

ARAB YOUTH: MISSING EDUCATIONAL FOUNDATIONS FOR A PRODUCTIVE LIFE?

LIESBET STEER, HAFEZ GHANEM, MAYSAL JALBOUT

With Adam Parker & Katie Smith



This paper is a companion piece to the Arab World Learning Barometer, an interactive tool that provides a snapshot of education access and learning among children and youth in the Arab world. The Arab World Learning Barometer can be found at www.brookings.edu/arabworldlearning.

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INTRODUCTION

Recent events continue to underline the fragility of the Arab region. Civil war rages in Syria, refugees surge across borders and the lasting effects of the Arab Spring are uncertain. What is certain, however, is that it is essential to give attention to the welfare of the region's young people and to economic health in order to build the foundations for lasting political stability and, in many countries, for a transition to democracy. Education is central to this effort. In particular, the ability of educational systems to help the region's children and youth develop the competencies and skills that will serve them well for their future lives and livelihoods.

Economic conditions in a number of countries have deteriorated recently, contributing to a sense of disillusionment and frustration among the population and especially youth. In Egypt and Tunisia, for example, citizen attitude surveys indicate that 83 percent of Tunisians and more than 70 percent of Egyptians are unhappy with current economic conditions (Pew Research Center 2012). Youth unemployment is a grave concern. Official unemployment figures tend to underestimate the magnitude of the problem, and especially the problems related to youth exclusion and women's access to jobs. In Tunisia, for in-

stance, youth make up 33 percent of the labor force but account for 75 percent of the unemployed. Most governments have so far concentrated on stimulating labor's demand side (e.g., through investment climate policies) but have been paying less attention to the supply side (e.g., ensuring that youth have the necessary skills to compete in the labor market).

The purpose of this report is to shine a spotlight on education in the Arab world at a time when most public attention is focused elsewhere, and thereby to open a dialogue about this key issue. It is crucial now, more than ever, to provide support for the ongoing efforts of Arab educationists—the many actors and innovators who are working day by day to provide education to the region's young people. Progressive and smart investments in education made today, including those focused on children affected by conflict, will reap large benefits in the future.

Increasingly, global actors are focusing both on who has access to education but also, of particular importance, on the types of skills, competencies and values that young people acquire through their educational experience (United Nations 2013). New data show, globally, that 250 million children are not able to read, write or count well, even though many of them spent four years in school,

and that 200 million youth do not have the skills needed for their future lives (UNESCO 2012).

But what about the young people in the Arab world? Our analysis provides a regional overview of children's and youth's ability to access, stay in and learn in school. According to the latest data available at the primary and lower secondary school levels, we find that

1. Getting into School: There are 3.1 million fewer children out of school since 2002 in the Arab region, but 8.5 million children remain excluded. Many of them are girls from poor, rural communities often living in regions affected by conflict.

2. Staying in School: More children are finishing primary school than ever before, yet in many countries more youth are dropping out of lower secondary school than a decade ago.

3. Learning Foundational Skills: Using available learning assessments in 13 Arab countries, the average proportion of children not learning while in school stands at 56 percent at the primary level and 48 percent at the lower secondary level.

4. Regional Learning Crisis with Wide Variation Across Countries: Learning outcomes vary significantly across countries in the region for which we have data but are particularly worrying in Yemen, Morocco, Kuwait and Tunisia where between two-thirds and ninety percent of primary-age students are failing to learn. At the lower secondary level, over 60 percent of students are not learning in Morocco and Oman. The learning performance of children in Arab countries is also below expectations, given the countries' income levels.

5. Girls versus Boys: There is a mixed, or “boomerang,” dynamic for girls. While girls are less likely to enter school than boys, they are more likely to make the transition from primary to secondary education, and they tend to outperform boys in terms of learning. However, despite significant investment and better performance in education, young adult women are much less likely to be employed than are men.

6. Education Data Gaps: There are multiple gaps in education data in Arab countries—only a small handful of countries systematically measure literacy and numeracy at both the primary and lower secondary levels.

7. Education for a Productive Life—Youth Employment Link: The lack of appropriate foundational skills has likely contributed to the employment crisis in the region, but the dynamics between the education system and the labor market, including the different reasons for boys' and girls' participation in education and labor markets, need to be better understood.

The findings in this report have important implications not only for families and education systems but also for those policymakers focused on how the region can better address important economic issues, including youth unemployment. After reviewing the education outcomes in depth, we discuss their implications for youth employment in detail. In conclusion, we hope these findings lead to further dialogue among actors in the region on what actions could be most fruitful for improving young people's learning.

THE LEARNING BAROMETER

The Arab World Learning Barometer, part of a regional series developed by the Center of Universal Education at Brookings, uses the latest available data to provide a snapshot of the ability of children and youth in the region to access school, complete school, and master basic skills in literacy and numeracy.¹ The Arab world is considered here to be made up of 20 countries spreading from North Africa to the Gulf,² consistent with the *EFA Global Monitoring Report's* categorization. This is a diverse region, with significant variation in levels of income and development. The region is made up of 8 lower-middle-income countries, 6 upper-middle-income countries and 6 high-income countries, with a per capita gross domestic product (GDP) ranging from \$1,361 for Yemen to \$89,736 for Qatar. The Human Development Index illustrates the equally wide variation in levels of human development; out of a total 186 countries, the United Arab Emirates is ranked 41st, compared with 171st for Sudan. Pockets of fragility, conflict and instability continue to threaten and undermine the region's economic growth and human development. Despite this diversity, there is an overriding concern across the region regarding the ability of youth to be successfully integrated into the labor market.

The Arab World Learning Barometer combines data on four general indicators of education access and completion (net enrollment at the primary and lower secondary levels, out-of-school primary children and youth, survival rates to the final grades of the primary and lower secondary levels, and transition rates from the primary to secondary levels) with data from international literacy and numeracy tests. The percentage of children in school who are not learning was determined by calculating the percentage of children who were not meeting minimum requirements in those tests. The data cover years from 2001 to 2012, and as such they do not reflect much of the recent turmoil in the region. The conflict in Syria, for example, is jeopardizing opportunities for hundreds of thousands of children (see box 1).

Getting into School

There are 3.1 million fewer children out of school since 2002 in the Arab region but an estimated 8.5 million children remain excluded. Many of those children are girls from poor, rural communities often living in regions affected by conflict.

Improved Access Across Schooling Levels

The number of primary-aged children who are out of school in the region has declined significantly in recent years, from 6.8 million in 2002 to 4.8 million in 2011, and the out-of-school adolescent population fell from 4.9 million to 3.8 million from 2002 to 2011.

Box 1: Syria—A Decade of Progress at Risk?

Ongoing conflict in Syria has resulted in a deep humanitarian crisis. Millions of people have fled to neighboring countries or have been internally displaced within Syria. The consequences for children and youth are severe, with large numbers being denied educational opportunities.

As shown in this report, prior to the conflict, enrollment in Syria was 93 percent at the primary school level and 67 percent for secondary schooling. While primary school enrollment had been high over the past decade, secondary enrollment saw significant improvements, rising from around 40 percent in 2001/2. However, as in other Arab countries, the data for 2011 also found that many children in school are not learning. About 57 percent of secondary school students were not able to achieve minimum numeracy levels. When accounting for out-of-school children and drop-out rates, the total learning deficit for secondary school-aged youth in Syria is estimated to be 75 percent.

School attendance and learning levels have most likely deteriorated because of the tremendous impact of the conflict. Half of the rising numbers of refugees, around 1 million people, are children (UNHCR 2013). About 90 percent of Syrian refugee children and youth aged 6 to 17 are estimated to be out of school (UNHCR 2013). As a result of conflict, more than 3,000 schools have been destroyed (UNICEF USA 2013). With the potential of long-term displacement, there is a risk of a generation of Syrians lacking access to quality education.

Certain countries have done particularly well in improving primary school enrollment—Djibouti, Oman, Morocco, Yemen and Mauritania made the largest improvements over the decade. Given that these same countries had the lowest rates of primary school enrollment in the region in 2001–2, this indicates a strong narrowing of disparities in access across the region. Despite impressive gains, three of these countries—Djibouti, Mauritania and Yemen—continue to have the lowest enrollment rates in the region. For instance, while primary enrollment in Djibouti recently has jumped nearly 23 percentage points, as of 2010–11 it rested at just 52 percent—by far the lowest in the region (figure 1).

