

WORLD ATLAS

of Gender Equality in Education

Contents

Foreword	1
Acknowledgements	2
List of maps	4
List of figures and tables	5
Introduction	8
CHAPTER 1	
Increased worldwide demand for quality schooling	10
1. School enrolments keeping pace with population growth	
2. National wealth: a factor in educational participation and persistence	
3. Countries differ in levels of commitment to education	
4. Compulsory education laws offer legal basis for education	
CHAPTER 2	
Girls' right to education	21
1. Female enrolment rising at greater rate than among males	
2. Gender parity an issue in all countries	
CHAPTER 3	
Enrolment and gender trends: primary education	26
1. Participation in pre-primary education on the rise	
2. Growing number of countries achieving universal primary education	
3. Significant progress in gender parity at the primary level	
4. Repetition a continuing obstacle to progress in school	
5. Dropout a threat to universal primary education	
6. Primary level completion rates on the rise	
7. Out-of-school children a continuing challenge	
8. Overage children more likely to drop out of school	
9. Special challenges of poor children and those in rural areas	
CHAPTER 4	
Enrolment and gender trends: secondary education	58
1. Gross enrolment ratios rising at secondary level	
2. Upward trends in secondary level gender parity	
3. Gross enrolment ratios different at lower and higher secondary levels	
4. Out-of-school adolescents a continuing problem	
CHAPTER 5	
Enrolment and gender trends: tertiary education	74
1. Gross enrolment ratio soaring at the tertiary level	
2. Women are the biggest beneficiaries of rising tertiary enrolments	
3. National wealth a major factor in gender gaps at tertiary level	
4. Women have edge in graduate degrees up until PhD level	
5. Significant gender differences in various fields of study	
6. Men continue to predominate in research jobs	
7. Multiple reasons for over-representation of women in post-secondary education	
CHAPTER 6	
Trends in school-life expectancy	86
CHAPTER 7	
Gender trends: adult and youth literacy	92
1. Significant progress made in push for universal adult literacy	
2. Youth literacy on the rise	
CHAPTER 8	
How policies affect gender equality in education	98
1. Female role models an important factor in girls' academic success	
2. Secondary teaching force evenly divided among males and females	
3. Teachers' pay a factor in proportion of female teachers	
4. Girls more affected than boys by distance to school	
5. Females have consistent edge in reading but not mathematics	
Conclusion	107
Annex	
Glossary	108
Definitions of indicators	110
Regions	112
Electronic resources	113
International targets	114
Index	115

