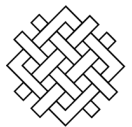


# Education and Literacy

Source: United Nations Educational, Scientific, and Cultural Organization (UNESCO)

EarthTrends Data Tables:  
Population,  
Health, and  
Human Well-being



	Primary School, Net Enrollment Ratio (a)				Secondary School, Net Enrollment Ratio (a)				Tertiary School, Gross Enrollment Ratio		Literacy Rate of Youths Ages 15 to 24 (percent)		Literacy Rate of Adults Older Than Age 15 (percent)	
	Female (percent)		Male (percent)		Female (percent)		Male (percent)		Total (percent)	Female (percent of total enrollment)	1980	2002	1980	2002
	1988	1998	1988	1998	1988	1988	1988	1998						
	1988	1998	1988	1998	1988	1988	1988	1998	1998	1996	1980	2002	1980	2002
<b>WORLD</b>	..	..	..	..	..	..	..	..	..	..	80	87	69	80
<b>ASIA (EXCL. MIDDLE EAST)</b>	..	..	..	..	..	..	..	..	..	..	76	85	58	74
Armenia	..	..	..	..	..	..	..	..	..	56	99	100	96	99
Azerbaijan	..	97	..	95	..	82	..	81	22	50	..	..	..	..
Bangladesh	57	102	68	106	14	..	28	..	5	..	37	52	29	43
Bhutan	..	15	..	17	..	5	..	5	..	..	..	..	..	..
Cambodia	100	95	100	110	32	14	63	26	1	16	67	80	54	69
China 93	..	92	100	90	48	48	64	52	6	..	90	98	65	85
Georgia	93	..	94	..	90	79	100	77	34	51	..	..	..	..
India	65	..	87	..	38	31	63	46	..	36	55	74	41	59
Indonesia	98	..	100	..	49	..	57	..	..	..	89	98	69	88
Japan	100	102	100	102	98	..	96	..	44	..	..	..	..	..
Kazakhstan	..	..	..	..	..	74	..	74	23	..	..	..	..	..
Korea, Dem People's Rep	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Korea, Rep	100	98	100	97	85	..	85	..	..	37	100	100	93	98
Kyrgyzstan	100	84	98	86	99	..	100	..	31	..	40	73	26	51
Lao People's Dem Rep	65	73	76	80	46	23	64	30	3	30	..	..	..	..
Malaysia	95	98	96	98	59	97	57	89	..	..	90	98	71	88
Monqolia	100	87	98	84	89	59	81	46	25	69	99	100	97	99
Myanmar	79	..	82	..	39	..	44	..	..	..	85	91	76	85
Nepal	43	..	85	..	26	..	61	..	3	..	33	63	22	44
Pakistan	..	..	..	..	..	..	..	..	..	..	37	59	28	45
Philippines	100	..	100	..	70	..	73	..	28	..	95	99	89	96
Singapore	97	..	95	..	71	..	79	..	..	..	97	100	83	93
Sri Lanka	100	103	100	101	77	..	71	..	..	..	93	97	85	92
Taiikistan	..	..	..	..	..	..	..	..	..	..	100	100	96	99
Thailand	90	76	92	78	23	57	24	54	30	..	97	99	88	96
Turkmenistan	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Uzbekistan	..	..	..	..	..	..	..	..	..	..	100	100	98	99
Viet Nam	89	..	94	..	44	50	47	48	11	..	95	97	87	94
<b>EUROPE</b>	..	..	..	..	..	..	..	..	..	..	100	100	97	99
Albania	..	..	..	..	..	..	..	..	..	57	90	98	66	86
Austria	100	90	100	87	91	..	96	..	50	49	..	..	..	..
Belarus	..	..	..	..	..	..	..	..	..	55	100	100	99	100
Belgium	100	..	100	..	100	..	100	..	..	..	..	..	..	..
Bosnia and Herzegovina	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Bulgaria	92	92	92	94	86	80	88	81	43	61	99	100	95	99
