

Teacher supply and demand in the Arab states

This regional profile is based upon the report, [Teachers and Educational Quality: Monitoring Global Needs for 2015](#), produced by the UNESCO Institute for Statistics.

To download the report, see www.uis.unesco.org/publications/teachers2006

After sub-Saharan Africa, the Arab States will face the greatest teacher shortage in the drive to provide every child with a primary education by 2015, according to the UIS report. The region will need to raise the current stock by 26% and create another 450,000 teaching posts in less than a decade.

As shown in **Figure 1**, only four out of the 15 countries – Algeria, Lebanon, the Syrian Arab Republic and Tunisia – won't need to expand their primary teaching forces to achieve universal primary education (UPE).

By contrast, the most difficult situation lies in Mauritania, where the teacher stock must grow by 5% a year to reach UPE by 2015. The United Arab Emirates and the Palestinian Autonomous Territories will also need to raise their stocks by about 3% annually.

It is important to note the difference between teacher stocks and flows. The projected stock refers to the total number of teachers needed in classrooms by 2015 for UPE. However, that stock is based upon flows in and out of the profession (e.g. retiring teaching versus new recruits). The data presented here are based upon a medium scenario, in which 6.5% of teachers leave the profession each year for diverse reasons (referred to as attrition).

For example, Saudi Arabia will need the greatest number of teachers. To reach UPE, the country will need to create 137,000 new teaching posts while also replacing 187,000 teachers who are expected to retire over the next decade. This amounts to a total of 324,000.

Figure 1 Primary teacher stocks, flows and additional teachers needed to reach UPE by 2015 (in thousands)

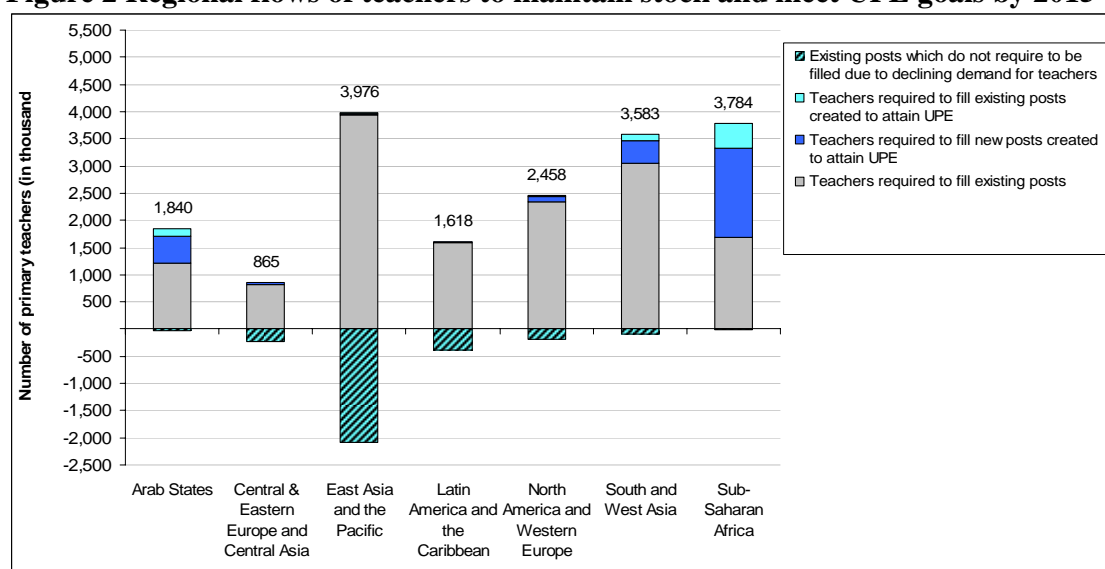
Country or territory	Primary teacher stocks			Primary teacher flows, 2004-2015	
	2004	2015	Difference	Teachers to fill vacancies due to attrition (6.5%)	Total number of teachers needed for UPE and attrition
Algeria	170	157	-13.0	104.2	104.2
Egypt	355 ** -1	424	68.9	277.6	346.5
Iraq	211	265	53.4	167.6	221.1
Jordan	39 ** -1	44	4.9	29.9	34.8
Kuwait	12	17	4.4	10.2	14.6
Lebanon	32	29	-3.4	18.3	18.3
Mauritania	10	17	7.2	9.1	16.3
Morocco	148	158	10.4	109.0	119.3
Oman	16 **	19	3.6	12.4	15.9
Palestinian Autonomous Territories	14	20	5.8	12.1	17.9
Qatar	7	10	2.6	6.0	8.6
Saudi Arabia	204	341	137.0	186.6	323.6
Syrian Arab Republic	125 **	125	-1	88.9	88.9
Tunisia	59 -1	47	-12.0	27.1	27.1
United Arab Emirates	17	24	7.3	14.3	21.6

Note: The projected teacher stock for 2015 is based upon the estimated primary school-age population in 2015 plus 10% or half the current rate of repetition all together divided by a pupil-teacher ratio (PTR) of 40:1 (or the current PTR if it is below the benchmark).