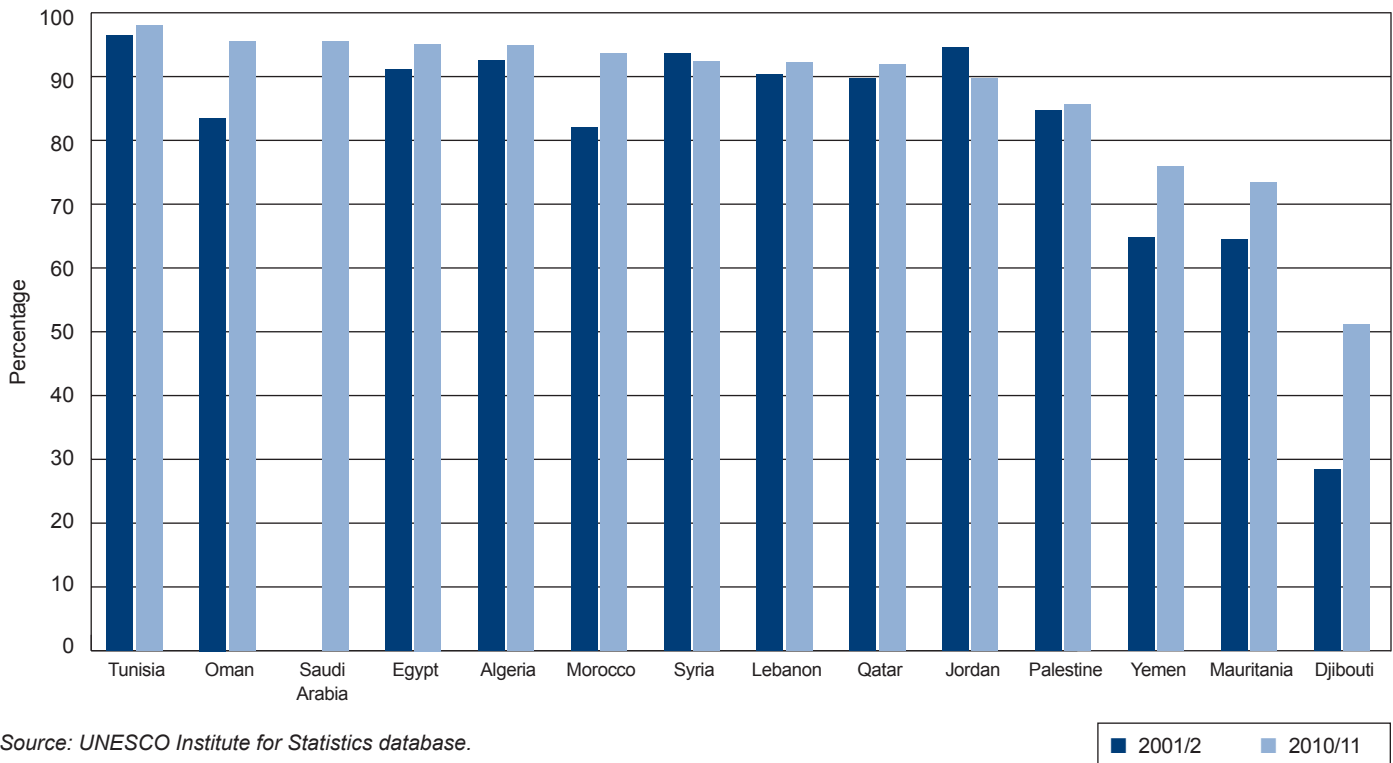
Secondary school enrollment has also improved significantly, though the data are much more limited. With respect to the five countries for which 10-year trends can be calculated, all recorded positive gains at the secondary level (figure 2). In particular, Syria, Oman

and Qatar made impressive progress, with enrollment gains of 26, 24 and 12 percentage points, respectively, although Syria has likely lost much of this progress over the last two years because of civil conflict. Djibouti also improved significantly in secondary schooling access, but again from a low base—raising secondary school net enrollment from 15 percent in 2002 to 24 percent in 2008.

Fragile Gains?

Despite progress in improving access to education, the Arab world still has a large proportion of children who are not in either primary or secondary school. About 8 percent of the world’s primary-age out-of-school children and 5 percent of out-of-school adolescents live in the Arab world. This adds up to 8.6 million children who are not in primary or lower secondary school, and 5 million of these children are girls.

Figure 1: Primary School Net Enrollment Rate, 2001/2 to 2010/11



Source: UNESCO Institute for Statistics database.

A few countries have also lost some ground over the past decade. While primary school enrollment in Jordan remains very high—at 91 percent in 2010–11—it declined somewhat from 96 percent in 2001–2. A few other Arab countries that made substantial progress overall in the past decade have seen setbacks in recent years. Primary school enrollment in Mauritania, Yemen and Syria has declined slightly—between 1 and 3 percentage points—from their peak enrollment levels over the decade. Similarly, while 2010–11 secondary enrollment in Palestine is essentially even with 2001–2 levels—at 81 percent—this figure is in fact a decline from a peak of 88 percent in 2006 (figures 1 and 2).

During the past decade, the population of out-of-school primary-aged girls has fallen from 4.1 million to 2.9 million, and gender parity in primary enrollment has improved. The ratio of female enrollment to male enrollment, measured by the Gender Parity Index (GPI), stood

at 0.94 in 2011, up from 0.91 in 2001. However, the Arab world has the lowest primary gender parity in the world, and progress in improving gender parity has been slower than other regions, including Sub-Saharan Africa. Significant variation between countries exists, however. In seven countries, the GPI for primary school enrollment is at least 0.99. In sharp contrast, in Yemen, the GPI stood at 0.84 for primary school enrollment and 0.65 for secondary school enrollment in 2011. Girls make up 60 percent of the primary-level out-of-school population. While disparities in access mostly affect girls, in some countries—in particular, at the secondary level—boys are disadvantaged. For example, Lebanon, Palestine and Qatar have secondary school enrollment GPIs of at least 1.10, indicating that more girls than boys are enrolled.

Gender disparities are also further aggravated by wealth and location disparities. Extreme education poverty, measured as the share of the population age 17–22

Figure 2: Secondary School Net Enrollment Rate, 2001/2 to 2010/11

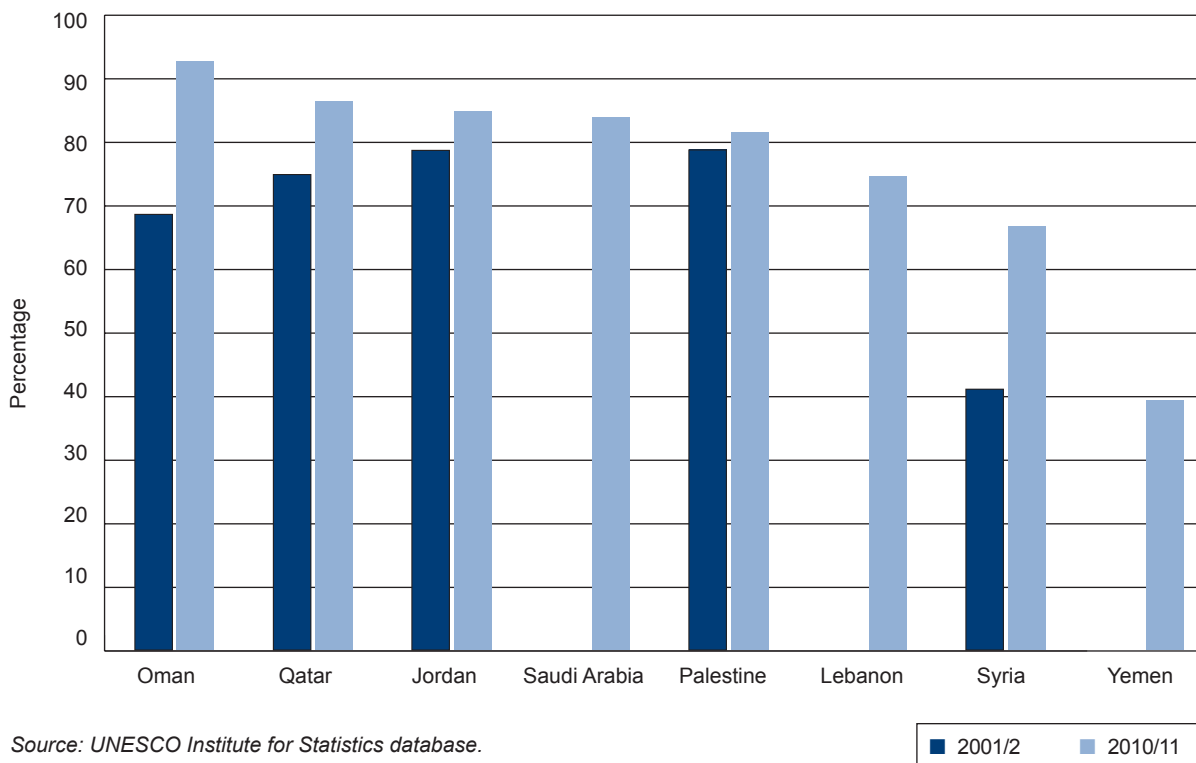
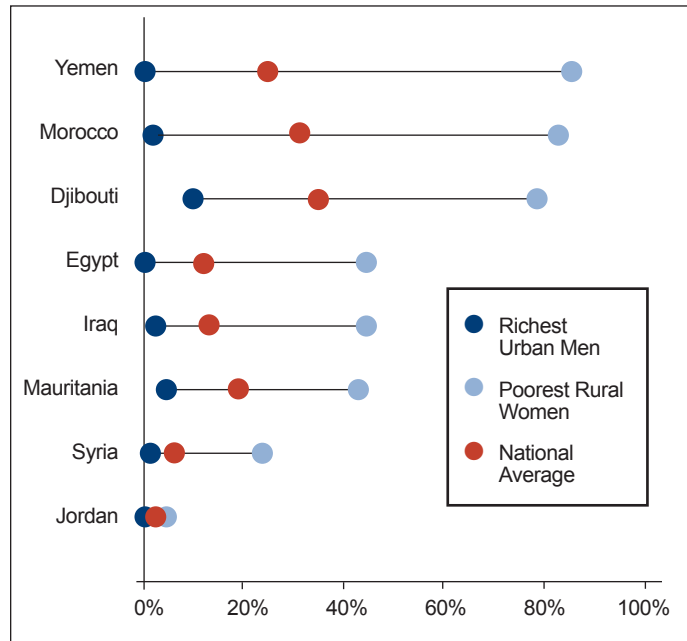


Figure 3: Overlapping Disparities in Extreme Education Poverty: Share of Population Age 17-22, 2006 to 2008