Croatia	100	..	100	..	87	..	85	..	..	51	99	100	94	98
Czech Rep	100	90	100	90	89	81	95	78	26	48	..	..	..	..
Denmark	100	101	100	101	88	91	86	88	55	..	..	..	..	..
Estonia	100	95	100	97	93	83	91	72	47	53	..	..	..	..
Finland	100	98	100	99	95	95	87	94	83	53	..	..	..	..
France	100	100	100	100	98	95	93	93	51	55	..	..	..	..
Germany	100	88	100	86	87	88	88	88	46	46	..	..	..	..
Greece	100	95	100	95	83	88	83	85	50	48	99	100	91	97
Hungary	96	82	95	81	72	86	72	84	34	..	100	100	99	99
Iceland	100	98	100	100	81	88	81	83	40	58	..	..	..	..
Ireland	100	104	100	104	96	78	93	76	45	52	..	..	..	..
Italy	100	101	100	101	76	89	76	87	47	54	100	100	96	99
Latvia	100	92	100	97	90	83	92	84	51	60	100	100	100	100
Lithuania	..	93	..	94	..	86	..	85	41	59	100	100	99	100
Macedonia, FYR	..	94	..	97	..	78	..	80	22	54	..	..	..	..
Moldova, Rep	..	..	..	..	..	..	..	..	..	55	100	100	95	99
Netherlands	100	100	100	101	97	93	95	92	49	48	..	..	..	..
Norway	98	102	98	102	87	97	84	96	65	56	..	..	..	..
Poland	98	..	98	..	81	..	77	..	..	..	100	100	99	100
Portugal	100	105	100	110	58	92	61	84	45	..	98	100	82	93
Romania	97	94	99	95	85	76	95	75	..	53	99	100	95	98
Russian Federation	96	..	96	..	99	..	99	..	..	..	100	100	99	100
Serbia and Montenegro	..	..	..	..	..	..	..	..	..	54	..	..	..	..
Slovakia	..	..	..	..	..	..	..	..	27	50	..	..	..	..
Slovenia	..	93	..	94	..	91	..	88	53	56	100	100	99	100
Spain	100	105	100	105	94	93	91	90	56	53	99	100	94	98
Sweden	100	102	100	103	86	102	86	97	63	56	..	..	..	..
Switzerland	100	93	100	94	77	80	83	86	35	..	..	..	..	..
Ukraine	..	..	..	..	..	..	..	..	..	..	100	100	99	100
United Kingdom	100	102	100	101	88	95	84	92	58	52	..	..	..	..
<b>MIDDLE EAST &amp; N. AFRICA</b>	..	..	..	..	..	..	..	..	..	..	67	86	48	71
Afghanistan	16	..	31	..	8	..	14	..	..	..	..	..	..	..
Algeria	84	92	98	96	52	59	70	58	15	..	..	90	36	69
Egypt	79	89	92	95	49	..	67	..	39	..	52	71	39	57
Iran, Islamic Rep	83	..	92	..	51	..	75	..	..	36	73	95	50	78
Iraq	87	74	100	85	42	25	67	38	13	..	49	75	35	58
Israel	..	95	..	95	..	85	..	84	49	..	98	99	85	95
Jordan	..	65	..	63	..	62	..	58	..	47	91	99	68	91
Kuwait	79	67	80	68	82	58	85	57	20	62	80	93	68	83
Lebanon	..	77	..	79	..	79	..	72	38	..	88	96	72	87
Libyan Arab Jamahiriya	95	..	100	..	85	76	95	67	57	..	79	97	53	82
Morocco	46	73	68	86	29	..	42	..	9	41	42	70	29	51
Oman	67	65	72	67	40	58	57	57	..	46	60	99	36	74
Saudi Arabia	50	57	65	61	46	47	49	50	19	47	74	94	51	78
Syrian Arab Rep	96	89	100	96	49	36	68	39	6	..	71	88	53	76
Tunisia	90	96	100	99	48	56	65	54	17	45	72	94	45	73
Turkey	92	96	95	105	37	..	58	..	14	35	88	97	69	86
United Arab Emirates	95	82	95	83	65	73	59	68	13	..	75	91	66	77
Yemen	..	44	..	77	..	20	..	50	10	13	31	68	20	49



