

THE WORLD NEEDS ALMOST 69 MILLION NEW TEACHERS TO REACH THE 2030 EDUCATION GOALS

On World Teachers' Day (5 October), the UNESCO Institute for Statistics (UIS) has released the first-ever estimates of how many teachers are needed to achieve Sustainable Development Goal 4 (SDG 4), which aims to ensure inclusive and equitable quality education and promote lifelong learning opportunities for all. In the next 14 years, countries must recruit 68.8 million teachers to provide every child with primary and secondary education: 24.4 million primary school teachers and 44.4 million secondary school teachers. The data are available via the [UNESCO eAtlas of Teachers](http://on.unesco.org/teachers), which features interactive maps and charts that can be shared and downloaded at <http://on.unesco.org/teachers-map>

MASSIVE TEACHER SHORTAGES AT THE PRIMARY AND SECONDARY LEVELS

The international education community has pledged to achieve universal primary and secondary education by 2030 as part of Sustainable Development Goal 4 (SDG 4). However, about 263 million children and youth are out of school, according to recent UIS data. This includes 25 million children of primary school age who will probably never set foot in a classroom, while just 14% of youth complete upper secondary education in low-income countries. Clearly, SDG 4 demands a seismic shift in the provision and quality of education and teachers.

Every education system is only as good as the teachers who provide the hands-on schooling. Study after study has confirmed their critical role in improving education quality and learning outcomes, which is why SDG 4 calls specifically for a major increase in the supply of qualified teachers and more support from the international community for teacher training in developing countries (Target 4.c).

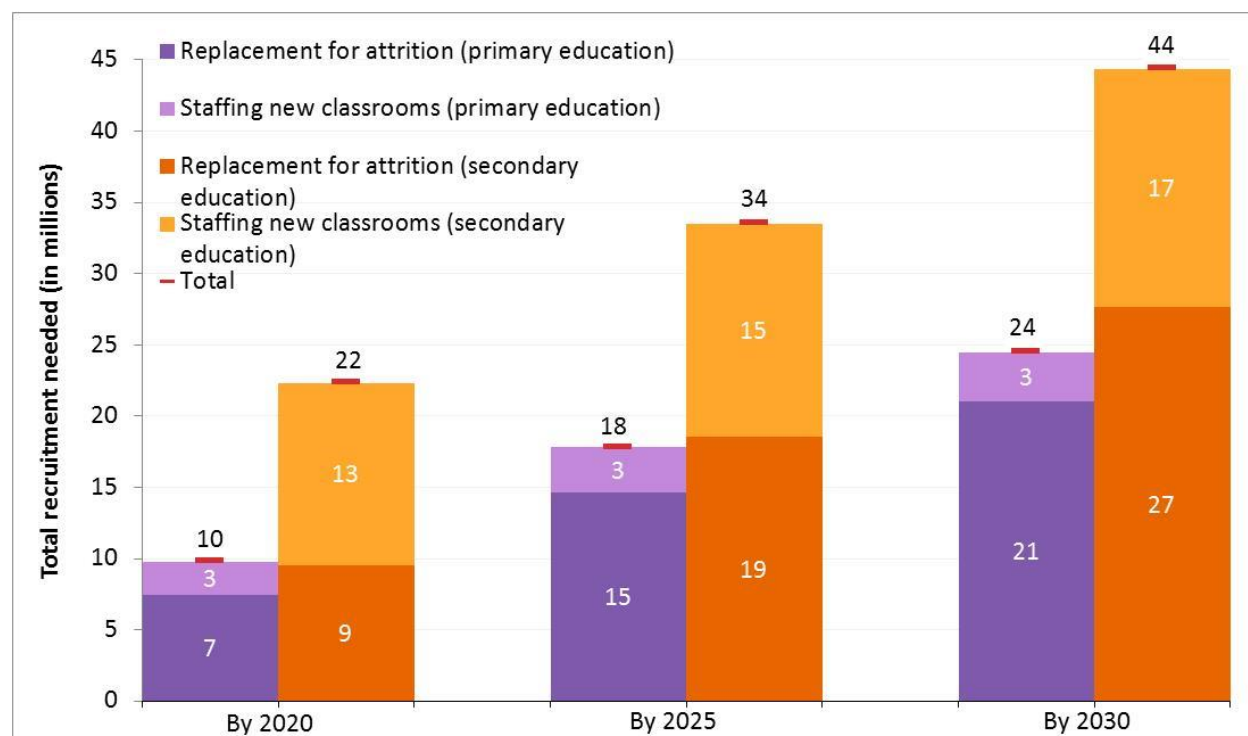
As the official source of data to monitor progress towards SDG 4, the UIS works with a range of partners to produce the global and thematic indicators. The UIS has also developed new global projections of the numbers of teachers needed to achieve the goal. By 2030, countries must recruit a total of 68.8 million teachers: 24.4 million primary school teachers and 44.4 million secondary school teachers (see **Figure 1** and **Annex 1**).

Of the 24.4 million teachers needed for universal primary education (UPE), 21 million will replace teachers who leave the workforce. The remaining 3.4 million, however, are additional teachers who are needed to expand access to school and underwrite education quality by reducing the numbers of children in each class to a maximum of 40.

The need for additional teachers is even greater at the secondary level, with a total of 44.4 million teachers need by 2030, of which 27.6 million are to replace those who leave and an additional 16.7 million to ensure that every pupil is in a classroom with no more than 25 students per teacher on average.

The UIS has also produced projections for five-year intervals, setting out the numbers of teachers needed at each milestone as we approach the 2030 deadline. To provide every child with education in 2020, countries would need to recruit a total of 9.8 million primary teachers and 22.3 million secondary teachers. By 2025, those figures rise to 17.8 million for primary education and 33.5 million for secondary education – the result of growing numbers of youth of secondary school age.

FIGURE 1. GLOBAL NUMBERS OF TEACHERS NEEDED TO ACHIEVE UNIVERSAL PRIMARY AND SECONDARY EDUCATION BY FIVE-YEAR INTERVALS: 2020, 2025 AND 2030



Source: [UNESCO Institute for Statistics database](#)

THE REGIONAL PICTURE

Together, Sub-Saharan Africa and Southern Asia account for over 76% (14.6 million) of the new teachers needed in developing countries to achieve universal primary and secondary education by 2030 (see *Figure 2*). The remaining 24% (4.6 million) are shared across the others developing regions, with South-Eastern Asia and Western Asia accounting for 1 million each.

Sub-Saharan Africa: 70% of countries face acute shortages of teachers, rising to 90% at secondary level

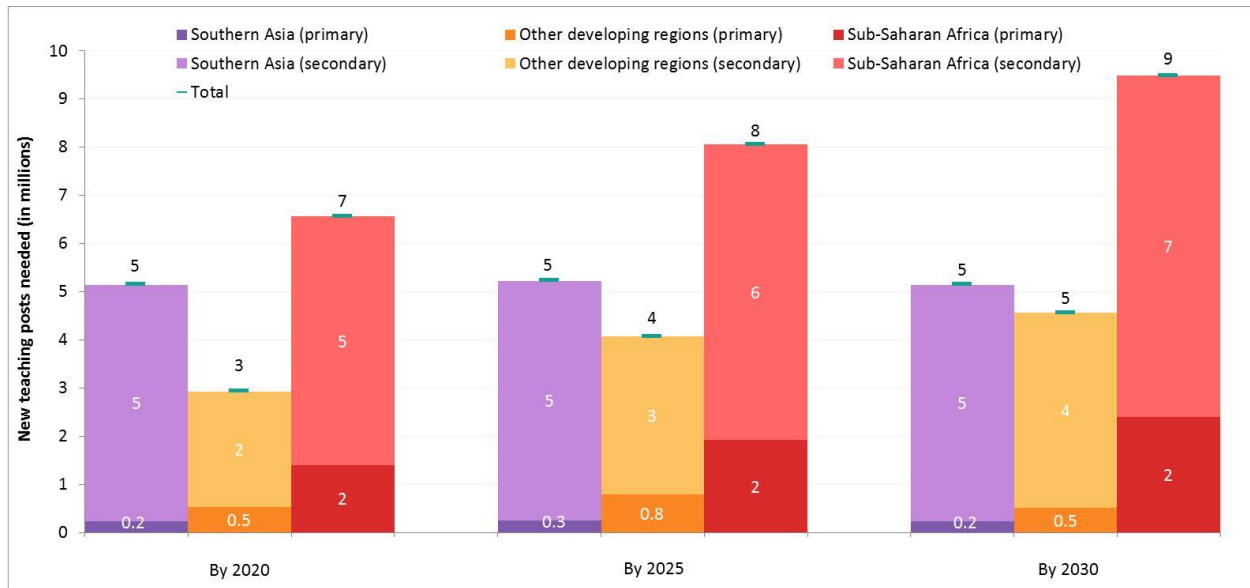
The greatest teacher shortages are in sub-Saharan Africa, which needs a total of about 17 million teachers to achieve universal primary and secondary education by 2030 (see *Figure 3*). About 6.3 million primary teachers are needed: 2.4 million to fill new teaching posts to accommodate all children and 3.9 million to replace the teachers expected to leave the profession. At the secondary level, the region must recruit 10.8 million teachers by 2030, including 7.1 million for new teaching positions and 3.7 million to replace those who have left.