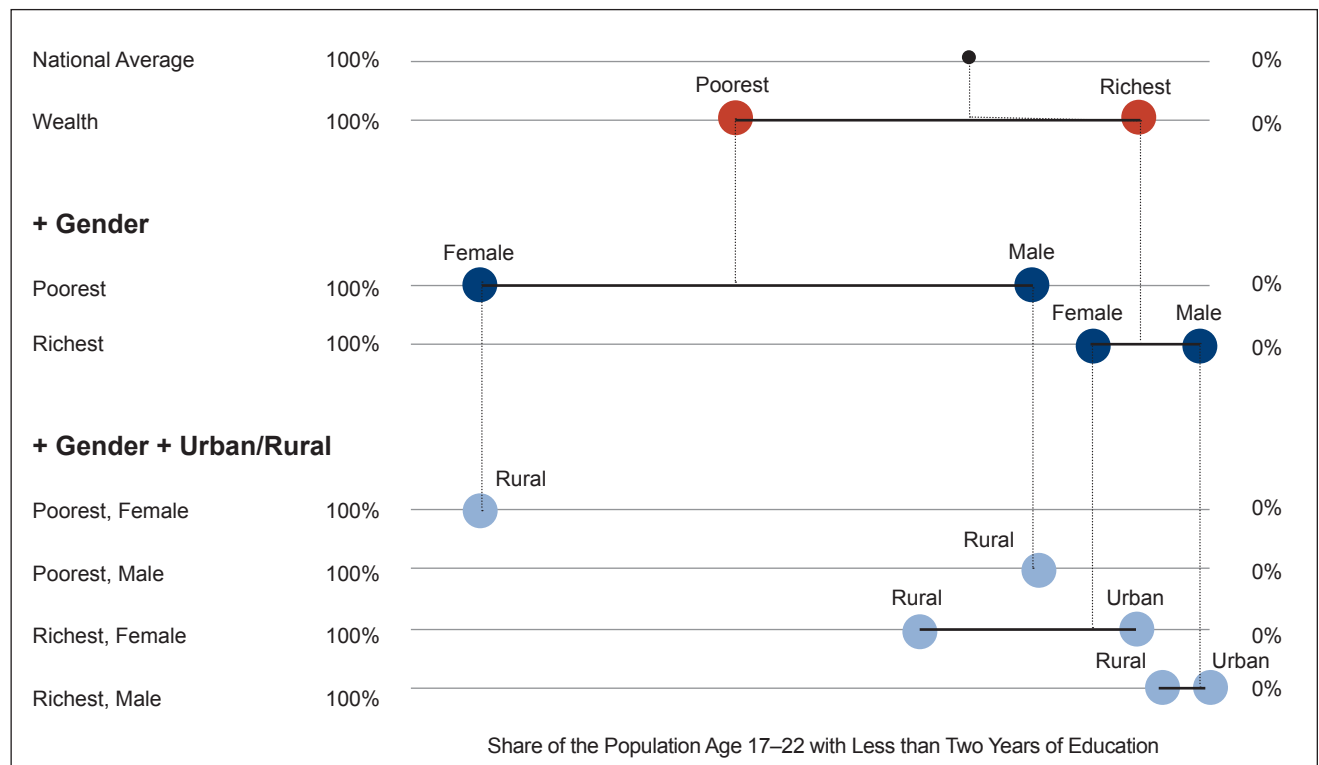
Source: World Inequality Database on Education, Education for All Global Monitoring Report.

with less than two years of education, illustrates these overlapping disparities (figure 3). In Egypt, for example, 16 percent of young women and 7 percent of young men have less than two years of education. Factoring in income levels and geographic location, this gap deepens significantly, with figures jumping to 45 percent for the poorest, rural females compared with less than 1 percent for the wealthiest, urban males. This divide is most striking in Yemen, where again less than 1 percent of wealthy, urban males suffer from extreme education poverty, compared with 86 percent of poor, rural females. Poverty has a particularly strong impact on female educational attainment (figure 4).

Staying in School

More children were finishing primary school than ever before in 2010–11, yet in many countries, more youth were dropping out of lower secondary school than in 2001–2.

Figure 4: Extreme Education Poverty in Yemen, 2006



Source: World Inequality Database on Education, UNESCO Education for All Global Monitoring Report.

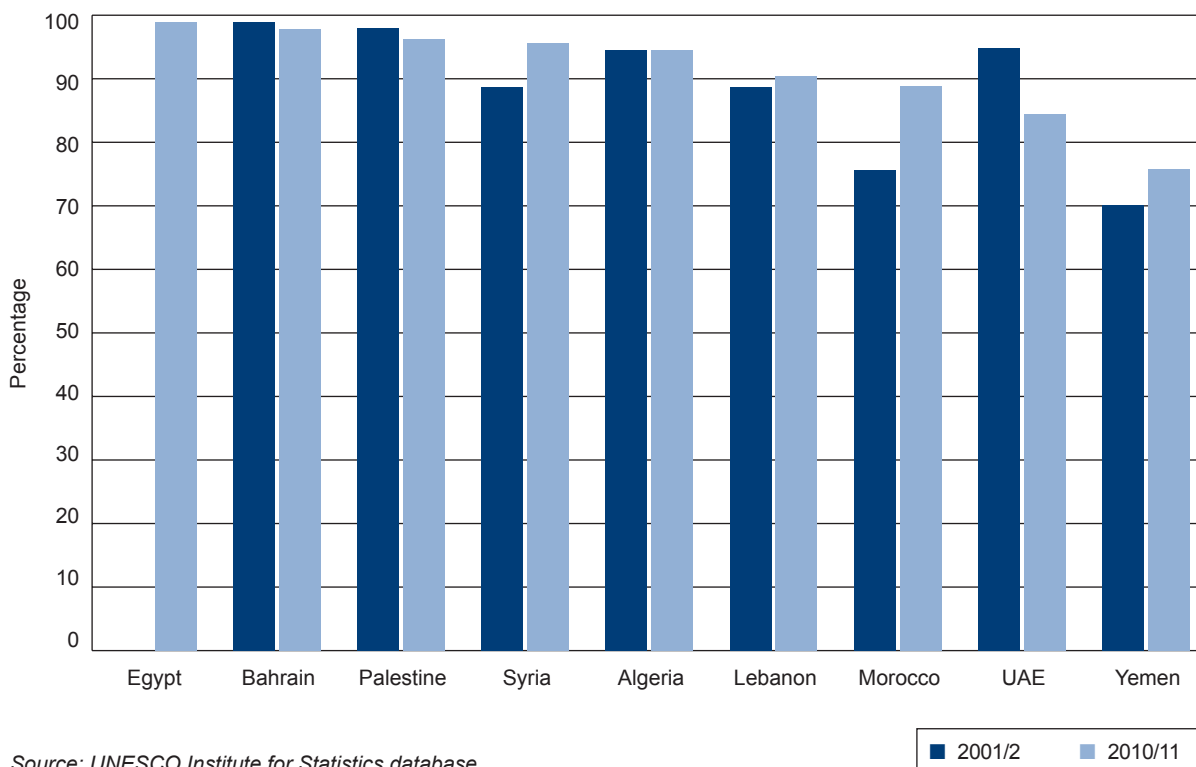
The majority of children who enter school are completing their primary education. The Arab region's primary school completion, or survival, rate stood at 93 percent in 2009, relatively high compared with most other regions in the world and up from 88 percent in 1999. Primary school survival rates were above 90 percent in all but two countries for which data exist for 2010–11. Data over time for individual countries in the region show mixed trends, however, and indicate that some countries are losing ground. While the completion rate improved in most countries, in some cases—including Bahrain, Algeria and Lebanon—it remained relatively constant or declined slightly. While the primary school completion rate remained high in the United Arab Emirates, it declined from 94 percent in 2001–2 to 84 percent in 2010–11. This most recent figure is also close to 14 percentage points below its peak completion rate of 98 percent in 2005 (figure 5).

A varied pattern can also be seen in survival rates for lower secondary education, ranging from 99 percent

in Qatar to 65 percent in Syria (figure 6). The data also suggest a declining trend in secondary school completion rates. An overall regional estimate is not calculated due to a lack of data, but the average completion rates of countries with available data declined by 2 percentage points between 2001–2 and 2010–11. More than half the states for which data exist lost between 2 and 9 percentage points between 2001–2 and 2010–11. Seven Arab states are currently below their peak for the period. Syria had the lowest completion rate in 2001–2, at 73 percent, which worsened over the decade to 65 percent in 2010–11.

Across the Arab region, girls drop out of primary school at a higher rate than boys, resulting in a lower ratio of female-to-male survival rates than any other region in the world, at 0.93 in 2009. Again, however, there has been progress by individual countries. Where data are available at the country level, in 10 Arab states girls survived to the end of primary school at similar or better rates than

Figure 5: Survival Rate for Primary School, 2001/2 to 2010/11



Source: UNESCO Institute for Statistics database.