	Primary School, Net Enrollment Ratio (a)				Secondary School, Net Enrollment Ratio (a)				Tertiary School, Gross Enrollment Ratio		Literacy Rate of Youths Ages 15 to 24 (percent)		Literacy Rate of Adults Older Than Age 15 (percent)	
	Female (percent)		Male (percent)		Female (percent)		Male (percent)		Total (percent)	Female (percent of total enrollment)	1980	2002	1980	2002
	1988	1998	1988	1998	1988	1998	1988	1998	1998	1996				
	1988	1998	1988	1998	1988	1998	1988	1998	1998	1996	1980	2002	1980	2002
<b>SUB-SAHARAN AFRICA</b>	..	..	..	..	..	..	..	..	..	..	55	79	38	63
Angola	49	53	56	61	38	..	49	..	1	..	..	..	..	..
Benin	..	..	..	..	..	10	..	22	3	19	29	55	18	40
Botswana	98	82	90	79	53	61	51	52	4	47	72	89	57	79
Burkina Faso	19	28	32	40	7	6	12	11	..	23	17	37	11	26
Burundi	48	34	56	41	15	..	24	..	1	..	40	66	28	50
Cameroon	70	..	81	..	41	..	55	..	5	..	75	94	47	78
Central African Rep	38	43	59	64	18	..	40	..	2	..	40	70	23	50
Chad	23	42	49	68	8	3	28	12	..	..	31	70	17	46
Congo	93	..	100	..	90	..	100	..	..	..	80	98	50	83
Congo, Dem Rep	43	31	58	33	26	9	45	15	1	..	53	84	34	64
Côte d'Ivoire	43	51	58	68	30	..	54	..	7	..	36	68	23	50
Equatorial Guinea	94	73	97	92	68	14	78	38	..	..	84	97	60	85
Eritrea	..	31	..	36	..	17	..	21	1	..	51	72	37	58
Ethiopia	26	30	35	41	19	12	32	19	1	20	32	57	20	42
Gabon	..	..	..	..	..	..	..	..	8	..	..	..	..	..
Gambia	41	57	66	65	13	20	28	27	..	..	29	60	16	39
Ghana	..	..	..	..	..	..	..	..	..	..	67	92	44	74
Guinea	18	37	36	54	8	7	22	18	..	11	..	..	..	..
Guinea-Bissau	33	..	58	..	14	..	28	..	..	..	33	61	19	41
Kenya	76	..	76	..	58	..	72	..	1	..	78	96	56	84
Lesotho	84	64	65	56	87	19	62	10	2	54	83	91	71	84
Liberia	..	35	..	46	..	..	..	..	7	..	44	72	28	56
Madagascar	72	63	73	62	..	13	..	12	2	45	62	81	48	68
Malawi	47	..	50	..	28	7	55	7	0	..	55	72	45	62
Mali	15	34	25	49	6	..	12	..	2	19	26	70	14	45
Mauritania	..	58	..	62	..	..	..	..	6	..	32	50	29	41
Mozambique	41	37	49	45	20	6	30	9	1	24	38	63	24	46
Namibia	98	90	85	83	77	38	68	25	7	..	81	92	66	83
Niger	17	20	31	32	5	5	11	7	..	..	12	24	8	17
Nigeria	..	..	..	..	..	..	..	..	..	..	55	88	33	67
Rwanda	63	92	64	90	..	..	..	..	1	..	58	85	40	69
Senegal	41	54	56	64	15	..	27	..	4	..	31	53	21	39
Sierra Leone	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Somalia	..	..	..	..	..	..	..	..	..	..	..	..	..	..
South Africa	97	..	96	..	78	..	75	..	17	..	85	92	76	86
Sudan	..	42	..	50	..	..	..	..	7	..	50	79	34	60
Tanzania, United Rep	53	49	52	47	..	3	..	4	1	18	69	92	49	77
Togo	58	78	86	99	30	14	68	32	4	17	50	77	32	60
Uganda	..	..	..	..	..	8	..	10	2	33	60	80	46	69
Zambia	85	72	88	74	35	20	55	23	3	..	73	89	59	80
Zimbabwe	100	..	100	..	57	..	77	..	..	36	86	98	70	90
<b>NORTH AMERICA</b>	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Canada	100	96	100	97	93	93	93	94	58	..	..	..	..	..
United States	98	95	97	95	94	76	94	104	77	..	..	..	..	..
<b>C. AMERICA &amp; CARIBBEAN</b>	..	..	..	..	..	..	..	..	..	..	87	92	77	87
Belize	93	99	92	100	56	43	58	35	..	..	94	98	83	94
Costa Rica	..	..	..	..	..	..	..	..	..	..	97	98	92	96
Cuba	91	97	91	96	78	79	73	71	19	60	98	100	93	97
Dominican Rep	84	88	81	87	60	57	53	48	..	57	83	92	74	84
El Salvador	77	87	75	74	39	38	37	37	18	50	79	89	66	80
Guatemala	63	80	71	85	28	..	36	..	..	..	66	80	53	70
Haiti	..	82	..	77	..	..	..	..	..	..	45	66	31	52
Honduras	95	..	92	..	45	..	41	..	13	..	73	84	61	76
Jamaica	98	93	96	92	69	80	64	78	9	..	88	94	76	88
Mexico	100	103	100	102	59	56	65	56	18	48	92	97	82	92
Nicaragua	75	..	71	..	52	..	38	..	..	..	65	72	59	67
Panama	91	..	91	..	66	..	65	..	..	..	93	97	85	92
Trinidad and Tobago	95	93	95	93	80	75	79	70	6	..	95	98	88	94
<b>SOUTH AMERICA</b>	..	..	..	..	..	..	..	..	..	..	90	95	81	90
Argentina	100	107	95	107	74	76	69	71	47	..	97	99	94	97
Bolivia	80	97	86	97	39	..	49	..	..	..	86	96	69	87
Brazil	80	96	86	101	53	..	52	..	14	..	87	93	75	86
Chile	91	87	89	88	80	72	83	69	34	45	97	99	92	96
Colombia	67	..	66	..	66	..	65	..	..	52	93	97	84	92
Ecuador	97	97	96	96	62	47	62	45	..	..	92	98	82	92
Guyana	100	82	100	88	79	..	75	..	..	51	99	100	95	99
Paraguay	92	92	93	91	34	43	38	41	..	55	94	97	86	94
Peru	92	103	96	103	76	61	83	62	29	..	91	97	79	91
Suriname	89	..	88	..	45	..	40	..	7	..	..	..	..	..
Uruguay	90	93	91	92	87	76	72	56	35	..	98	99	95	98
Venezuela	88	..	84	..	53	..	44	..	..	..	94	98	84	93
<b>OCEANIA</b>	..	..	..	..	..	..	..	..	..	..	99	100	96	99
Australia	100	..	100	..	91	..	89	..	..	51	..	..	..	..
Fiji	99	100	98	101	67	76	67	76	..	..	95	99	82	93
New Zealand	100	..	100	..	88	..	87	..	..	56	..	..	..	..
Papua New Guinea	..	78	..	91	..	18	..	26	2	..	61	77	48	65
Solomon Islands	..	..	..	..	..	..	..	..	..	..	..	..	..	..
<b>DEVELOPED</b>	..	..	..	..	..	..	..	..	..	..	99	100	97	99
<b>DEVELOPING</b>	..	..	..	..	..	..	..	..	..	..	74	85	57	74