Across the region, more than 70% of countries face shortages of primary school teachers, rising to 90% for secondary education. Without urgent and sustained action, the situation will deteriorate in the face of rising demand for education. This is the region with the fastest-growing school-age population: for every 100 children of primary age and every 100 of secondary age in 2014, there will be 138 and 148 respectively in 2030. The region must expand secondary provision, despite widespread concerns about the lack of resources needed to improve the quality of the primary education on offer.

Teachers and students across the region are already struggling in over-crowded classrooms in schools that often lack the most basic amenities. According to UIS data, the average pupil-teacher ratio at primary level is 42 but rises to more than 60 in countries such as Central African Republic (80), Chad (62),

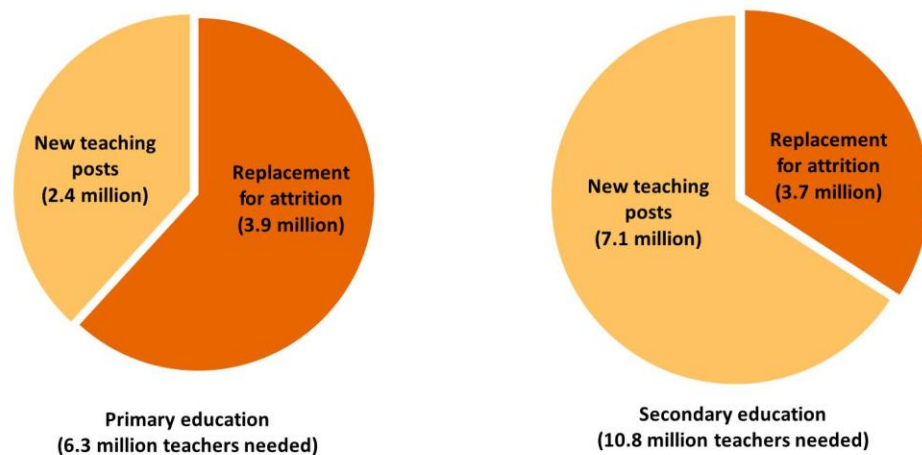
Ethiopia (64), and Malawi (69). The ratio is much smaller at the secondary level (25), but this may well reflect low enrolment rates with the regional average standing at just 43.

FIGURE 2. NUMBER OF NEW TEACHING POSITIONS NEEDED TO ACHIEVE UNIVERSAL PRIMARY AND SECONDARY EDUCATION BY FIVE-YEAR INTERVALS: 2020, 2025 AND 2030



Source: [UNESCO Institute for Statistics database](#)

FIGURE 3. NUMBER OF TEACHERS NEEDED TO ACHIEVE UNIVERSAL PRIMARY AND SECONDARY EDUCATION IN SUB-SAHARAN AFRICA BY 2030



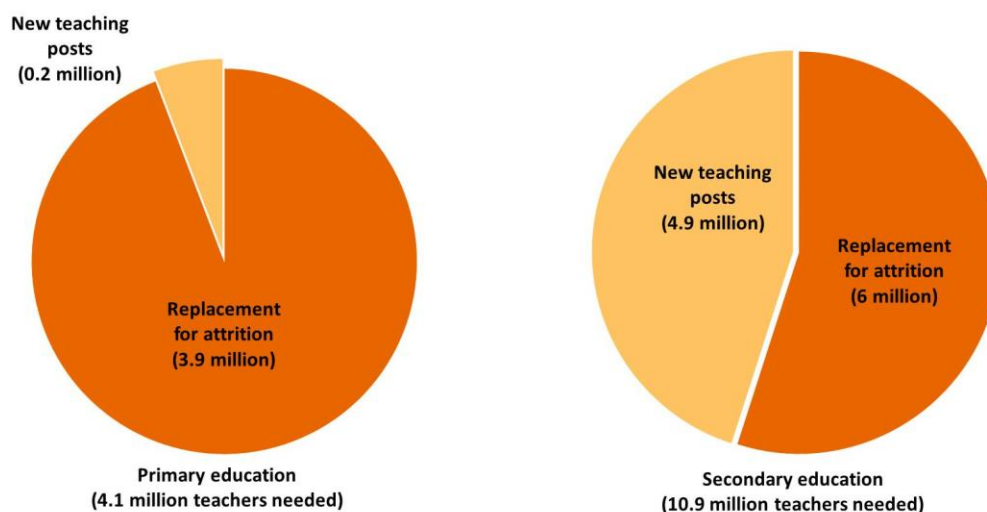
Source: [UNESCO Institute for Statistics database](#)

Southern Asia: Overcrowded classrooms

Southern Asia is the region with the second-largest shortage of teachers, which explains the overcrowded classrooms, particularly at the secondary level. The average pupil-teacher ratio stands at 34:1 in primary education and 29:1 (2014 estimates) in secondary education – far higher than the global average of 18:1. School-age populations are relatively stable, but enrolment in secondary education across the region is still low, at just 65%. So the challenge is to improve the quality of education, as well as prepare to enrol those who are currently out of school.

To achieve universal primary and secondary education by 2030, Southern Asia must recruit a total of 15 million teachers (see **Figure 4**). At the primary level, a total of 4.1 million teachers are needed, including 0.2 million teachers to fill new posts and another 3.9 million to replace teachers expected to leave the profession. At the secondary level, the region must recruit 10.9 million teachers by 2030, including 4.9 million for new teaching posts and 6 million to replace teachers who have left the profession.