Figure 6: Survival Rate for Lower Secondary School, 2001/2 to 2010/11

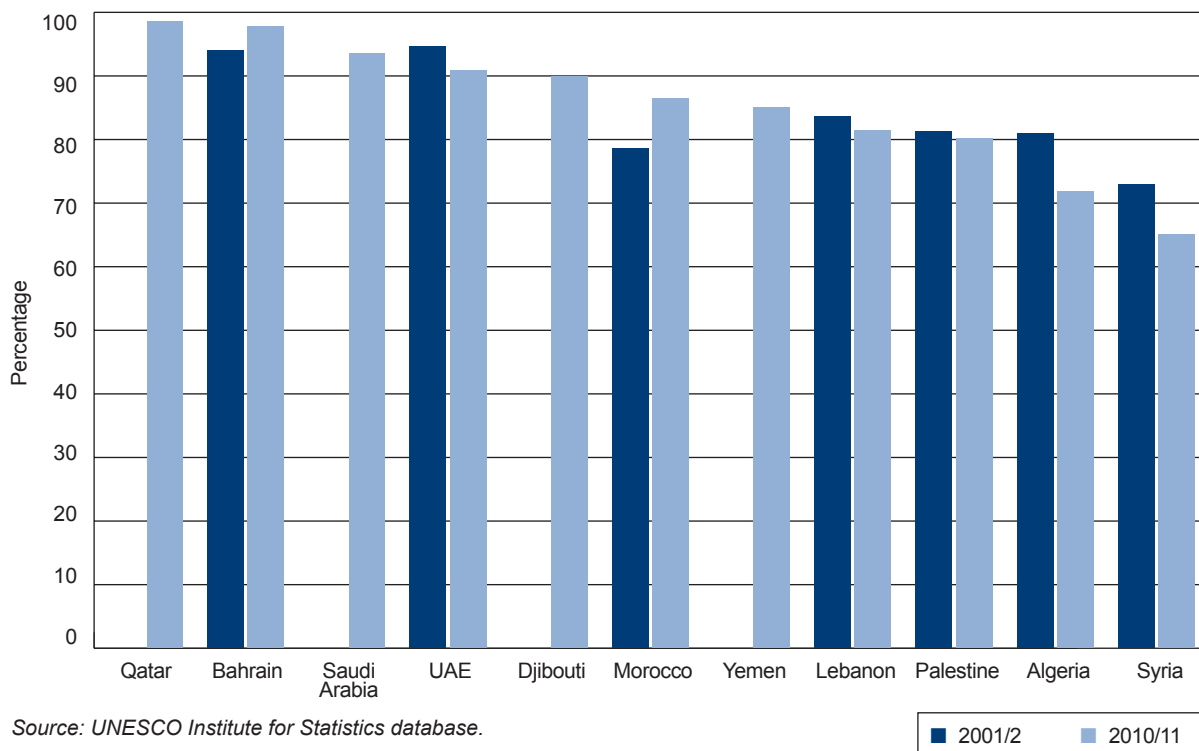


Table 1. Arab World Learning Barometer: Percentage of Students Not Meeting Basic Learning Level, 2011/12

Country	Primary		Lower Secondary	
	Numeracy	Literacy	Numeracy	Literacy
Bahrain	33	-	47	-
Jordan	-	-	45	51
Kuwait	70	-	-	-
Lebanon	-	-	27	-
Morocco	74	79	64	-
Oman	54	53	61	-
Palestine	-	-	48	-
Qatar	45	40	46	57
Saudi Arabia	45	35	53	-
Syria	-	-	57	-
Tunisia	65	-	39	49
UAE	36	36	27	36
Yemen	91	-	-	-

Source: Calculations based on PIRLS 2011 (primary literacy), TIMSS 2011 (primary and secondary numeracy), and PISA 2012 (secondary literacy) data (Mullis et al. 2012a, 2012b, OECD 2013).

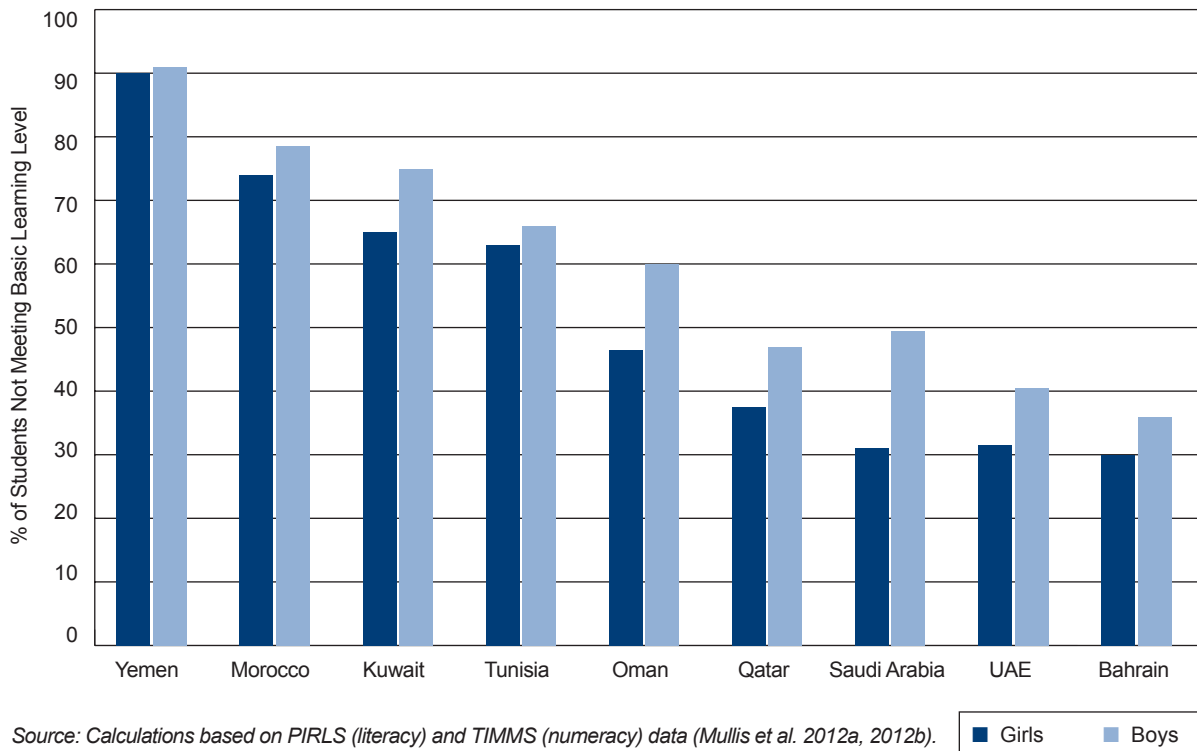
boys in 2009. Girls in the Arab world also make the transition to secondary school at a higher rate than boys—97 to 91 percent in 2009—the highest level of female-to-male transition rates for all regions in the world.³

Learning Foundational Skills

More than half of the region’s children and youth are failing to learn, as measured by literacy and numeracy scores on international tests. Somewhat surprisingly, and in contrast to disparities in access and completion rates for primary school, girls are performing better than boys.

Children who are unable to access or complete school are being deprived of the opportunity to learn. But they are not the only ones missing out. By far the most im-

Figure 7: Percentage of Primary Students Not Meeting Basic Learning Level (Average Literacy and Numeracy) By Gender, 2011



Source: Calculations based on PIRLS (literacy) and TIMSS (numeracy) data (Mullis et al. 2012a, 2012b).

portant reason children are not learning is that they are not receiving an adequate education, even if they go to and stay in school. We estimate, based on the average scores for literacy and numeracy for the 13 countries for which we have available data, that 56 percent of primary students and 48 percent of lower secondary school students are not learning.⁴ By country, this figure ranges from 33 percent of children in Bahrain to 91 percent of children in Yemen who are not learning at the primary level despite being in school. At the secondary level, more than one-quarter of children are not learning in Lebanon and the United Arab Emirates, while nearly two-thirds are not learning in Morocco (table 1).

Somewhat surprisingly, and in contrast to the access and completion data, the learning crisis is affecting boys much more than girls. The percentage of girls meeting basic

learning levels is higher than boys in all nine Arab states for which learning data are available. At the primary school level, Saudi Arabia showed the largest disparity, with nearly half the boys not learning but less than one-third of the girls not learning.

As with primary school, girls also learn more than boys while in secondary school. In 9 of the 11 Arab states for which learning outcomes are available, higher proportions of girls are learning than boys. In three countries—Bahrain, Jordan and Oman—the share of boys not learning was at least 20 percentage points greater than the share of girls not learning (figures 7 and 8).

Geographical disadvantages also affect learning levels. Disparities between rural and urban areas are particularly pronounced at the secondary level. In 6 out of 11

Figure 8: Percentage of Lower Secondary Students Not Meeting Basic Learning Level (Average Literacy and Numeracy) By Gender, 2011/12