List of maps

Map 1.1.1	Majority of countries seeing growth in school-age population	10
	School-age population growth, 2010–2020, ages 5–29	
Map 1.2.1	School-life expectancy rates rise with greater national wealth	14
	National wealth and school-life expectancy	
Map 1.3.1	Two-thirds of countries devote 10 to 20 percent of public spending to education	16
	Total public expenditure on education as % of total government expenditure	
Map 1.4.1	Ten to fourteen years of education is the norm in most countries	18
	Compulsory education	
Map 2.1.1	Gender parity achieved in two-thirds of countries at primary and/or secondary levels	22
	Gender parity index for primary and secondary education	
Map 3.1.1	Pre-primary enrolment apparent in most regions of the world	26
	Gross enrolment ratio in pre-primary education	
Map 3.1.2	Gender parity widespread in pre-primary education	30
	Gender parity index in pre-primary education	
Map 3.2.1	Gross enrolment ratios vary across regions	32
	Gross enrolment ratio in primary education	
Map 3.2.2	Steady progress seen toward universal primary education	34
	Net enrolment rate in primary education	
Map 3.3.1	Two-thirds of countries show gender parity in primary schools	38
	Gender parity index in primary education	
Map 3.4.1	Repetition rates vary widely among different regions	40
	Percentage of repeaters in primary education	
Map 3.5.1	Dropout rates vary widely among different regions	44
	Dropout rate in primary education	
Map 3.6.1	Primary completion rates at least 95 percent in half of countries	48
	Primary completion rate	
Map 3.7.1	Children not in school heavily concentrated in three regions	52
	Rate of out-of-school children	
Map 4.1.1	Secondary gross enrolment ratios vary amongst different regions	58
	Gross enrolment ratio in secondary education	
Map 4.1.2	Net enrolment rates in lower secondary education vary widely	62
	Net enrolment rate in lower secondary education	
Map 4.2.1	Gender parity at secondary level reached in more than one-third of countries	64
	Gender parity index in secondary education	
Map 4.3.1	Enrolments highest at lower secondary level	66
	Gross enrolment ratio in lower secondary education	
Map 4.3.2	Enrolments lowest at upper secondary level	68
	Gross enrolment ratio in upper secondary education	
Map 4.4.1	High rates of out-of-school female adolescents detected in certain regions	72
	Rate of female out-of-school adolescents (lower secondary education)	
Map 5.1.1	Tertiary level gross enrolment ratios vary across regions	74
	Gross enrolment ratio in tertiary education	
Map 5.2.1	Women now a majority of tertiary level students in most countries	78
	Gender parity index, tertiary education	
Map 5.6.1	What is the share of women among researchers?	84
	Women as a share of total researchers	
Map 6.1.1	School-life expectancy rates vary across different regions	86
	School-life expectancy from primary to tertiary education	
Map 7.1.1	Adult literacy rates vary across different regions	92
	Adult literacy rate	
Map 7.2.1	Youth literacy rates higher than those for adults	96
	Youth literacy rate	
Map 8.1.1	Women account for a majority of primary school teachers in most countries and regions	98
	Percentage of female teachers, primary education	
Map 8.2.1	Proportion of female teachers in secondary schools rising but still lower than at the primary level	100
	Percentage of female teachers, secondary education	