FIGURE 4. NUMBER OF TEACHERS NEEDED TO ACHIEVE UNIVERSAL PRIMARY AND SECONDARY EDUCATION IN SOUTHERN ASIA BY 2030



Source: [UNESCO Institute for Statistics database](#)

Western Asia and Northern Africa: Armed conflicts and unrest are causing chaos

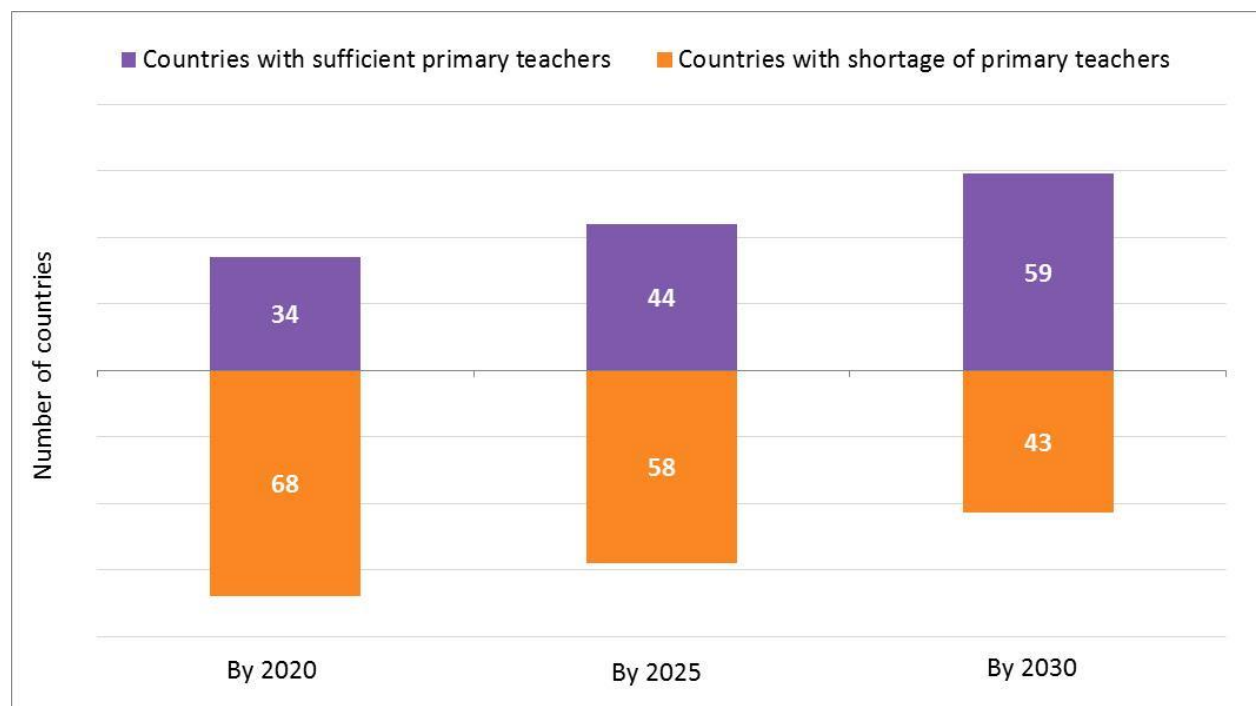
In Western Asia, persistent armed conflicts in a number of countries, including the Syrian Arab Republic and Iraq, are causing chaos. Large parts of entire education systems have been destroyed and millions of people, including teachers and children, have taken shelter in neighbouring countries or in camps. The Syrian Arab Republic recently reported that the number of pre-primary, primary and secondary schools fell from 23,000 to 15,000 between 2012 and 2016, and the number of students from 5.6 million to 4.1 million. According to the national Ministry of Education, the teaching workforce fell by nearly one-half (46%) during the same period.

In Northern Africa, 0.8 million teachers – 0.7 million to replace teachers who have left and 0.2 million to fill new positions – will be needed to achieve universal primary education by 2030. At the secondary level, 1.8 million teachers will be needed: 1.1 million to replace those who have left and 0.8 million to fill new positions. The countries facing the biggest teacher shortages in the region are: Algeria (0.2 million) for primary education and Egypt (1.1 million) for secondary education.

WHICH COUNTRIES WILL CLOSE THE PRIMARY TEACHER GAP AND WHEN?

Most countries (58%) need to hire more teachers to achieve UPE. Of the 102 countries facing the biggest challenges, only 34 (or 33%) will have enough primary teachers in classrooms by 2020, with the share rising to 43% by 2025. However, if current trends continue, 43 countries (or 42%) will still not have enough teachers to provide UPE until after 2030 (see **Figure 5**).

FIGURE 5. NUMBER OF COUNTRIES ACCORDING TO THE DATE BY WHICH THEY ARE EXPECTED TO FILL THE TEACHER GAP FOR PRIMARY EDUCATION, BASED ON CURRENT TRENDS



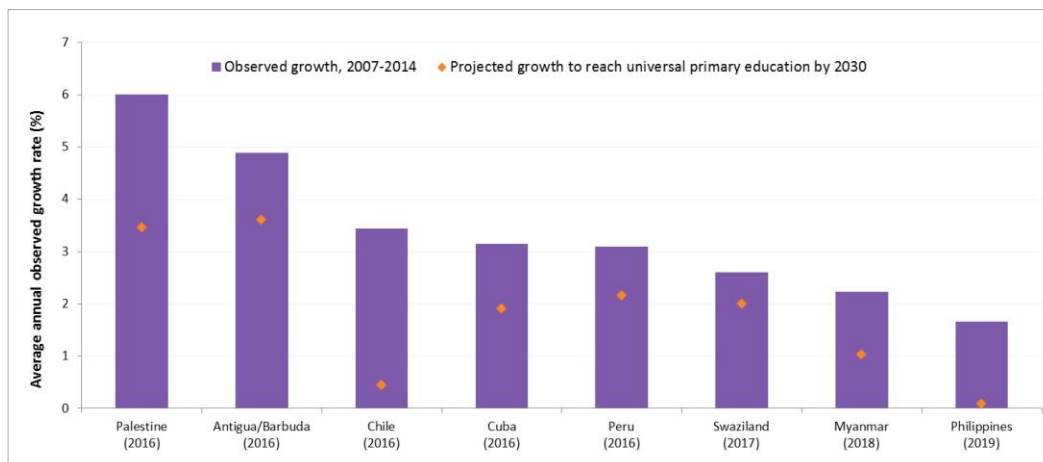
Source: [UNESCO Institute for Statistics database](#)

A number of policy interventions can affect the supply of teachers. One of the most obvious is the recruitment of more teachers. Here, some countries have managed to close the gap by steadily increasing their rates of teacher recruitment over the past decade, including Algeria, Argentina, Botswana, Costa Rica, Gabon, Malaysia, Nepal, Seychelles and Viet Nam. However, the pressure to hire more teachers will continue in countries like Algeria and Botswana that have growing school-age populations. Such countries will have to maintain steady growth in teacher recruitment each and every year if they are to maintain the balance between the supply of and demand for teachers.

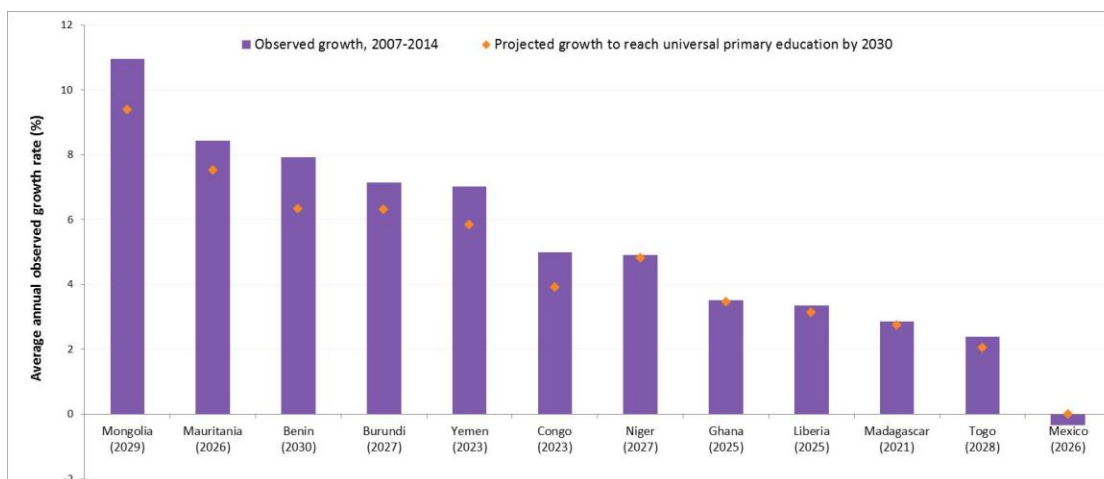
A deeper analysis is possible when we compare the average annual growth rate in teacher recruitment (from 2007 to 2014 or latest year available) with the growth rate required to ensure that all primary school-age children are in classrooms with no more than 40 pupils per teacher, on average (see **Figure 6**).