a. As net enrollment ratios approach 100%, inconsistencies with enrollment and/or population data are more likely to skew the resulting ratios. As a result, some net enrollment ratios are greater than 100%. Please refer to the technical notes for more information.

## Technical Notes

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### **VARIABLE DEFINITIONS AND METHODOLOGY:**

**Primary School Education** is defined by the International Standard Classification of Education (ISCED) as the "beginning of systematic apprenticeship of reading, writing and mathematics". Programs are typically six years long and represent the beginning of compulsory education in many countries.

**Secondary School Education** follows primary education, and is characterized by the ISCED as being subject-oriented with specialized fields of learning. Programs may be vocational or technical in nature, and students achieve a full implementation of basic skills.

**Tertiary School Education**, as characterized by the ISCED, provides the level of education required for entry into an advanced research program or a profession with high skills requirements. Faculty are typically required to have advanced research credentials. A broad variety of tertiary education programs exist in different countries.

**Net Enrollment Ratio (NER)** is defined as the enrollment of the official age-group for a given level of education expressed as a percentage of the population from the same age group. The theoretical maximum value is 100%, but inconsistencies with enrollment age data as the NER approaches 100% may produce values greater than 100% (see cautionary notes below). A high NER denotes a high degree of participation of the official school-age population. If the NER is below 100%, users should not assume that the remaining school-aged population is not enrolled in any school; they could be enrolled in school at other grade levels.