List of figures and tables

Table A.	Gender-related goals	8
Figure A.	Number of students (in millions) worldwide enrolled in school from primary to tertiary education, 1970, 2000 and 2009	9
Figure 1.1.1	More than half of school-age population resides in Asia and sub-Saharan Africa	10
	School-age population, distribution by region, 2010	
Table 1.1.1	Projected growth in school-age population by region	12
Table 1.1.2	Some regions expect population declines	12
	Projected school-age population growth in Central and Eastern Europe, Central Asia and East Asia and the Pacific	
Table 1.1.3	Sub-Saharan African countries that have the lowest and highest school-age population growth	13
Figure 1.2.1	School-life expectancy rises with national wealth	13
	School-life expectancy and GDP per capita in US\$ PPP, 2009 or latest year available	
Table 1.2.1	School-life expectancy for different levels of national wealth	14
Table 1.2.2	School-life expectancy for representative group of countries from the various income strata, 2009 or latest year available	14
Figure 1.3.1	Size of public sector affects education expenditures	16
	Total government expenditure as a share of GDP and public education spending as a share of total government spending, selected countries, 2009 or latest year available	
Figure 1.4.1	How regions vary in compulsory education requirements	18
	Number of countries per region according to the number of compulsory years of education, 2009	
Table 1.4.1	Country distribution by region, according to compulsory education, 2009	20
Table 1.4.2	Countries with no compulsory education	20
Table 1.4.3	Countries in sub-Saharan Africa that have 10+ years of compulsory education	20
Table 1.4.4	Countries with 5 to 6 years of compulsory education	20
Figure 2.1.1	Central and Eastern Europe the top region for parity at both primary and secondary levels	22
	Number of countries according to parity in primary and secondary education, 2009	
Figure 2.1.2	Majority of world's children living in countries with gender parity at primary level	24
	Distribution of world's children by level of education by gender parity index for gross enrolment ratio, 2009	
Figure 3.1.1	Growth seen in the majority of the regions	28
	Gross enrolment ratio in pre-primary education, by region and worldwide, 1990–2009	
Figure 3.1.2	Participation rates vary within regions	28
	Gross enrolment ratio in pre-primary education for selected countries and regions, 2009 or latest year available	
Figure 3.1.3	Early childhood experience ranges from minimal to near-universal	29
	Percentage of new entrants in primary education with ECD experience for selected countries, 2009 or latest year available	
Figure 3.2.1	Majority of children living in countries with high gross enrolment ratios	32
	Distribution of world's children by levels of gross enrolment ratio in primary education, 2009	
Figure 3.2.2	Net enrolment rates rising in most countries	34
	Changes in net enrolment ratios in primary education, 2000–2009	
Figure 3.2.3	Sub-Saharan Africa leading gains in gross enrolment ratios for both sexes	36
	Gross enrolment ratio in primary education by region and worldwide, 1970–2009	
Figure 3.2.4	Primary enrolments keeping pace with population growth	36
	Percentage change in enrolment and population in primary education by gender, 1999–2009	
Figure 3.2.5	Gross enrolment ratio higher for boys in some countries and girls in others	37
	Gross enrolment ratio in primary education for selected countries, 2009 or latest year available	
Table 3.3.1	Examples of countries with more girls and more boys	38
Figure 3.3.1	Pace of movement toward gender parity varies among regions	38
	Percentage of countries within parity range in primary education, 1970–2009	
Table 3.4.1	Largest proportions of repeaters found in Latin America and the Caribbean and sub-Saharan Africa	42
	Regional percentage of repeaters, 2009 or latest year available	
	Regional percentage of repeaters by gender, 2009 or latest year available	
Table 3.4.2	Countries with highest percentage of repeaters, 2009 or latest year available	42
Figure 3.4.1	Boys are more likely to repeat than girls	42
	Percentage of repeaters for selected countries, 2009 or latest year available	
Figure 3.4.2	Male repeaters outnumber females in 75 percent of countries	43
	Percentage of countries according to repetition rates	
Table 3.4.3	Some countries have more female repeaters	43
	Countries with gender parity in repetition rates, 2009 or latest year available	
	Countries where there are more female repeaters, 2009 or latest year available	
Figure 3.5.1	Dropout rates high in two out of three sub-Saharan countries	44
	Percentage of countries according to dropout rates in primary education for sub-Saharan Africa and the remaining regions of the world, 2009	
Figure 3.5.2	How dropout rates vary among countries	46
	Dropout rates for selected countries, primary education, 2009 or latest year available	
Figure 3.5.3	Boys more likely than girls to leave school	47
	Dropout rates by gender for all countries with available data, 2009 or latest year available	
Figure 3.5.4	Examples of male/female dropout rates among countries	47
	Dropout rates by gender for selected countries, 2009 or latest year available	

List of figures and tables (continued)