FIGURE 6. AVERAGE ANNUAL GROWTH RATE OF PRIMARY TEACHER WORKFORCE AND PROJECTED GROWTH RATE NEEDED TO ACHIEVE UNIVERSAL PRIMARY EDUCATION

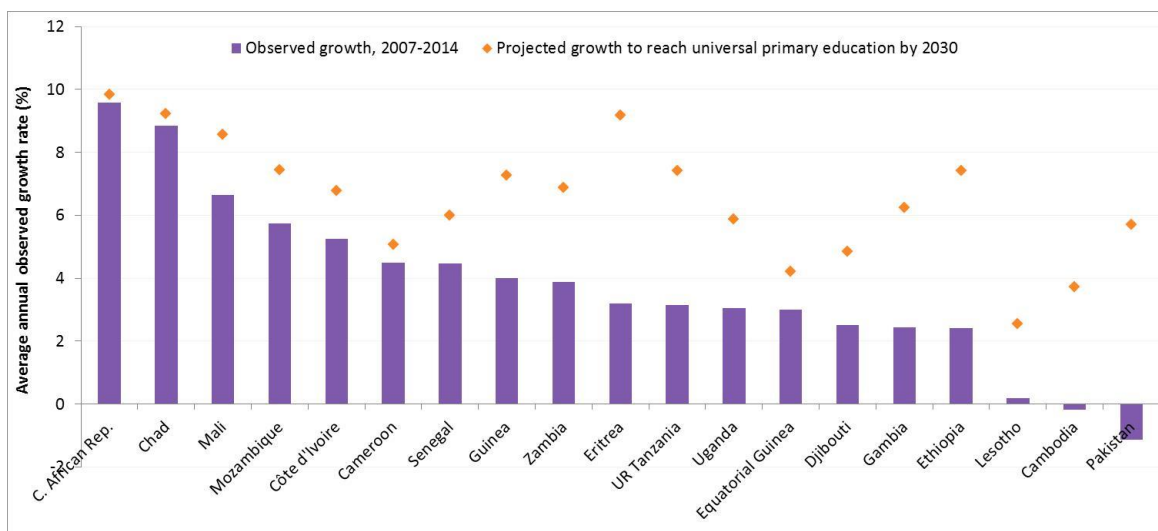
(a) Countries on track to close the gap by 2020



(b) Countries expected to close the gap between 2020 and 2030



(c) Countries expected to close the gap after 2030



Source: [UNESCO Institute for Statistics database](#)

Figure 6(a) shows countries that should have enough teachers in classrooms by 2020 if they maintain current rates of recruitment. Myanmar, for example, has been increasing its recruitment rate by an average of 2% per year since 2007. If this growth continues, it should be able to accommodate all primary school-age children by 2018, while maintaining its average pupil-teacher ratio of 28:1.

Figure 6(b) shows countries that should have enough teachers in classrooms between 2020 and 2030. In Mauritania, for example, the supply of teachers has been growing by an average of 8% per year, which is higher than the projected growth rate required to achieve UPE by 2030. So if current trends continue, the country will have enough teachers in its primary classrooms by 2026. Countries such as Burundi and Niger are expected to close the gap just one year later, by 2027.

From a policy perspective, there are questions about whether high growth rates can be maintained, while ensuring that new recruits meet national training qualifications. Information on the training and qualifications of new teachers is sparse, although most countries require teachers to have at least a secondary or tertiary degree. But do they have enough candidates to fuel the necessary annual increases in teacher recruitment? In Mauritania, for example, the minimum academic qualification required to teach primary education is short-cycle tertiary education (ISCED 5), but the enrolment ratio in tertiary education (2013 estimates) was only 5%.

Figure 6(c) shows countries where the situation is getting worse and will continue to deteriorate without urgent action. Based on current trends, there will be more children needing primary teachers in 2030 than today in countries such as Cambodia, Central African Republic, Chad, Lesotho, Mali, Pakistan, Senegal and Uganda. This is, in large part, because of the demand for education from growing school-age populations. The situation is also exacerbated by high attrition rates that are out-pacing recruitment rates for teachers.

Mali, for example, will continue to face an acute shortage of teachers beyond 2030 if current trends continue. In 2014, only 59% of primary school-age children were enrolled in primary school. To achieve UPE by 2030, the country would have to recruit 9% more teachers each year, compared to the current average annual growth rate of 7%.

The situation is more extreme in Ethiopia and Pakistan, where only about 86% and 73%, respectively, of primary school-age children are enrolled in school and where the pressure to expand access is intensifying as the school-age population grows.

In Ethiopia, the recruitment rate of teachers has increased by an average of about 2.4% in recent years. Nevertheless, primary classrooms remain massively overcrowded, with an average of 64 pupils per teacher. The situation may deteriorate as the primary school-age population is estimated to increase by 18% – from 15.7 million in 2014 to 18.5 million in 2030. To reach all children by that deadline, the country needs to recruit 7.4% more teachers per year.

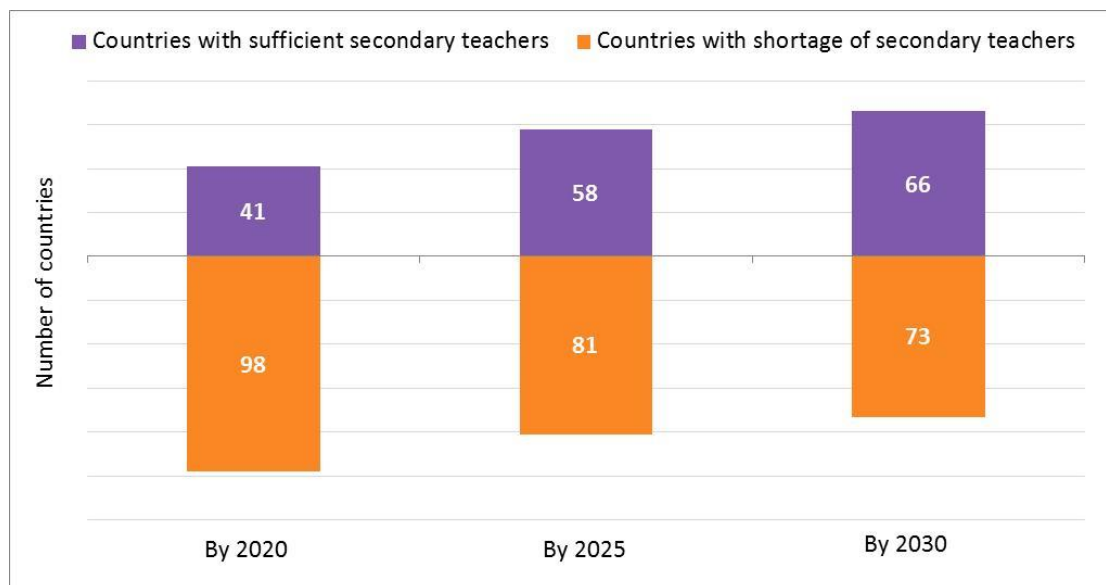
Pakistan is recruiting 99 teachers today for every 100 teachers recruited in 2007. Many children are still out of school and those that do gain access find themselves in classrooms with, on average, one teacher for every 47 pupils. To accommodate all children by 2030, Pakistan must raise its recruitment rate to almost 6% per year.

WHICH COUNTRIES WILL CLOSE THE SECONDARY TEACHER GAP AND WHEN?

With the global enrolment ratio at 75% in 2014, the challenge that must be addressed to achieve universal secondary education (USE) by 2030 is to expand national education systems. In many countries, it is not just teachers that are missing: secondary schools are often lacking too. The gap that has to be closed to achieve USE is bigger than it is for UPE, and far more countries are affected (76%). Of the 139 countries facing the biggest gaps, only 41 (or 29%) will have enough secondary teachers in classrooms by 2020. In 2025, this number will increase to 58. If current trends continue, 73 (53%) countries will not have enough teachers to achieve USE until after the 2030 deadline (see **Figure 7**).