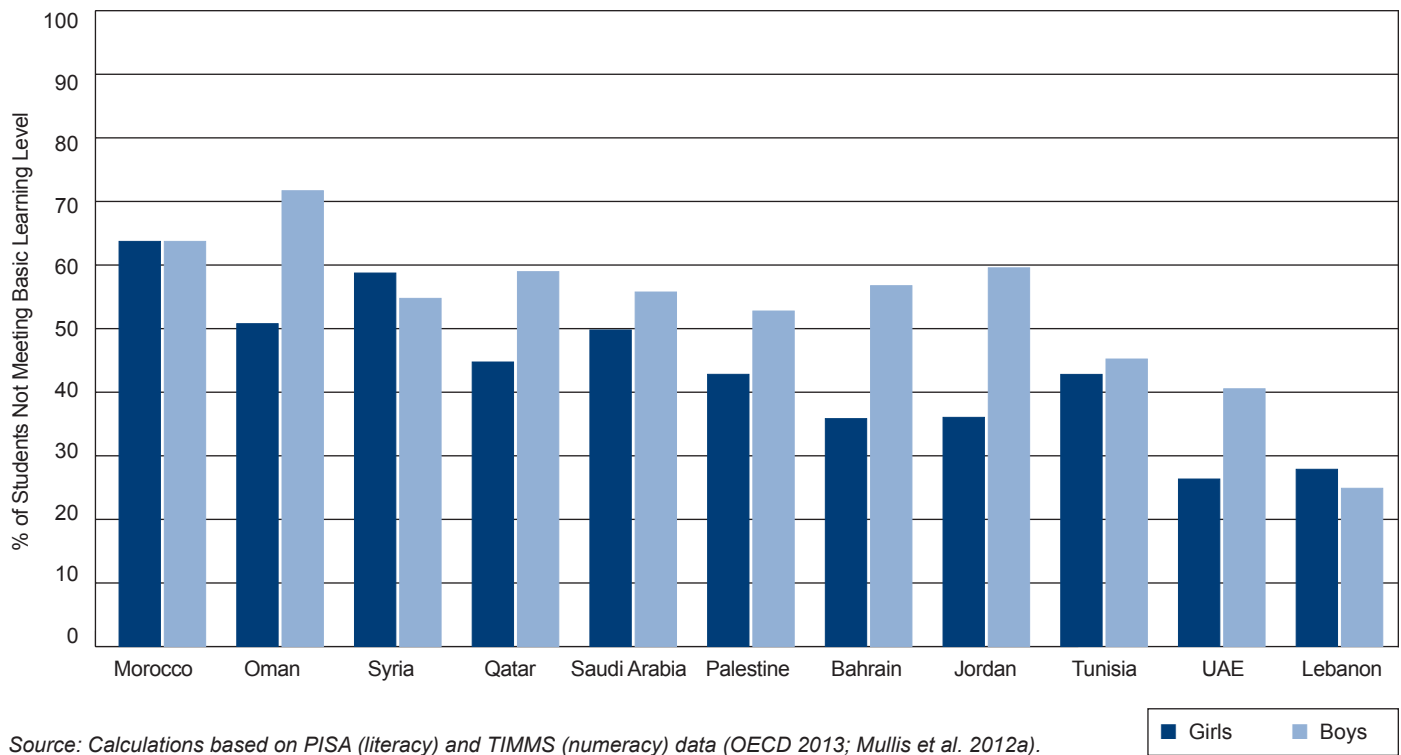
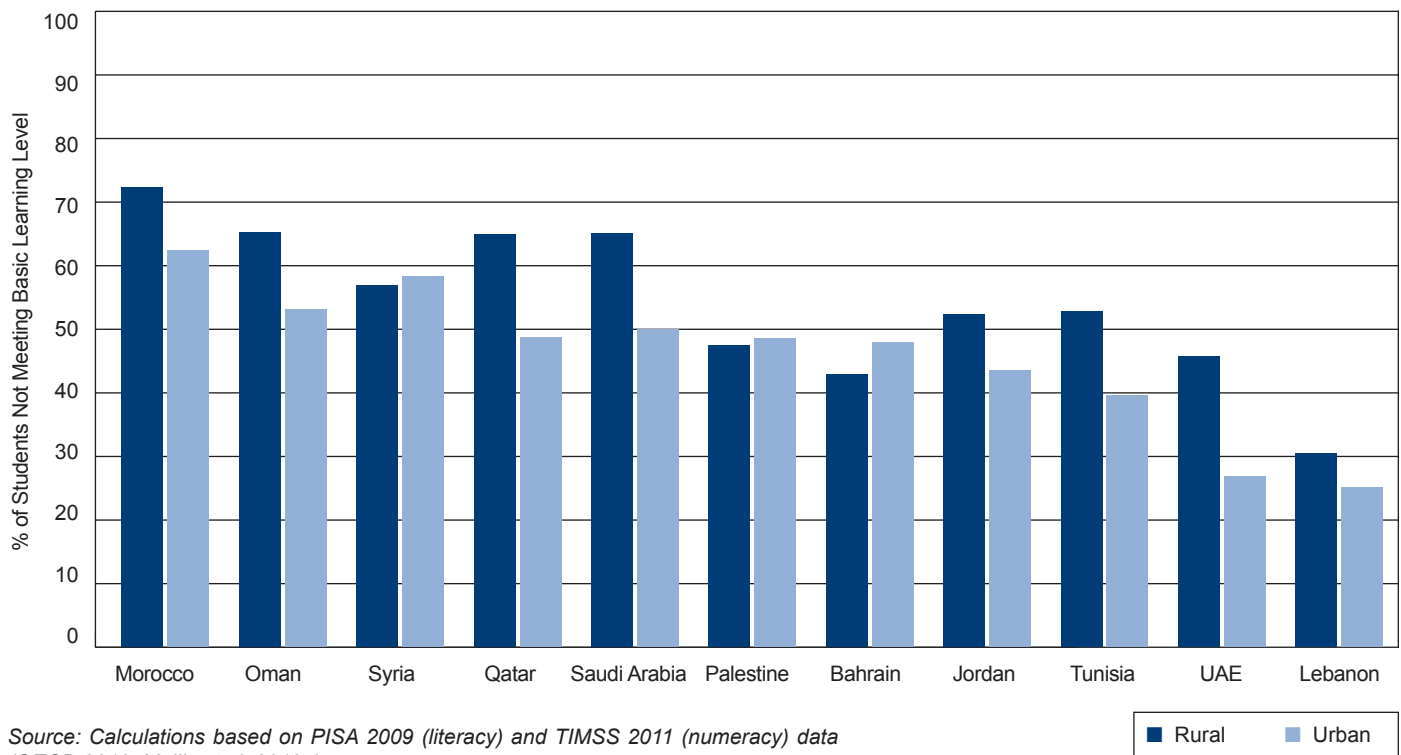


Figure 9: Percentage of Lower Secondary School Students Not Meeting Basic Learning Level (Average Literacy and Numeracy) by Location, 2009/11



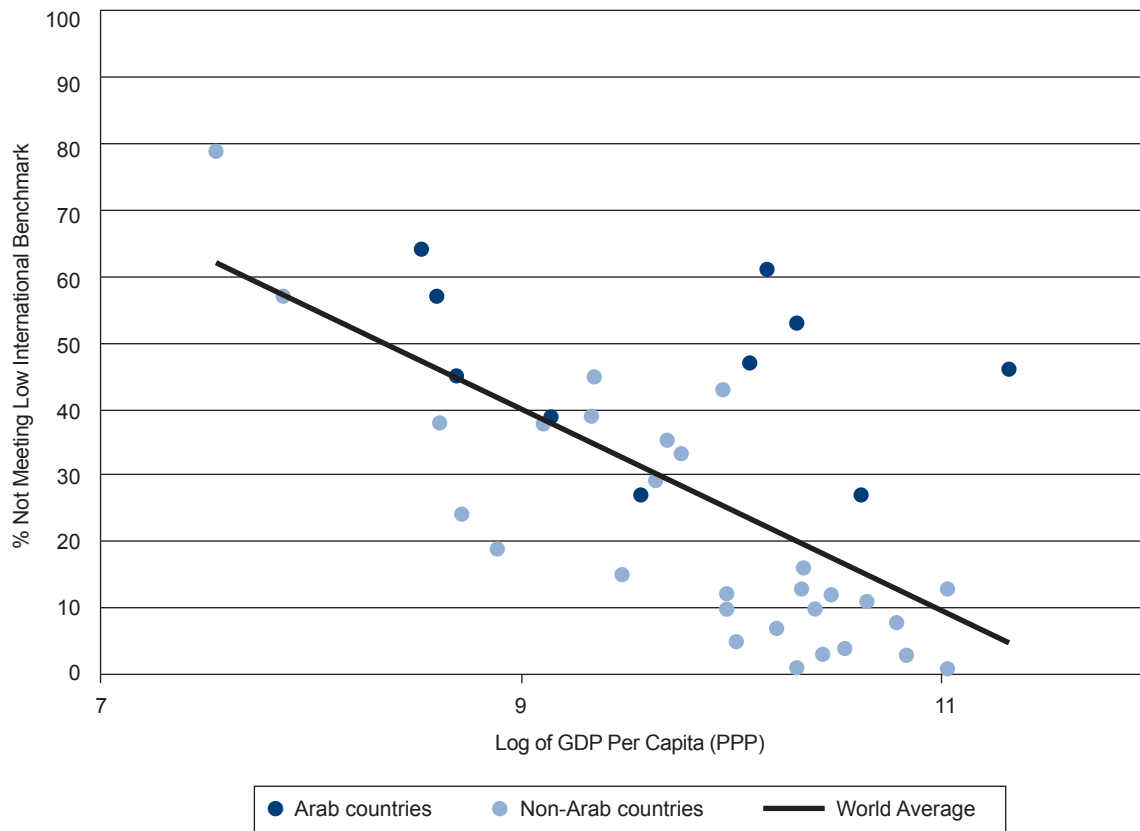
countries, the proportion of youths not learning is at least 10 percentage points higher in rural than in urban areas. The difference is most pronounced in the United Arab Emirates, where 46 percent of rural youths are not learning, versus 27 percent of urban youths (figure 9).⁵

Another concern is that learning assessments show that countries throughout the Arab world are not performing on par with countries at similar levels of economic development. Figure 10 below shows that the percentage of students not meeting basic learning levels in numeracy in Arab states, measured by the TIMSS assessment of 8th

graders, is greater than the percentage predicted based on their income level. Qatar, in particular, stands out for having a nearly 50 percent rate of not learning, despite having a per capita GDP that is significantly higher than countries with negligible rates of not learning.