**Gross Enrollment Ratio (GER)** is defined as the total enrollment, regardless of age, expressed as a percentage of the official school-age population for a given level. Gross enrollment ratio can be over 100% due to the inclusion of over-aged and under-aged students. Gross enrollment ratios show general levels of participation in education. When net (aged-based) enrollment data are not available, gross enrollment can be used as a substitute indicator. This data can also be compared to net enrollment figures to indicate the extent of over- and under- aged enrollment. Gross enrollment ratios of 100% or more indicate that a country is, in principle, able to accommodate all of its school-age population.

**Youth Literacy Rate** is defined as the percentage of the population aged 15 to 24 years old who can both read and write, with understanding, a short, simple statement about their everyday life. Youth literacy rates are increasingly used to gauge the impact of primary education as well as the speed with which illiteracy can be eradicated. In general, literacy data can measure the achievement of literacy programs and primary education.

**Adult Literacy Rate** is defined as the percentage of the population aged 15 years and over who can both read and write, with understanding, a short, simple statement about their everyday life. In general, literacy data can measure the achievement of literacy programs and the effectiveness of primary education.

Information on the methodologies used to collect these data can be found in the technical notes for each variable in the EarthTrends searchable database, at <http://www.earthtrends.org>.

### **FREQUENCY OF UPDATE BY DATA PROVIDERS:**

**Enrollment:** UNESCO data are available from WRI for each year from 1980-1998 and every 5 years from 1960 to 1980. Some data are available for 1999. The year of the data indicates when a school year started; 1998 data, for example, are for the 1998-1999 school year. UNESCO updates the data regularly as new estimates are made available; as of summer 2003, data thru 2001 were available for some countries at the UNESCO website.

**Literacy:** Data are available annually from 1980 to 2002. UNESCO updates the data regularly as new estimates are made available. The most recent updates were in January, 2002.

### **DATA RELIABILITY AND CAUTIONARY NOTES:**

**Enrollment:** While UNESCO keeps the most complete global data set on enrollment levels, problems do remain. The availability and quality of national school enrollment statistics vary widely, particularly for

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developing countries. Even though UNESCO has applied the same methodology to analyze all of the country data, definitions of "schooling" and "enrollment" are not strictly comparable among countries.

As net enrollment ratios approach 100%, inconsistencies with enrollment and/or population data are more likely to skew the resulting ratios. As a result, some net enrollment ratios are greater than 100%. Difficulties arise when a substantial proportion of students begin school earlier than the prescribed age, or when the reference date for entry into primary education does not coincide with the birthdays of all eligible students.

**Literacy:** While the empirical results of a 1994 assessment by UNESCO confirmed that most countries adhere to the standard definition of literacy identified above and that statistics are consistent enough to compare among countries, problems do remain. The availability and quality of national statistics on literacy vary widely, particularly for developing countries. When census and survey data are not available for a particular country, estimates need to be made based on neighboring countries. Even when census and survey data are available, they are typically collected only once every decade. Many industrialized countries have stopped collecting literacy data in recent years, based on the sometimes incorrect assumption that universal primary education means universal literacy.

In addition, UNESCO's definition of literacy does not include people who, though familiar with the basics of reading and writing, do not have the skills to function at a reasonable level in their own society. Practices for identifying literates and illiterates during actual census enumeration may also vary, and errors in literacy self-declaration can affect data reliability. Some countries, for example, may equate persons with no schooling for illiterates, or change definitions between censuses.

#### **SOURCES:**

**Enrollment:** United Nations Educational, Scientific, and Cultural Organization (UNESCO) Institute for Statistics. 2002. *World Education Indicators*. Paris: UNESCO.

**Literacy:** United Nations Educational, Scientific, and Cultural Organization (UNESCO) Institute for Statistics. 2002. *Special Estimates and Projections of Adult Illiteracy for Population Aged 15 Years Old and Above, By Country and By Gender*. Paris: UNESCO. Available online at: <http://www.uis.unesco.org/en/stats/stats0.htm>.

United Nations Educational, Scientific, and Cultural Organization (UNESCO) Institute for Statistics. 2002. *Special Estimates and Projections of Adult Illiteracy for Countries With No Census Data*. Paris: UNESCO. Available online at: <http://www.uis.unesco.org/en/stats/stats0.htm>.