More than 60% of countries facing the biggest gaps are in sub-Saharan Africa. They include Burundi, Central African Republic, Chad, Mauritania, Malawi, Niger and Zambia. In Southern Asia, the countries with the biggest gaps include Afghanistan, Bangladesh, India, Maldives, and Pakistan. In South-Eastern Asia, they include Cambodia, Laos, Myanmar, Timor-Leste and Viet Nam.

FIGURE 7. NUMBER OF COUNTRIES ACCORDING TO THE DATE BY WHICH THEY ARE EXPECTED TO FILL THE TEACHER GAP FOR SECONDARY EDUCATION, BASED ON CURRENT TRENDS



Source: [UNESCO Institute for Statistics database](#)

Figure 8 compares the average and projected annual growth rates needed to achieve USE. **Figure 8(a)** shows countries that should have enough teachers in classrooms by 2020 if current rates of recruitment continue. Chile, for example, has policies in place to increase recruitment by an average of 11% since 2007. If this growth continues, the country should be able to accommodate all secondary school-age adolescents by 2020, while maintaining the ratio of students per teacher at the current level of 21:1.

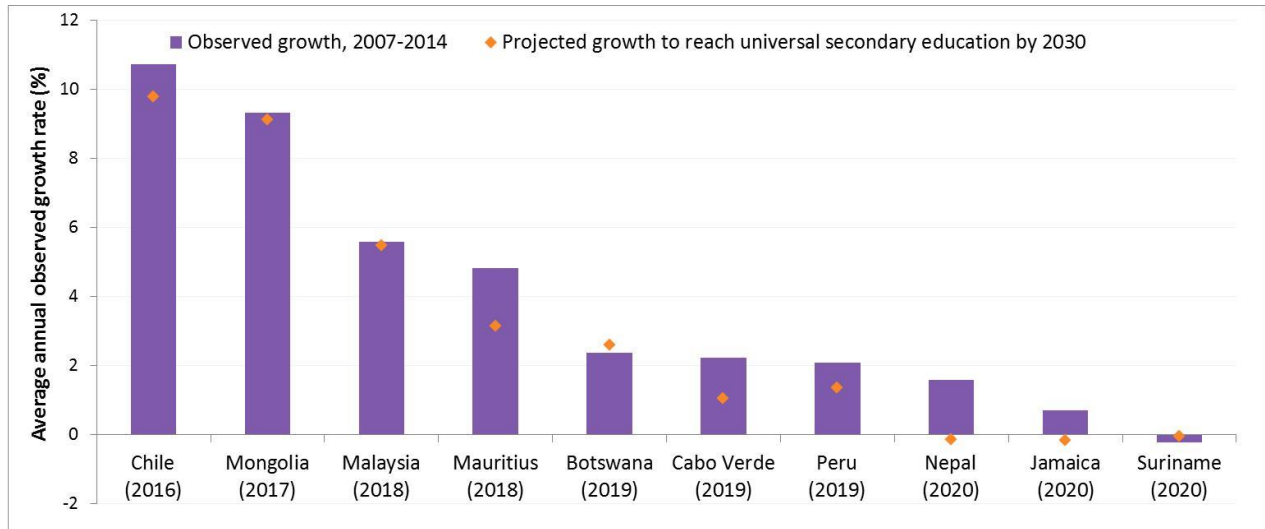
Another example is Nepal, where the teachers' workforce has been growing at an average of 2% since 2007 to ensure USE by 2020. However, the ratio of students per teacher (29:1 in 2014) is higher than the global average of 20. The country should maintain or increase its recruitment rate to improve education quality and ensure that the average pupil-teacher ratio does not exceed 25:1.

Figure 8(b) shows countries that should have enough teachers in classrooms to achieve USE between 2020 and 2030. They include Burkina Faso, Ethiopia, Palestine, Panama, Rwanda, Swaziland, and Tonga. As with UPE, countries can increase their recruitment rates significantly to provide greater access to education, but new recruits must meet the required standards in terms of their training and qualifications. The supply of new teachers and their qualifications are key issues that must be addressed if we are to achieve a good-quality education for all.

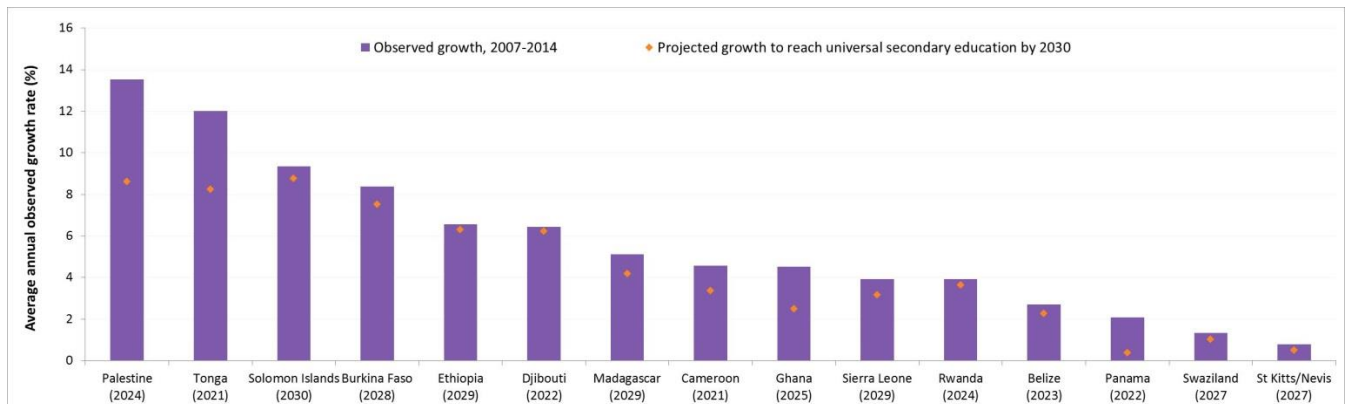
Figure 8(c) shows countries where things are getting worse, rather than better and where the situation will continue to deteriorate without urgent action. If current trends continue, there will be more children needing secondary teachers in 2030 than today in such countries as: Burundi, Central African Republic, Kenya, Malawi, Mozambique, Seychelles and Uganda. This is because of the pressure arising from growing secondary school-age populations, but also because of high attrition rates and low recruitment rates.

FIGURE 8. AVERAGE ANNUAL GROWTH RATE OF SECONDARY TEACHER WORKFORCE AND PROJECTED GROWTH RATE NEEDED TO ACHIEVE UNIVERSAL SECONDARY EDUCATION

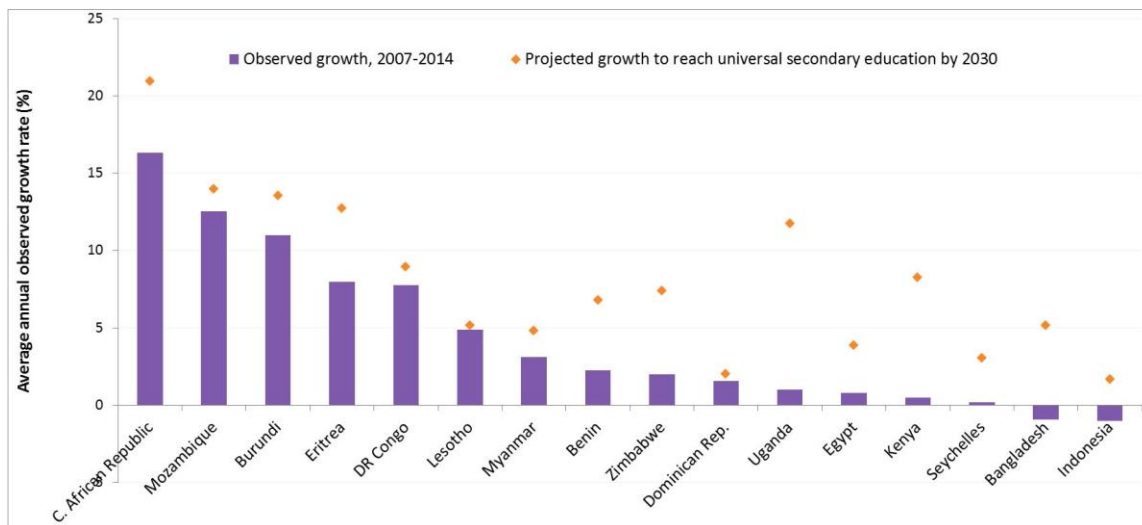
(a) Countries on track to close the gap by 2020



(b) Countries expected to close the gap between 2020 and 2030



(c) Countries expected to close the gap after 2030



Source: [UNESCO Institute for Statistics database](#)

Central African Republic, for example, will continue to face an acute shortage of teachers even after 2030 if current trends continue. According to the latest available data (2012), only 14% of those of secondary school age were actually enrolled in secondary schools, and classrooms were overcrowded with an average of 68 students per teacher. To accommodate all of them in classrooms with no more than an average of 25 students per teacher, the country needs to recruit 21% more teachers each year, compared to today's average annual growth rate of 16%.