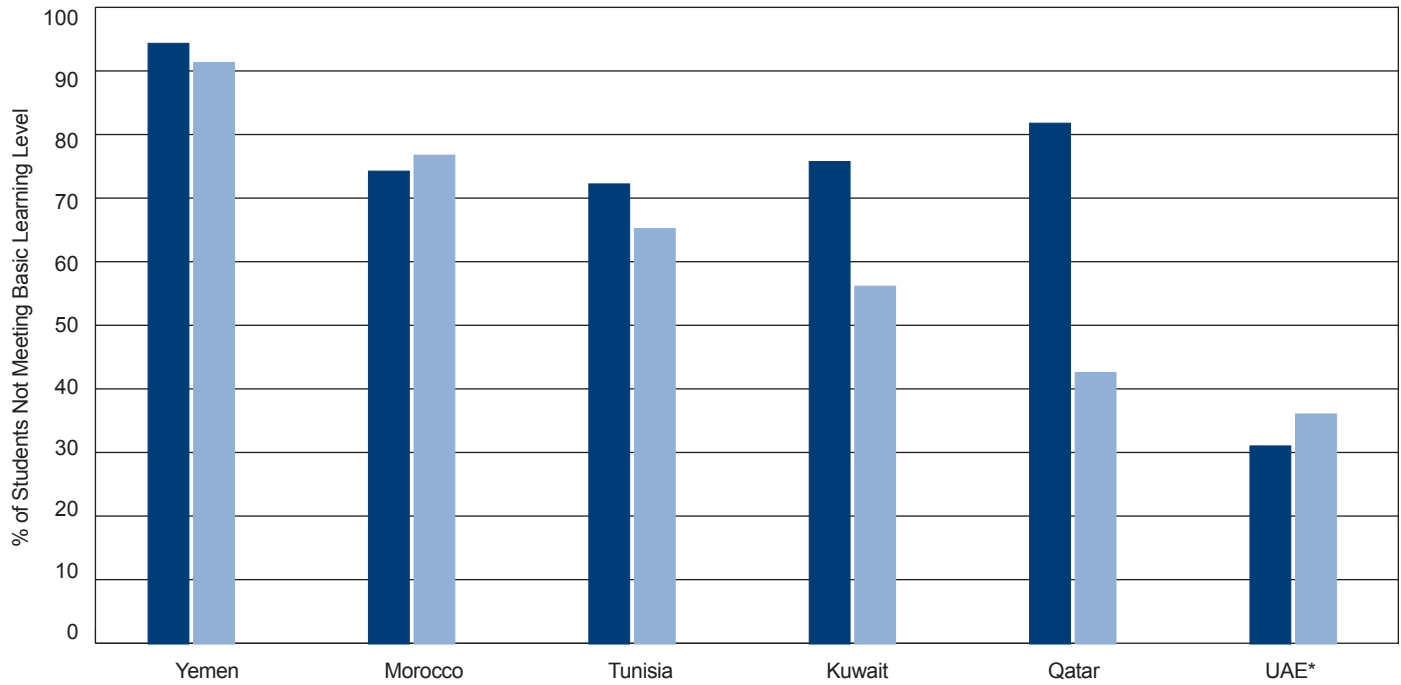
But evidence also suggests that, despite a considerable unfinished agenda, learning is improving in some countries (figures 11 and 12). Qatar, in particular, has made remarkable strides at the primary as well as secondary levels in a relatively short period. The proportion of children not learning at the primary

Figure 10: Percentage of Grade 8 Students Not Meeting Basic Learning Level in Numeracy (TIMSS) as a Function of Income, 2011



Source: Calculations based on TIMSS data (Mullis et al. 2012a) and GDP data (World Bank World Development Indicators Database).

Figure 11: Percentage of Primary Students Not Meeting Basic Learning Level (Average of Literacy and Numeracy), 2006/7 to 2011

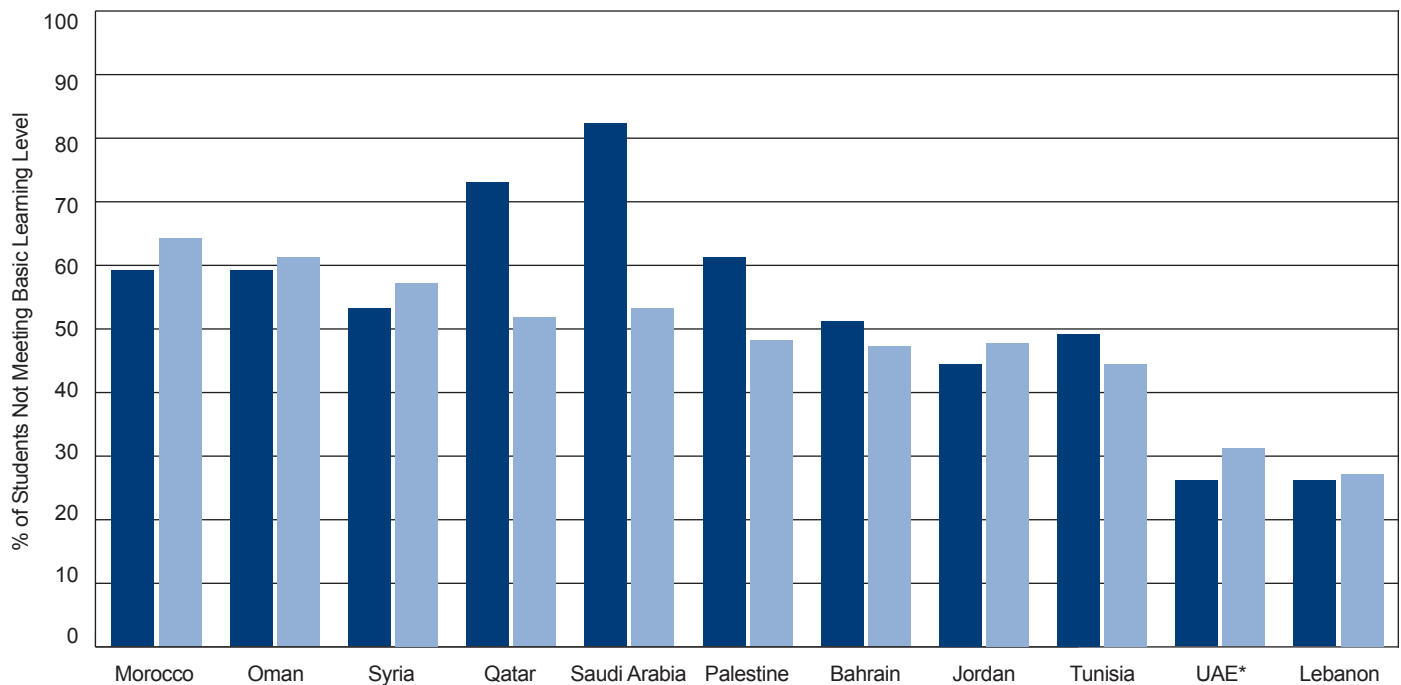


Source: Calculations based on PIRLS (literacy) and TIMMS (numeracy) data (Mullis et al. 2012a, 2012b).

*Data for 2006/7 cover Dubai only while data for 2011 cover the whole country.

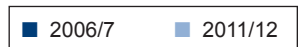


Figure 12: Percentage of Lower Secondary Students Not Meeting Basic Learning Level (Average of Literacy and Numeracy), 2006/7 to 2011/12



Source: Calculations based on PISA (literacy) and TIMMS (numeracy) data (OECD 2013; Mullis et al. 2012a).

*Data for 2006/7 cover Dubai only while data for 2011/12 cover the whole country.



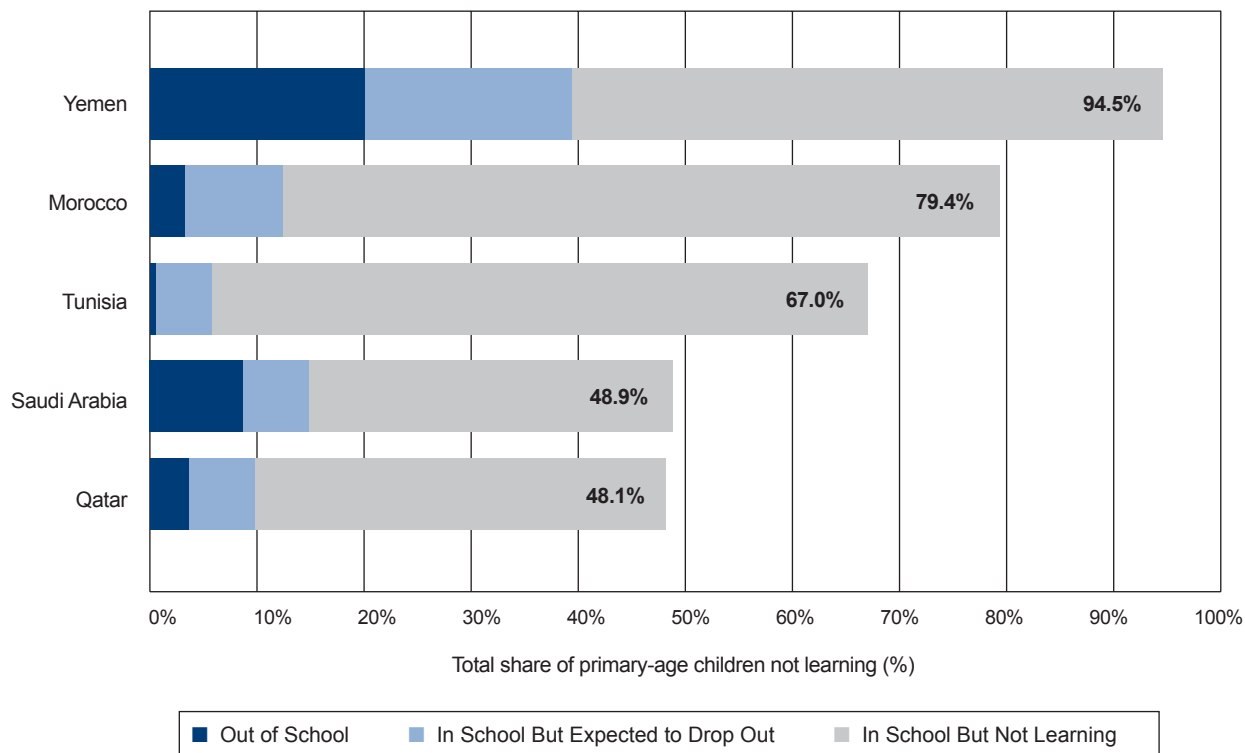
level dropped from 82 percent to 43 percent, and that of youth not learning declined from 73 to 52 percent from 2006/7 to 2011/12.