Figure 3.6.1	Rise seen in most regions and among both sexes 48 Primary completion rates by region and gender, 1999–2009	48
Figure 3.6.2	Global primary completion rates up from 73 to 88 percent 50 Primary completion rates by region, 1970–2009	50
Figure 3.6.3	Countries differ in primary completion rates by gender 50 Primary completion rates by gender for selected countries, 2009 or latest year available	50
Figure 3.6.4	Schooling trajectories vary among countries 51 Net enrolment rate and primary completion rate, selected countries, 2009	51
Figure 3.7.1	How out-of-school rates vary among regions 52 Out-of-school rate for primary school-age children for selected countries and regions, 2009 or latest year available	52
Figure 3.7.2	Most out-of-school children living in three regions 54 Distribution of out-of-school children, 2009	54
Figure 3.7.3	How sub-Saharan Africa compares to world 54 Country distribution according to the out-of-school rate for primary school-age children, 2009	54
Figure 3.7.4	Out-of-school rates declining, including in sub-Saharan Africa 54 Rate of out-of-school children by region, 1999 and 2009	54
Figure 3.7.5	Decline of percentage of female out-of-school children greatest in East Asia and the Pacific 55 Percentage of female out-of-school children of primary age, by region and worldwide, 1990–2009	55
Figure 3.7.6	Dramatic gains in girls' school participation seen in South and West Asia 55 Out-of-school trends, 1990–2009	55
Figure 3.8.1	Boys more likely than girls to be overage at the end of primary school 56 Percentage of overage boys and girls in the last grade of primary education, 2008 or latest year available	56
Figure 3.9.1	Primary school attendance highest in wealthy households 57 Primary adjusted net attendance rate: Richest versus poorest wealth quintile	57
Figure 3.9.2	Attendance also higher in urban than in rural areas 57 School attendance of primary school-age children: Urban versus rural areas	57
Figure 4.1.1	Upward trend in secondary GER seen in all regions and for both sexes 60 Regional gross enrolment ratio in secondary education by region and worldwide, 1970–2009	60
Figure 4.1.2	Secondary enrolment rising faster than school-age population in most regions 61 Percentage change in enrolment and population in secondary education by gender, 1999–2009	61
Figure 4.1.3	Patterns of gross enrolment ratio by gender vary among countries 61 Gross enrolment ratio for secondary education for selected countries, 2009 or latest year available	61
Figure 4.1.4	NERs range widely within regions 62 Net enrolment rate in lower secondary education for selected countries and regions	62
Table 4.2.1	Some countries favour males, some females, at secondary level 64 Gender parity index for selected countries, 2009 or latest year available	64
Box 4.1	The adjusted gender parity index 66	66
Figure 4.3.1	Despite general pattern, some countries have more females than males in vocational education 68 Percentage of upper secondary students enrolled in vocational education by gender, 2009 or latest year available	68
Figure 4.3.2	Significant enrolment increases at both lower and upper secondary levels 70 Gross enrolment ratio in lower and upper secondary education by region and worldwide, 1999–2009	70
Figure 4.3.3	Regions differ in gender parity patterns at lower and upper secondary levels 70 Regional gender parity index in lower and upper secondary education, 2009	70
Figure 4.3.4	Gender parity index of lower and upper secondary for selected countries 71 Gender parity index of lower and upper secondary for selected countries, 2009 or latest year available	71
Table 4.4.1	Rate of female out-of-school adolescents for selected countries, 2009 or latest year available 72	72
Figure 5.1.1	Largest gains seen for regions that had the furthest to go 76 Tertiary enrolment by region, 1970–2009	76
Figure 5.1.2	Dramatic gains seen in Thailand, Bahrain and Cameroon 76 Gross enrolment ratio in tertiary education for selected countries, 1971–2009	76
Figure 5.1.3	Tertiary enrolment growth exceeding population growth in all regions and for both sexes 76 Percentage change in enrolment and population in tertiary education by gender, 1999–2009	76
Figure 5.2.1	Overall female advantage in tertiary enrolment growth mirrored at regional level 77 Gross enrolment ratio in tertiary education by region and worldwide, 1970–2009	77
Figure 5.2.2	Global GPI up from 0.74 favouring men to 1.08 favouring women since 1970 77 Adjusted gender parity index for gross enrolment ratio in tertiary education, 1970–2009	77
Table 5.2.1	Examples of countries favouring males or females, 2009 or latest year available 78	78
Figure 5.2.3	Majority of world's youth live in countries where men have an edge in tertiary GPI 78 Distribution of world's youth by gender parity index for gross enrolment ratio in tertiary education, 2009	78
Figure 5.2.4	Women's participation in tertiary education much higher than at lower levels 79 Gender parity index of the gross enrolment ratio by level of education, 2009 or latest year available	79