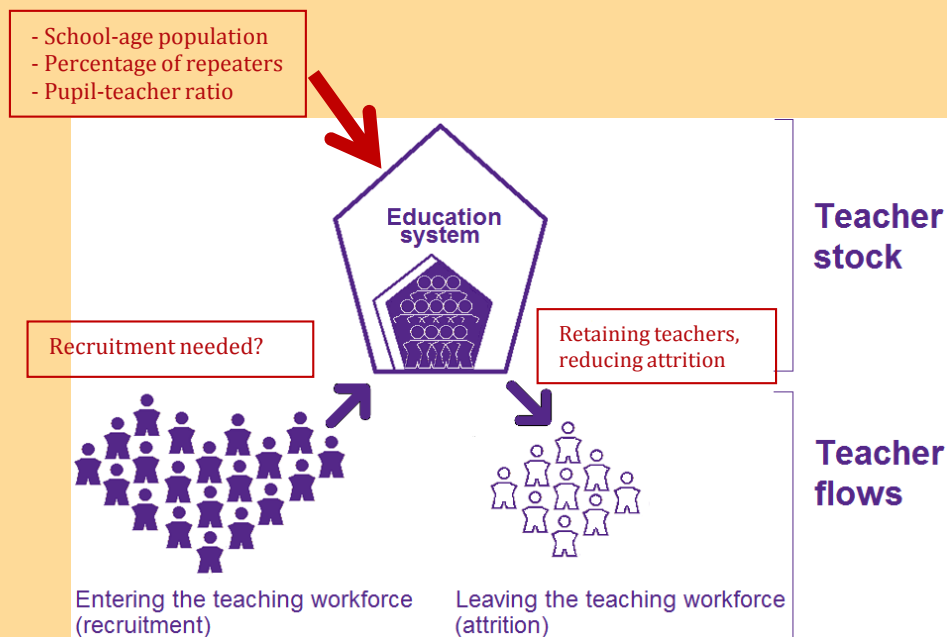
As in primary education, the quality of secondary education is linked directly to the training and qualifications of teachers as well as the numbers of students in classrooms. Quality is determined by a combination of many factors, but at the secondary level, teachers must have subject-specific knowledge (e.g. mathematics, science, etc.). Very few countries currently track this expertise, although it is possible to monitor specific shortfalls in teachers' subject-matter qualifications through the development of information management systems.

Box 1. What drives demand for teachers?

The demand for teachers is driven by a number of factors (see **Figure 9**): change in the size of the school-age population, the percentage of repeaters and the average number of students per teacher in each classroom. It is possible to draw on these determinants of demand for teachers to determine the workforce needed to achieve universal primary and secondary education.

From the supply side, the most common influencing factors are entry into the profession (recruitment), retention and attrition. Typically, a shortage of teachers translates into either overcrowded classrooms or insufficient hiring of new teachers to staff new classrooms (as a result of increased enrolment) or to replace teachers who have left the profession. Teacher absenteeism may also influence the supply of teachers. Moreover, as the TALIS study of 17 countries showed that of teachers who reported spending about 80% of their time on teaching and learning, on average, one in four in more than one-half of the participating countries reported losing at least 30% of their time due to classroom disruptions and administrative tasks. Shortages of teachers can often occur in particular subject areas, qualifications or training profiles, grades or regions of a particular country.

FIGURE 9.



Source: [UNESCO Institute for Statistics database](#)

The retention of teachers is seen as a key factor in limiting attrition driven by reasons other than retirement. An attractive teaching profession (in terms of working conditions, salaries, school environment, etc.) stimulates interest from a potential pool of candidates and motivates those already serving in the profession. A competitive salary, for example, is considered an important incentive to motivate teachers and stop them switching to other careers.

The type of contract for teachers is another key factor in retention. Their recruitment on a temporary contract basis – usually with limited qualifications or training and their employment under less favorable terms than regular civil service teachers (e.g. with lower salary and less support) – is likely to lead to a precarious and demotivating teaching career.

THE IMPORTANCE OF TEACHER QUALITY

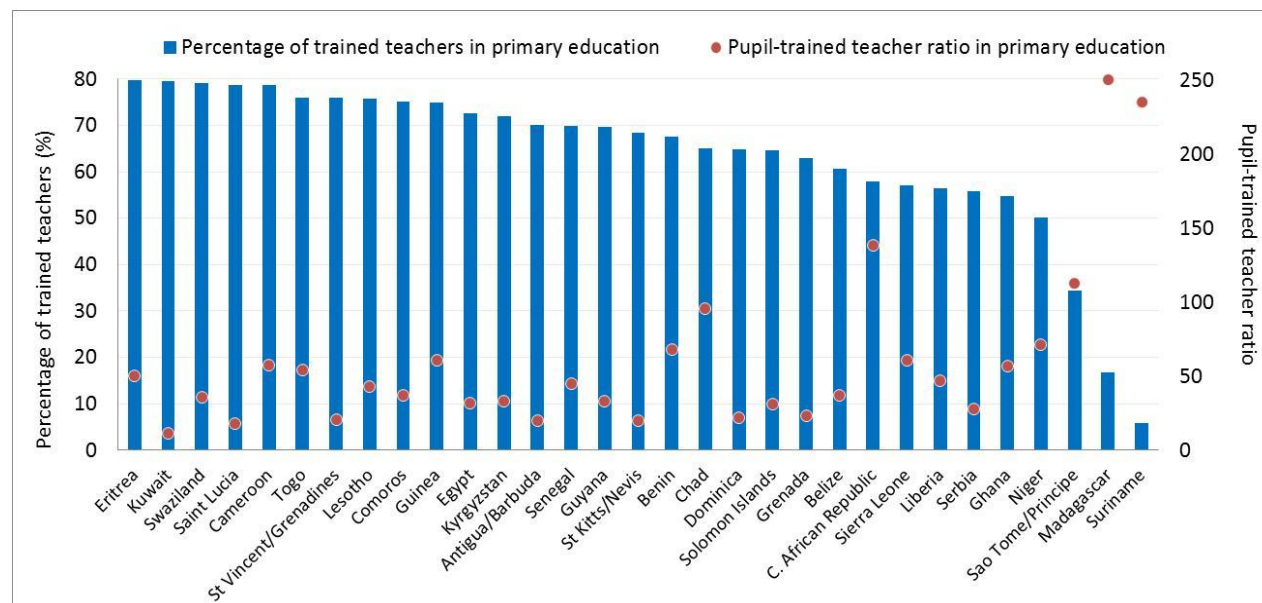
Improving education quality requires far more than just having enough teachers in the education system: teachers need to be trained, supported through professional development, motivated and willing to continually improve their teaching practices. To fully understand the challenge ahead, it is helpful to know the prevalence of trained teachers in each country and how many additional trained teachers are needed. Unfortunately, in many developing countries, reliable information on teacher qualifications and teacher training is hard to come by. What's more, national teacher education programmes vary in terms of their content, duration and qualification levels. As a result, global and regional comparisons should be used and interpreted with caution.