-1 Data refer to 2003. ** UIS estimates.

Source: UNESCO Institute for Statistics.

Figure 2 presents a regional breakdown of the flows needed to ensure that there are enough teachers in classrooms in 2015. After sub-Saharan Africa, the Arab States will need to create the greatest number of new teaching posts – 479,000 – to accommodate the growing number of pupils.

Figure 2 Regional flows of teachers to maintain stock and meet UPE goals by 2015

Source: UNESCO Institute for Statistics estimates.

How many children will need teachers in 2015?

Figure 3 presents the projected change in school-age population and the primary net enrolment, which is the percentage of school-age children currently enrolled.

For example, about a quarter of school-aged children are currently not enrolled in Mauritania. To reach UPE, the government must provide for these children while accommodating the steady influx of new pupils, as the size of this age group grows by 33% between 2005 and 2015.

A similar situation is found in Yemen, where about one-quarter of school-age children are currently not in school and the population is expected to grow by 27% over the next decade. Population growth is also quite high in Kuwait, the Palestinian Autonomous Territories and Qatar, although the net enrolment rates are relatively high. By contrast, Djibouti and Saudi Arabia have the lowest enrolment rates in the region, at 33% and 53% respectively. However, this may be due to the large numbers of children enrolled in Koranic schools. In absolute terms, Egypt can expect the largest increase in the number of school-age children, from 7.9 to 9 million, over the next decade.

At the opposite end of the spectrum, the school-age population will fall by 21% in the Syrian Arab Republic, where 92% of children are currently enrolled in primary school. This translates into an unusual opportunity to improve the quality of education over the next decade, by investing more resources per pupil and teacher.

Figure 3 Primary school-age population growth between 2005 and 2015

Country or territory	Primary net enrolment rate (2004)	Projected primary school-age population		
		2005 (in thousands)	2015 (in thousands)	Percentage change
Algeria	97	3,902	3,931	1
Bahrain	97	80	75	-7
Djibouti	33	126	136	8
Egypt	95	7,938	9,196	16
Iraq	88	4,499	5,223	16
Jordan	91	840	882	5
Kuwait	86	167	212	27
Lebanon	93	426	385	-10
Libyan AJ	...	666	798	20
Mauritania	74	476	632	33
Morocco	86	3,828	4,085	7
Oman	78	352	374	6
Palestinian AT	86	437	544	24
Qatar	90	66	85	29
Saudi Arabia	53	3,597	3,902	9
Sudan	...	5,424	6,175	14
Syrian AR	92	2,683	2,111	-21
Tunisia	97	1,082	974	-10
UAE	71	315	360	14
Yemen	75	3,634	4,617	27

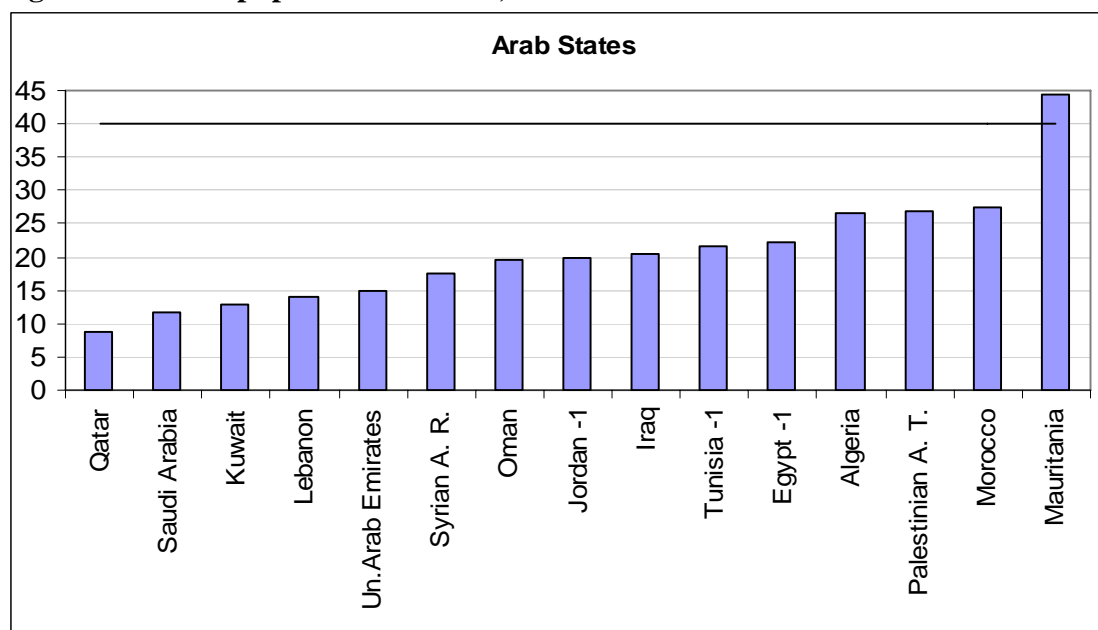
Source: UNESCO Institute for Statistics.