Figure 5.3.1	Women more likely to pursue tertiary education in wealthy countries	80
Figure 5.4.1	Gender parity index for gross enrolment ratio in tertiary education and GDP per capita (\$PPP), 2009	81
	Women's edge in bachelor's and master's degrees reversed at PhD level	81
	a. Proportion of women graduates in tertiary education by programme level, 2008	
	b. Proportion of women and men graduates in tertiary education by programme level and those employed as researchers, 2008	
Table 5.5.1	Proportion of women graduates strongest in social sciences, business, law and the life sciences	81
Figure 5.5.1	Percentage of women graduates in the fields of science and social sciences, business and law by region, 2008	82
Figure 6.1.1	Percentage of female tertiary graduates differs in education and engineering	82
	Women as a percentage of the total number of tertiary graduates in selected fields of education, 2009 or latest year available	
Figure 6.1.1	Most children living in countries with modest SLE rates	86
	Distribution of world's children according to school-life expectancy	
Figure 6.1.2	Gains in school-life expectancy reflected in all regions	88
	Average school-life expectancy in years, by region and worldwide, 1970–2009	
Figure 6.1.3	Increase in school-life expectancy seen among both sexes	88
	Average school-life expectancy in years by gender, by region and worldwide, 1990–2009	
Figure 6.1.4	Grade repetition: A major impediment to school-life expectancy	89
	Average school-life expectancy excluding repetition, and years expected to be spent repeating grades for selected countries, primary and secondary education, 2009 or latest year available	
Figure 6.1.5	Patterns of school-life expectancy differ among countries and regions	89
	School-life expectancy from primary to secondary and from primary to tertiary education for selected countries, 2009 or latest year available	
Figure 6.1.6	Dramatic gains seen in school-life expectancy in Afghanistan and Bhutan	90
	School-life expectancy for primary and secondary education for selected South and West Asian countries, 1990 and 2009	
Figure 6.1.7	Despite gains, sub-Saharan African countries still face challenges in school-life expectancy	90
	School-life expectancy for primary and secondary education for selected sub-Saharan African countries, 1990 and 2009	
Figure 6.1.8	Gender disparities a persistent problem in some developing countries	91
	Share of population with at least five years of education by year of birth, 1950–1990	
Table 7.1.1	Global gains in adult literacy mirrored in all regions	92
	Adult literacy rates by region and worldwide, 1990–2009	
Figure 7.1.1	Despite gains, women still account for substantial majority of adult illiterates	94
	Trends in male and female adult literacy rates, 1990–2009	
Figure 7.1.2	Greatest gains in female literacy seen in Arab States and South and West Asia	95
	Gender parity index for adult literacy by region and worldwide, 1990–2009	
Figure 7.1.3	Largest number of adult illiterates live in India	95
	Number of adult illiterates for selected countries, in millions, 1990 and 2009	
Figure 7.2.1	Males still have an edge in some regions	96
	Youth literacy rates for selected regions, 1990–2009	
Figure 8.1.1	Proportion of female teachers on the rise since 1990	98
	Percentage of female teachers in primary education, 1990–2009	
Figure 8.2.1	Gains in proportion of female secondary teachers seen in all regions except sub-Saharan Africa	101
	Percentage of female teachers in secondary education, 1990–2009	
Figure 8.2.2	Countries with high female GERs have more female teachers	102
	Gross enrolment ratio for females in secondary education and the proportion of women teachers in primary education	
Figure 8.2.3	Proportion of female managers at primary and secondary level ranges from 26 to 82 percent	103
	Percentage of female teachers and female management personnel in primary and secondary education	
Figure 8.2.4	Slovakia the only country with more female managers than teachers	103
	Percentage of female teachers and female management personnel in primary education	
Figure 8.3.1	More female primary teachers in countries where salaries are low	104
	Primary teachers' salaries as a ratio of average GDP per capita and the proportion of female primary teachers, 2000–2007	
Figure 8.4.1	How distance affects primary attendance in four sub-Saharan African countries	105
	Distance to school and attendance: Primary	
Figure 8.4.2	How distance affects secondary attendance in four sub-Saharan African countries	105
	Distance to school and attendance: Secondary	
Figure 8.5.1	Female advantage in reading but not mathematics in 14 SACMEQ countries	106
	Gender differences in reading and mathematics in 14 southern and eastern African countries, 2000 and 2007	