Many teachers have been recruited where primary education systems have expanded rapidly, but they do not always meet national minimum qualifications and training standards. According to UIS data, in 31 of the 96 countries with data after 2012, less than 80% of primary school teachers were reportedly trained according to national standards in 2014. More than one-half (17 out of 31) of these countries are in sub-Saharan Africa, and most of them (15 countries) have more than 40 pupils for every trained teacher: Benin (68), Cameroon (58), Central African Republic (138), Chad (96), Eritrea (50), Ghana (57), Guinea (61), Lesotho (43), Liberia (47), Madagascar (250), Niger (71), Sao Tome and Principe (113), Senegal (45), Sierra Leone (61) and Togo (54) (see **Figure 10**).

At the current rate of recruitment, some of these countries – Benin, Ghana, Madagascar, Niger and Togo – appear to have enough teachers to achieve UPE by 2020 or by 2030. However, they will have to contend with the double challenge of achieving this goal, while recruiting more trained teachers (or training those who are not yet trained) to underwrite quality by maintaining, on average, an acceptable ratio of pupils to trained teachers.

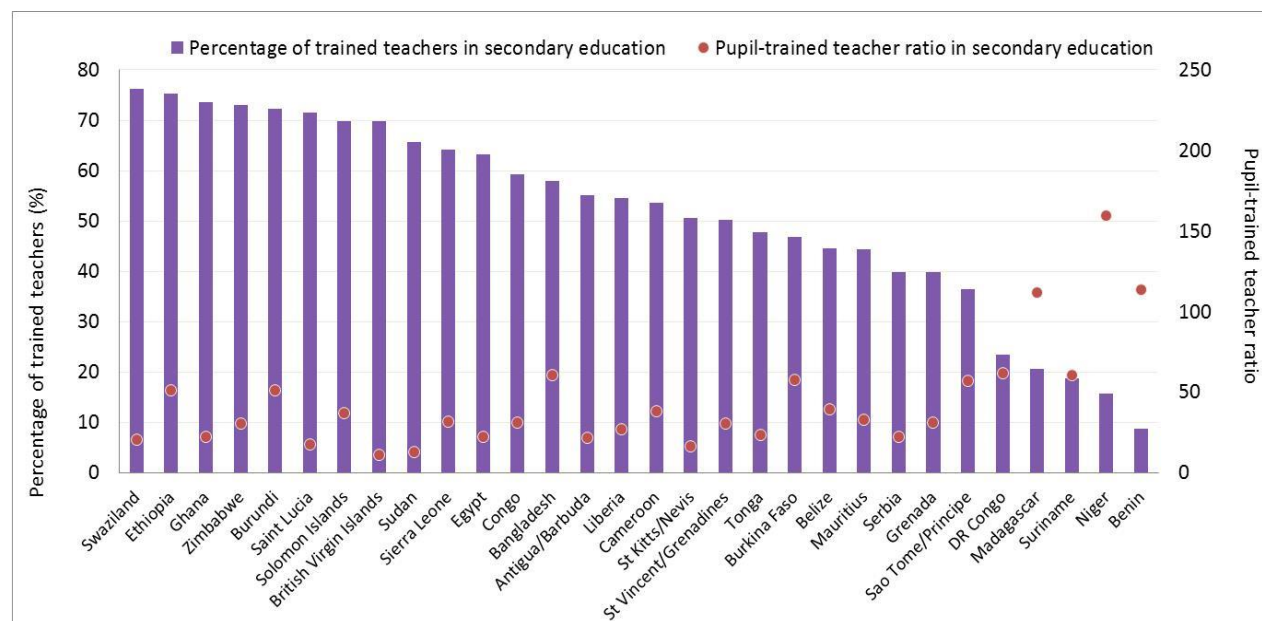
It is also difficult to estimate the proportion of trained teachers in secondary education across countries because, once again, national standards are not comparable. In 30 out of 73 countries reporting data after 2012, less than 80% of secondary school teachers were trained according to national standards in 2014. Most of these (17) are in sub-Saharan Africa, including seven that have far more than 25 pupils per trained teacher: Burkina Faso (58), Burundi (51), Democratic Republic of Congo (62); Ethiopia (52), Niger (160), Benin (114), Madagascar (112) (see **Figure 11**).

FIGURE 10. COUNTRIES WITH LESS THAN 80% OF TRAINED TEACHERS IN PRIMARY EDUCATION AND THE CORRESPONDING RATIO OF PUPILS FOR EACH TRAINED TEACHER, 2014 OR LATEST YEAR AVAILABLE



Source: [UNESCO Institute for Statistics database](#)

FIGURE 11. COUNTRIES WITH LESS THAN 80% OF TRAINED TEACHERS IN SECONDARY EDUCATION AND THE CORRESPONDING RATIO OF PUPILS FOR EACH TRAINED TEACHER, 2014 OR LATEST YEAR AVAILABLE



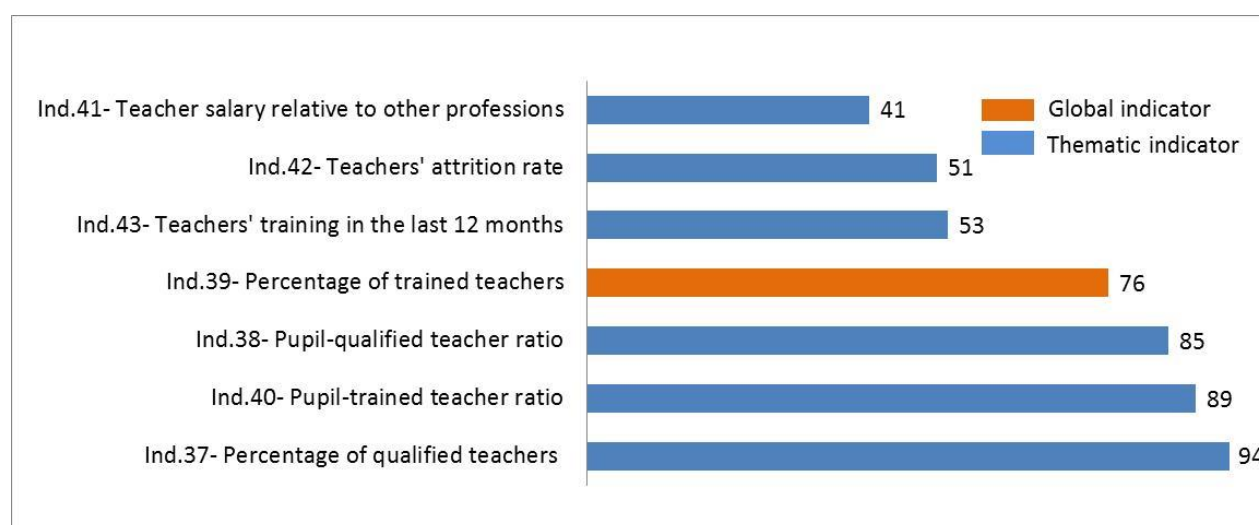
Source: [UNESCO Institute for Statistics database](#)

ARE COUNTRIES READY TO REPORT ON THE TEACHER-RELATED SDG INDICATORS?

The UIS conducted a series of regional surveys in early 2016 to map the availability of data needed to monitor progress towards SDG 4, based on 43 thematic indicators. These include subsets of 11 global indicators and 7 teacher-specific indicators, across 121 countries.

The surveys found that 72% of the data needed to monitor Target 4.c – specifically on teachers – are currently available (see **Figure 12 and Annex 2**). About 90% can report data on teacher qualifications, and there is also good coverage for indicators based on administrative data, such as the percentage of qualified teachers and pupil-to-trained/qualified teacher ratios. However, only 41% of countries can produce data to assess teacher motivation, which includes key issues such as how average teacher salaries compare to other professions that require a similar level of qualifications and the rates of teacher attrition. Such indicators require special studies or detailed labour force data that are not readily available in many countries at present.