Can schools accommodate more pupils?

As shown in **Figure 4**, Mauritania is only the country in the region to have more than 40 pupils per teacher, which is considered the maximum to provide quality education.

By contrast, Qatar has the lowest pupil-teacher ratio (PTR) in the world at 9:1. In fact, five countries have PTRs of 15:1 or less.

Figure 4 Current pupil-teacher ratios, 2004



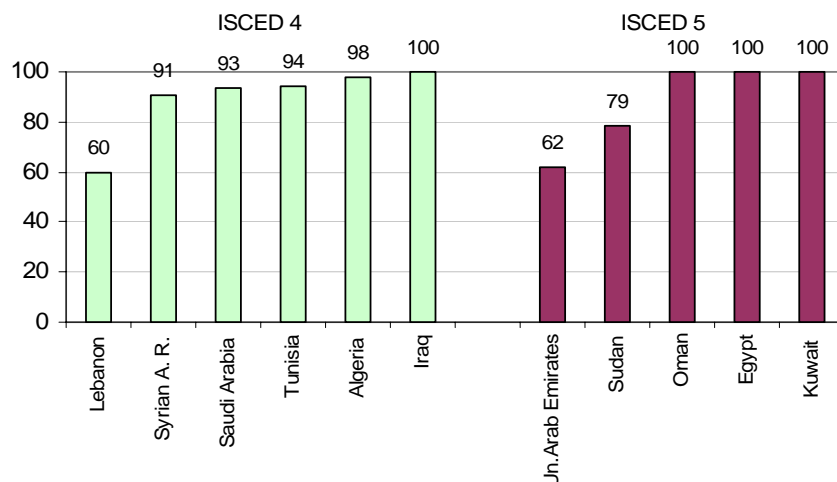
Note: ⁻¹ Data refer to 2003.

Source: UNESCO Institute for Statistics

The demand for education is also shaped by the quality of instruction. Are qualified teachers in the classrooms?

Figure 5 presents the proportion of primary teachers who meet the minimum qualification (ISCED level) to enter the profession in 11 countries with available data. In general the standards are quite high: either a post-secondary non-tertiary degree (ISCED 4), which usually entails a one to two year course upon completion of an upper-secondary education; or a tertiary level degree (ISCED 5).

Almost all teachers in the Arab States are qualified, with the exception of Lebanon (60%), Sudan (79%) and the United Arab Emirates (62%).

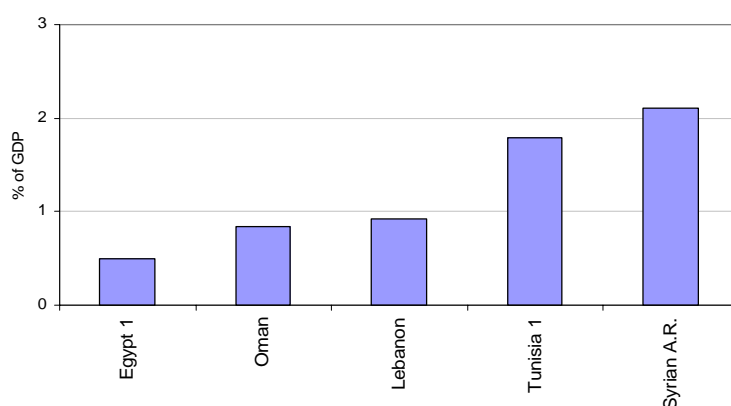
Figure 5 Proportion of primary teachers meeting the minimum qualifications

Source: UNESCO Institute for Statistics.

In most countries, staff costs account for the single largest education expenditure. How do teacher salaries compare across the region?

By benchmarking primary teachers' salaries as a percentage of national GDP per capita, it is possible to compare levels across countries by reducing differences due to labour markets and price structures. According to data presented in **Figure 6**, entry level salaries for primary teachers are highest in the countries needing to expand their teaching forces.

Based on a study of high-performing countries in terms of UPE, the World Bank has suggested that the average primary teacher's salary should not exceed 3.5% of national GDP per capita. But it should be remembered that in the lowest income countries, relative measures such as the share of GDP per capita, hide the fact that these salaries in absolute terms are still very small, as is the pool of secondary school graduates who may pursue competing employment options.

Figure 6 Statutory teacher salaries relative to GDP per capita, 2003

Notes: The data correspond to starting salaries for teachers with minimum qualifications.

¹ Public institutions only.

Source: UNESCO Institute for Statistics.