Adding Up: A Learning Crisis

When looking at the totality of children throughout the Arab world who are out of school, expected to drop out, or are not learning while in school, one sees a bleak picture and a crisis of significant proportions.

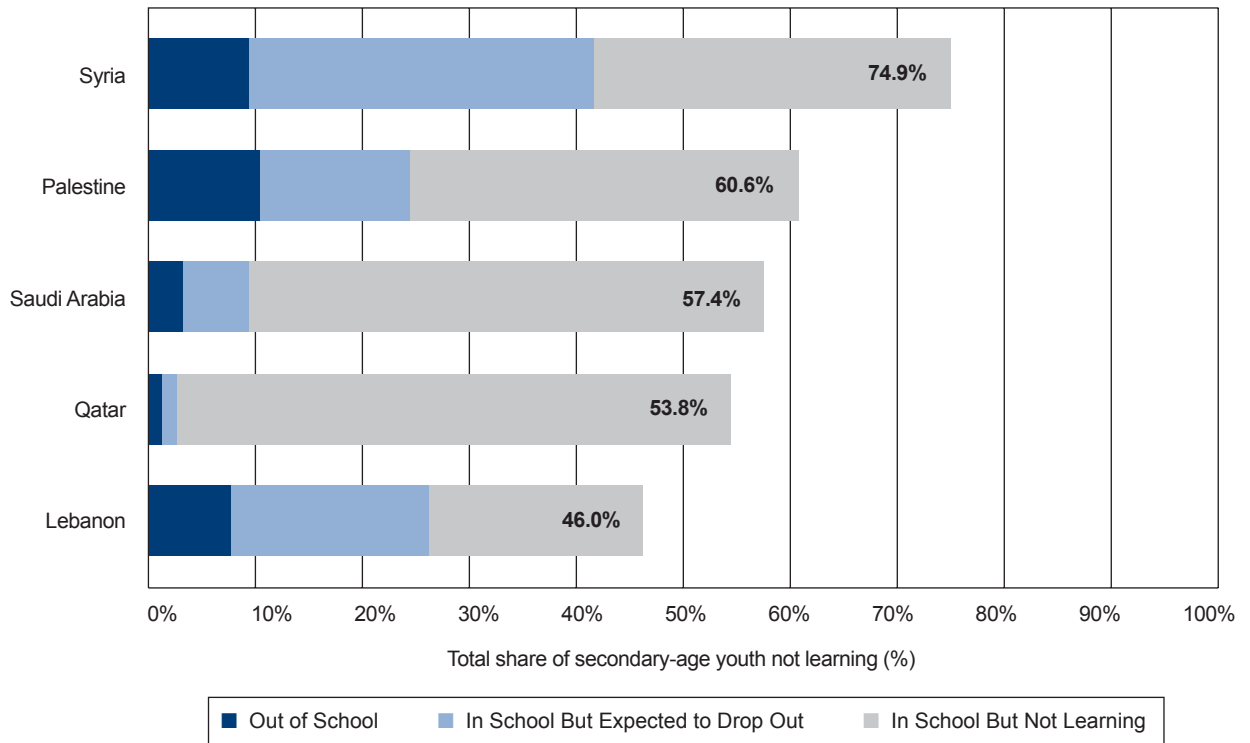
For the five countries for which we have complete data, we find that nearly half or more of all primary-aged children are not learning. The situation is particularly critical in Yemen, where close to 95 percent of all primary children are not learning. The situation at the secondary level is, in some cases, worse than at the primary level. For example, more than 53 percent of children are not learning at the lower secondary level in Qatar compared with about 48 percent in primary school (figures 13 and 14).

Figure 13: Total Learning Deficit for Primary-Aged Children, Available Countries, 2011



Source: Calculations based on UNESCO Institute for Statistics database and TIMSS (numeracy) and PIRLS (literacy) data (Mullis et al. 2012a, 2012b).

Figure 14: Total Learning Deficit for Secondary-Aged Youth, Available Countries, 2011/12



Source: Calculations based on UNESCO Institute for Statistics database and PISA (literacy) and TIMSS (numeracy) data (OECD 2013; Mullis et al. 2012a).

Education Data Gap

There are multiple gaps in the available education data, with only a small handful of countries systematically measuring literacy and numeracy at both the primary and lower secondary levels.

A final striking finding of the Arab World Learning Barometer is that education data for the Arab states are incredibly scarce. Of the 20 states in the Arab world, 3—Iraq, Libya and Sudan—have no recent data available for primary or lower secondary school enrollment, school survival (i.e., completion), out-of-school populations or learning outcomes. An additional 8 countries only have half or fewer of the data points available for recent years.

Within countries, data are available in a very irregular pattern; no variable or group of variables is consistently

missing. Rather, different countries are missing different measures in a seemingly arbitrary fashion. Only 2 countries—Morocco and Yemen—have the full complement of the 4 primary school variables available for recent years (out-of-school, enrollment, completion and transition). The data situation is only slightly better for the lower secondary level, where 4 countries—Lebanon, Palestine, Qatar and Saudi Arabia—have the full complement of variables available. No country in the Arab world has data for all 8 indicators, although 5 countries have 7 indicators available. In total, nearly half (47.5 percent) of the data points are missing (table 2).

If one digs deeper into the variables for learning outcomes, the situation is even worse. While 13 Arab states participate in some international assessment, only 7 participate at both the primary and lower secondary levels.

Table 2. Education Data Gaps

	Primary NER	Secondary NER	Primary Out-of-School	Secondary Out-of-School	Primary Survival	Secondary Survival	Primary Learning Outcomes	Secondary Learning Outcomes	All Primary?	All Secondary?	International Learning Assessment?	National Learning Assessment?
Algeria	✓		✓		✓	✓						
Bahrain					✓	✓	✓	✓			✓	✓
Djibouti	✓		✓			✓						
Egypt	✓		✓		✓							✓
Iraq												
Jordan	✓	✓	✓	✓				✓			✓	✓
Kuwait							✓				✓	
Lebanon	✓	✓	✓	✓	✓	✓		✓		✓	✓	✓
Libya												
Mauritania	✓		✓									✓
Morocco	✓		✓		✓	✓	✓	✓	✓		✓	
Oman	✓	✓	✓	✓			✓	✓			✓	✓
Palestine	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓
Qatar	✓	✓	✓	✓		✓	✓	✓		✓	✓	✓
Saudi Arabia	✓	✓	✓	✓		✓	✓	✓		✓	✓	✓
Sudan												
Syria	✓	✓	✓	✓	✓	✓		✓		✓	✓	✓
Tunisia	✓		✓				✓	✓			✓	
UAE					✓	✓	✓	✓			✓	✓
Yemen	✓	✓	✓	✓	✓	✓	✓		✓		✓	

Source: Compiled from UNESCO Institute for Statistics database, TIMSS, PIRLS, and PISA data, and the World Bank SABER student assessment (UIS no date, OECD 2010; OECD 2013; Mullis et al. 2012a; Mullis et al. 2012b; World Bank forthcoming)

Five countries test their primary students on both numeracy and literacy, and 4 countries test their secondary students on both subjects. Only 2 countries—Qatar and the United Arab Emirates—test students at both levels for both numeracy and literacy. The limited data from international assessments is unfortunately not compensated for by national assessments. The World Bank’s SABER initiative is currently conducting a student assessment survey for countries in the Middle East and North Africa

region, covering 17 countries in the region. According to the study, 12 countries had full or partial national assessments. These were largely the same countries that were already participating in international assessments. The only countries with national assessments that did not engage at the international level are Sudan and Mauritania (World Bank, forthcoming). This finding further emphasizes the lack of sufficient data and the need for comprehensive learning assessments within the region.

EDUCATION FOR A PRODUCTIVE LIFE: YOUTH EMPLOYMENT LINK

The Arab World Learning Barometer highlights the successes and outstanding challenges in education across the Arab region. It shows that more children are entering school than ever before. But a significant number of children remain out of school, either because they never enter or because they drop out. In this regard, girls are generally worse off than boys. However, by far the biggest challenge is that, once in school, about half the children do not learn. Somewhat surprisingly in this case, boys are doing much worse than girls. These challenges of access, completion and learning combine into a significant deficit of foundational skills in the Arab world, with wider economic and societal effects. This section explores how the lack of those skills can be connected to wider employment challenges in the region. Foundational skills are necessary for getting work that pays enough to meet daily needs. They are also a prerequisite for engaging in further education and training and for acquiring transferable skills and technical and vocational skills.⁶ For those unable to read basic texts or do basic sums and apply them, the possibility of gainful employment or entrepreneurial activity is greatly reduced (UNESCO 2012).