FIGURE 12. DATA AVAILABILITY TO MONITOR THEMATIC INDICATORS RELATED TO TEACHERS SDG TARGET 4.C BY INDICATOR (%)



Source: UIS regional assessments of system readiness to monitor SDG 4, 2016.

Box 2. Data at your fingertips with our eAtlas series

What is the supply of and demand for teachers in your country? How many pupils are there for every teacher in primary and secondary schools? How many teachers are leaving the profession or meet their national qualification levels?

With just a couple of clicks, you can explore the data in a series of interactive maps and charts with our [eAtlas of Teachers](http://on.unesco.org/teachers-map), which is available in English, French and Spanish at <http://on.unesco.org/teachers-map>

The UIS has also launched the [eAtlas for Education 2030](http://on.unesco.org/sdg4-map), which presents all the global and thematic indicators currently available. This ground-breaking series of interactive maps is organized by every SDG 4 target for every country with available data and is updated when new figures become available. Every map view can be customised, shared via social media and downloaded. This edition is a “work in progress” and includes placeholder indicators for those that are not yet available in a sufficient number of countries. See <http://on.unesco.org/sdg4-map>

Source: UNESCO Institute for Statistics

CONCLUSION

The new estimates from the UIS confirm the urgent need for millions of additional teachers to propel the world towards its education goals. Looking beyond the sheer quantity of teachers, there is also a pressing need for teachers who are well-trained, well-supported and commensurately paid. Entire education systems are gearing up for the pursuit of SDG 4, aiming to ensure that all children are in school and learning by 2030. Such efforts could falter if they fail to prioritize those on the frontline: the world's teachers, who are tasked with the actual delivery of a good quality education for all.

ANNEX 1. TOTAL NUMBERS OF TEACHERS NEEDED BY REGION FOR 2020, 2025 AND 2030 (IN THOUSANDS)

Regions	Primary education									
	Number of teachers in 2014 (in thousands)	Total recruitment needed (in thousands)								
		By 2020			By 2025			By 2030		
		Total recruitment needed	Of which:		Total recruitment needed	Of which:		Total recruitment needed	Of which:	
Replacement for attrition	Staffing new classrooms		Replacement for attrition	Staffing new classrooms		Replacement for attrition	Staffing new classrooms			
Northern Africa	912	381	259	122	711	494	217	844	694	150
Sub-Saharan Africa	3,799	2,700	1,295	1,405	4,463	2,548	1,916	6,288	3,885	2,403
Latin America & the Caribbean	3,044	726	707	19	1,414	1,390	23	2,060	2,041	19
Eastern Asia	6,141	1,177	1,028	149	2,112	1,907	205	2,262	2,249	13
Southern Asia	5,922	1,378	1,147	231	2,730	2,474	257	4,087	3,850	237
South-Eastern Asia	3,572	999	985	14	2,154	2,125	30	2,988	2,980	7
Western Asia	1,372	550	401	150	968	759	209	1,351	1,102	249
Oceania	47	15	14	1	29	26	3	43	38	5
Caucasus & Central Asia	338	191	111	80	316	211	105	355	292	62
Developed regions	5,123	1,676	1,462	215	2,924	2,683	241	4,187	3,913	273
World	30,271	9,794	7,408	2,386	17,822	14,617	3,205	24,465	21,045	3,420

Regions	Secondary education									
	Number of teachers in 2014 (in thousands)	Total recruitment needed (in thousands)								
		By 2020			By 2025			By 2030		
		Total recruitment needed	Of which:		Total recruitment needed	Of which:		Total recruitment needed	Of which:	
Replacement for attrition	Staffing new classrooms		Replacement for attrition	Staffing new classrooms		Replacement for attrition	Staffing new classrooms			
Northern Africa	1,039	670	349	320	1,252	699	553	1,845	1,087	758
Sub-Saharan Africa	2,247	6,288	1,133	5,155	8,471	2,331	6,140	10,755	3,673	7,083
Latin America & the Caribbean	3,907	1,553	1,199	354	2,416	2,082	334	3,370	3,028	342
Eastern Asia	6,617	1,419	1,247	172	2,919	2,389	530	4,295	3,573	723
Southern Asia	5,498	7,096	2,181	4,915	9,073	4,105	4,968	10,896	5,988	4,908
South-Eastern Asia	2,623	1,686	829	857	2,373	1,533	840	3,279	2,274	1,004
Western Asia	1,431	1,080	484	596	1,679	928	750	2,242	1,372	870
Oceania	26	46	12	35	61	23	38	74	34	40
Caucasus & Central Asia	829	291	235	56	741	510	231	1,086	772	314
Developed regions	7,898	2,195	1,849	345	4,534	3,928	606	6,523	5,836	687
World	32,115	22,324	9,518	12,806	33,518	18,528	14,990	44,365	27,636	16,729

Regions	Primary and secondary education									
	Number of teachers in 2014 (in thousands)	Total recruitment needed (in thousands)								
		By 2020			By 2025			By 2030		
		Total recruitment needed	Of which:		Total recruitment needed	Of which:		Total recruitment needed	Of which:	
Replacement for attrition	Staffing new classrooms		Replacement for attrition	Staffing new classrooms		Replacement for attrition	Staffing new classrooms			
Northern Africa	1,950	1,051	608	443	1,963	1,193	770	2,689	1,781	909
Sub-Saharan Africa	6,046	8,988	2,428	6,560	12,934	4,879	8,055	17,043	7,558	9,486
Latin America & the Caribbean	6,951	2,279	1,906	373	3,830	3,472	358	5,429	5,068	361
Eastern Asia	12,759	2,596	2,276	320	5,031	4,296	735	6,557	5,822	736
Southern Asia	11,420	8,475	3,328	5,147	11,803	6,579	5,225	14,983	9,838	5,145
South-Eastern Asia	6,195	2,685	1,814	871	4,527	3,658	869	6,266	5,254	1,012
Western Asia	2,803	1,630	884	746	2,647	1,687	960	3,593	2,474	1,119
Oceania	73	62	26	36	90	49	41	117	73	44
Caucasus & Central Asia	1,168	482	346	136	1,056	721	336	1,441	1,064	377
Developed regions	13,021	3,871	3,311	560	7,458	6,611	846	10,710	9,750	961
World	62,386	32,118	16,927	15,192	51,340	33,145	18,195	68,830	48,681	20,149

Source: [UNESCO Institute for Statistics database](#)

ANNEX 2. LIST OF THEMATIC INDICATORS TO MONITOR TARGET 4.C

- Indicator 37. Percentage of teachers qualified according to national standards, by education level and type of institution
- Indicator 38. Pupil-qualified teacher ratio by education level
- Indicator 39. Proportion of teachers in: (a) pre-primary education; (b) primary education; (c) lower secondary education; and (d) upper secondary education who have received at least the minimum organized teacher training (e.g. pedagogical training) pre-service or in-service required for teaching at the relevant level in a given country, by sex (global SDG indicator for Target 4.c)
- Indicator 40. Pupil-trained teacher ratio by education level
- Indicator 41. Average teacher salary relative to other professions requiring a comparable level of education qualification
- Indicator 42. Teacher attrition rate by education level
- Indicator 43. Percentage of teachers who received in-service training in the last 12 months by type of training

Source: Education 2030: Towards inclusive and equitable quality education and lifelong learning for all (Incheon Declaration and Framework for Action), <http://unesdoc.unesco.org/images/0024/002456/245656e.pdf>

Please consult the UIS website www.uis.unesco.org to access the UIS Data Centre and subscribe to eAlerts on the Institute's latest publications and data releases.

Explore the data in the [UNESCO eAtlas of Teachers](http://on.unesco.org/teachers-map): <http://on.unesco.org/teachers-map>
With just a couple of clicks, you can download interactive maps and charts.