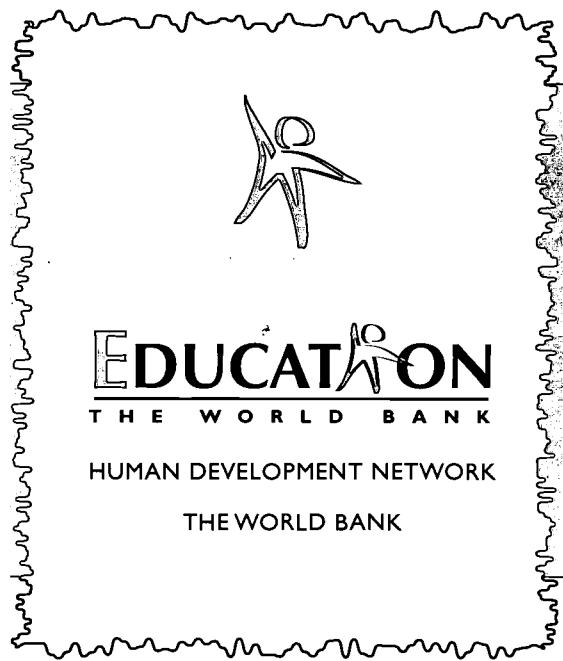
OECD 1998

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