While not the only factor, evidence from private sector surveys suggests that the skills crisis in the Arab region has likely contributed to the depth of the region's employment crisis. Both have been further exacerbated by rapid growth in the youth population, which has produced a much larger labor force that lacks the necessary skills to secure employment. Some 55 percent of the population is under the age of 24 years, and about 67 percent are under the age of 30. While total employment has been growing at 3.3 percent annually, this growth has not been sufficient to absorb the rapidly increasing working-age population. Demand-side factors have also deepened the crisis. Declines in public sector hiring have resulted in much lower demand for labor from that sector. Arab

youth have traditionally found their first job in the public sector. In Egypt in the mid-1970s, about 80 percent of first job seekers, both men and women, found employment in government or public enterprises (UNESCO 2012). But such opportunities no longer exist. Together, these supply and demand factors have resulted in high unemployment rates (averaging about 10 percent) (Amin et al. 2012).

With a declining public sector, Arab youth are becoming increasingly dependent on the employment opportunities provided by the private sector. But where private investment has been growing, surveys have indicated that the lack of available skills is an important constraint. According to surveys of private sector employers, the skills of job applicants are not matched with their needs. Using the Enterprise Survey database, a recent World Bank report shows that nearly 40 percent of employers in the formal private sector in the Middle East and North Africa region identify skill shortages as a major constraint to business operation and firm growth (World Bank 2013). This share is the highest for all developing regions of the world. Inadequate education is also ranked as the fourth most important constraint to economic growth in the *Arab World Competitiveness Report 2011–12* (World Economic Forum 2012).

Because young people have been lacking the skills demanded by modern business, and because the formal private sector has remained underdeveloped, many young Arabs have ended up being unemployed or working in the informal sector. Of the young men and women who currently find jobs in Egypt, only 28 percent find formal sector jobs—18 percent in the public sector, and 10 percent in the formal private sector. The vast majority, 72 percent, end up working in the informal micro and small-scale sector (MSE)—with no labor contract, no job security and no social benefits (Assad and Barsoum 2007). But these working conditions in the informal sector are not considered appropriate for women, and as a result

they have remained unemployed for a long time waiting for a public sector job. Enterprise surveys in Egypt show that women's employment in MSEs remains low, at only 11.4 percent. Half the women working in MSEs are less than 25 years old. Youth employment and labor force participation rates in the Arab world are therefore particularly low for women (see table 3) compared with other regions. Female unemployment, at nearly 20 percent, is higher than in any other middle-income region in the world. Many of them get discouraged and exit the labor market.

The low female participation rate, together with the high unemployment rate, mean that only about 18 percent of working-age Arab women actually have jobs. Again, this is much lower than any other region in the world, and it implies a waste of important resources, especially in the case of educated women. It makes it more difficult for families with only one income earner to raise their standards of living and achieve middle-income status.

The employment problem is widespread across countries and also worse than four comparator countries (see table 4). The overall youth unemployment rate for the Arab countries is high (excluding Bahrain and Qatar). However, they are comparable to the nearly 20 percent

rates observed for Indonesia and Brazil. They are lower than the 50.5 percent for South Africa, but higher than Malaysia's 11.4 percent. The striking difference between the Arab countries and the comparators is that in the Arab world female unemployment rates are much higher than male rates. In Egypt and Saudi Arabia, more than half of young women are unemployed, compared with 14.7 percent and 23.5 percent for men. Young women's unemployment rates in Algeria and Syria are double those for young men.

Young women in Arab states could be held back from participating in the labor market more so than men because of religious beliefs. However, while Indonesia and Malaysia are societies with similar religious backgrounds, the unemployment rates for young women are more or less the same as those for young men (22 percent for women, as compared with 21 percent for men in Indonesia, and 12 percent for women, compared with 11 percent for men in Malaysia) (table 4). Hence, there may be other explanations for high female unemployment in the Arab world that need to be better understood, including family traditions, culture and possibly the degree to which their skills are matched with private sector needs.

Table 3. Labor Force Participation Rates (percent), 2008-2011					
Participation Rates	Arab World	East Asia	Europe and Central Asia	South Asia	Latin America and Caribbean
Total labor force participation rate	51.8	77.7	59.3	59.3	70.6
Female participation rate	24.1	73.4	61.9	33.3	57.8
Female unemployment rate	19.3	...	9	4.4	9.7

Source: World Bank World Development Indicators Database, 2008-2011

Table 4. Youth Unemployment Rates (percent), 2010			
Country	Youth	Male	Female
<i>Arab</i>			
Egypt	24.8	14.7	54.1
Tunisia	29.4	27.8	32.7
Algeria	21.5	18.7	37.6
Syria	20.4	16.4	43.5
Saudi Arabia	30.0	23.5	54.8
Bahrain	5.0	2.5	11.6
Qatar	1.2	0.5	7.0
<i>Comparator</i>			
Indonesia	21.4	21.0	22.0
Malaysia	11.4	11.0	12.0
Brazil	17.8	13.8	23.1
South Africa	50.5	47.2	54.6

Source: ILO Database.

WHAT CAN BE DONE?

The evidence presented above suggests that urgent action is needed to improve Arab children's and youth's foundational skills to enable them to progress in school and find decent work. A number of complex and inter-related issues need to be addressed to tackle the current challenges in the Arab education system. Indeed, many educators, policymakers, researchers and other actors in the Arab world are actively involved in advancing education reforms. We hope that the findings given in this report will spur increased dialogue within the region on the way forward. We pose five questions by way of conclusion that could prove fruitful starting places for this discussion.

First, research confirms that investing early in children's lives is one of the most beneficial investments a country can make in its future. Early childhood education has been shown to improve learning ability, school performance and labor market productivity. It is also cost-effective; the earlier the investment, the greater the economic return. For example, it is estimated that raising the pre-primary gross enrollment rate to 25 percent in countries such as Yemen would lead to a future stream of wage income 6.4 times higher than the per capita cost of providing access to preschool. With the pre-primary gross enrollment ratio at 22 percent in 2010, a multisectoral approach (including the private and nonprofit sectors) is needed to address the gap, especially for poor children. What types of financial incentives (e.g., cash transfers and vouchers) could accelerate progress in making good-quality early childhood education and child care more accessible and affordable?

Second, learning outcomes cannot be improved without addressing the shortage of teachers and the quality of teaching. According to UNESCO, the Arab states have the second-largest share of the global teaching gap, after Sub-Saharan Africa. The region needs to create an additional 500,000 posts and replace 1.4 million teachers who

are leaving the profession, in order to achieve universal primary education by 2030. Filling this teacher gap with qualified graduates as well as retraining in-service teachers is a shared priority among countries in the region. Are there good national practices that could be replicated and scaled up? Could more cost-effective models be developed? What are the potential benefits for developing a regional approach to the teacher recruitment and training challenge?

Third, solutions will need to take account of challenges in conflict-affected countries. Before the Syrian conflict, 4 million children were already out of primary school in conflict-affected countries with the greatest concentrations in Iraq, Sudan and Yemen. In addition, with hundreds of thousands of Syrian children now out of school, the region is facing its biggest education crisis yet. For these children, more aid is urgently needed to support education as part of the overall humanitarian response. A longer-term development approach is also needed to support the education of all refugee and internally displaced children in the region, including Palestinians. How could regional donor agencies help leverage funds from regional and international corporations and philanthropists? How could the capacity of national public schools and civil society organizations be strengthened to respond to the needs of these children over the longer term?

Fourth, governments cannot improve the quality of education alone. The private sector in the region would be among the greatest beneficiaries of higher learning achievements, given that children and youth are their future pool of employees. There is a need for more structured and enduring dialogue between government, education institutions and the private sector to not only explore how to improve the alignment of education outcomes with the job market, but also to continuously explore and share practices and collaborate to encourage more effective corporate investments in education, en-

hanced partnerships and stronger efforts to draw on corporate resources and competencies. What mechanisms need to be put in place to ensure that there are such ongoing dialogues and joint efforts? What new types of public-private partnerships could assist governments in increasing access to educational opportunities and improving learning? What could governments do to encourage the private sector to support innovation in education, to devise innovative financing plans and to scale up initiatives in education and training?

Fifth and finally, the systematic collection and use of data on learning outcomes is an important first step for any country that seeks to improve its students' performance. Given the gaps in student assessment data in the region, how could the existing global efforts to support improved measurement of learning outcomes data be leveraged regionally? Specifically, how could the recommendations of the Learning Metrics Task Force be rolled out in a way that supports countries efforts to improve their systems?⁷

ENDNOTES

1. A detailed methodology of the Arab World Learning Barometer is available online at www.brookings.edu/arabworldlearning.
2. These 20 countries are: Algeria, Bahrain, Djibouti, Egypt, Iraq, Jordan, Kuwait, Lebanon, Libya, Mauritania, Morocco, Oman, Palestinian National Authority (Palestine), Qatar, Saudi Arabia, Sudan (pre-secession), Syrian Arab Republic (Syria), Tunisia, the United Arab Emirates (UAE), and Yemen
3. Women in the Arab world are also enrolling in tertiary education at a higher rate than men, although this imbalance is lower than any other region (all regions of the world see higher female than male tertiary enrollment rates).
4. The 2013/14 EFA Global Monitoring Report estimates that 43 percent of primary-aged children in the entire Arab region (including all 20 countries) are failing to learn.
5. Data on rural/urban disparities is based on PISA 2009 (literacy) and TIMSS 2011 (numeracy). PISA 2012 scores were not available for this calculation at the time of publication.
6. Transferable skills are defined as skills that can be transferred and adapted to different work needs and environments, including problem solving, communicating ideas and information effectively, showing leadership and conscientiousness, etc. (UNESCO 2012).
7. The Learning Metrics Task Force outlines a series of recommendations to use existing assessments of learning as well as innovative, new measures to improve learning opportunities and outcomes for all children and youth (LMTF 2013).

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