Chapter 6
A four-part strategy for providing the best teachers
A sense of vocation: Bonafice, a teacher in Lodwar, Turkana, Kenya, says ‘Teaching is more than just a profession, it’s also a calling.’
To end the global learning crisis, policy-makers need to give teachers every chance to put their motivation, energy, knowledge and skills to work in the service of improving learning for all. And they need to provide the best teachers for those who need them most. This chapter describes the strategies governments need to adopt to attract and retain the best teachers, improve teacher education, allocate teachers more fairly and provide incentives in the form of better salaries and attractive career paths. To make sure these strategies are implemented effectively, the chapter also identifies approaches to strengthen teacher governance.
Introduction

To end the global learning crisis, policy-makers need to increase significantly teacher numbers and give them every chance to put their motivation, energy, knowledge and skills acquired through training to work to maximize the learning potential of all children and young people. This chapter describes in detail the four strategies that governments need to adopt to attract and retain the best teachers, improve teacher education, allocate teachers more fairly and provide incentives in the form of appropriate salaries and attractive career paths.

Many teachers enter the profession for the best reasons. But in some countries teaching is seen as second-best; in other cases teachers are not educated well enough themselves. In addition, teaching often does not draw the most appropriate blend of men and women, or enough people who have experience of diversity.

It is crucial, therefore, for governments to ensure that children have the most able and most qualified teachers. That means attracting the right balance of good candidates, preparing them through comprehensive initial teacher education, and supporting them throughout their careers with ongoing training and guidance.

Even when all these criteria are fulfilled, however, learning outcomes remain widely unequal if the best teachers are not deployed to remote or poor areas. Unless governments ensure that teachers are fairly distributed, children who are already disadvantaged will fail to learn because of larger classes, high teacher turnover and a lack of qualified teachers.

Teacher turnover is high when salaries are too low, weakening morale and pushing teachers to take up additional jobs or seek other careers. Governments need to offer teachers a career path with prospects for promotion; where governments face severe budget constraints, salaries need to be at least high enough to ensure that teachers have enough to live on. To reduce disadvantage in learning, policy-makers also need to improve teacher governance by implementing strategies that prevent absenteeism and the encroachment of private tuition on classroom teaching time.

Strategy 1: Attract the best teachers

I chose to be a teacher because I believe that education has the power to transform the society we live in. What motivates me to be a good teacher is to be an active agent in this change that is so necessary for my country, to fight against discrimination, injustice, racism, corruption and poverty. Our responsibility as teachers is enormous, and our commitment to provide quality education must be renewed every day.

– Ana, teacher, Lima, Peru

The quality of an education system is only as good as the quality of its teachers. An analysis for this Report of the 2011 TIMSS results for grade 4 from 45 countries found that, across the countries, the better the teacher quality, the less the incidence of low achievement.1 In Poland, for example, a student attending a school with low teacher quality was 25% more likely to score below the mathematics benchmark and 34% more likely to score below the science benchmark, compared with a student attending a school with high teacher quality. In Turkey, the effects were 28% in mathematics and 30% in science. Since 42% of schools in Turkey are identified as having teachers of low quality, the effects are felt by a large proportion of students there (Nonoyama-Tarumi and Willms 2013).

The first step to getting good teachers is to attract the best and most motivated candidates into the profession. Many people who decide to become teachers are driven by the satisfaction of helping students learn, fulfil their potential and develop into confident, responsible citizens. Some have been inspired to emulate their own teachers and pass on their knowledge, skills and love of learning. Many enter teaching because they like working with children and young people.

Teaching does not always draw the best candidates, however. Some have not received enough education themselves. In some countries, teaching is seen as a second-class job for those who do not do well enough academically to enter more prestigious careers, for example as doctors or engineers. In addition, teaching

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1. The study used an index of teacher quality, including teachers’ job satisfaction, their understanding of the school’s curricular goals, their degree of success in using the school’s curriculum, their expectations for student achievement, and teacher absenteeism.
often fails to attract the right balance of men and women, or recruit enough people with disabilities or from ethnic minorities, disadvantaged backgrounds or conflict-affected areas. This section examines ways to attract not only the best teachers but also the right mix of teachers.

Getting entry requirements right

It is not enough just to want to teach. People should enter the profession having received a good education themselves. They need to have completed at least secondary schooling of appropriate quality and relevance, so that they have a sound knowledge of the subjects they will be teaching and the ability to acquire the skills needed to teach.

The level of qualification required to enter teaching is a signal of the field’s professional status. In some countries, teaching is regarded as a career for those not scoring high enough marks to enter more prestigious professions.

To elevate the status of teaching and attract talented applicants, Egypt has introduced more stringent entry requirements, requiring candidates to have strong performance in secondary school as well as a favourable interview assessment. Once selected, candidates also have to pass an entrance examination to ensure that they match the profile of a good teacher (World Bank, 2010b).

In rich countries where students’ level of achievement is high, teaching is a prestigious profession, with future teachers selected from among the best secondary school graduates. In Singapore, candidates are chosen from the top third of high school graduates. In Finland, selection is highly competitive, with only about 10% of applicants gaining entrance to teacher education programmes (OECD, 2011b).

In many poor countries, candidates enter teaching with low levels of academic qualifications. But simply raising the formal educational qualification needed to become a teacher does not necessarily ensure that teachers will be better: the quality of the academic qualification is also important. For example, data for francophone sub-Saharan African countries show no relationship between teachers’ academic qualifications and student achievement (Fehrler et al., 2009). This is an indication of the low quality of the education the teachers themselves had received. Raising entry requirements without improving the quality of general education will do little to improve the pool of candidates with the necessary subject knowledge and skills to become better teachers, and risks excluding those from disadvantaged groups with limited access to quality education.

Even having a university degree does not always ensure that those entering teaching have the subject knowledge needed to teach basic school subjects. A study for this Report of the 2007 SACMEQ data found that in most of the countries concerned, teachers with a university education had no better knowledge of basic reading and mathematics than teachers with lower qualifications who might have developed a stronger practical understanding of the subjects (Altinok, 2013a).

Where academic qualifications are not of sufficient quality, and especially where raising them would reduce representation from disadvantaged groups, teacher education policies need to widen recruitment strategies and provide intensive, high quality training to raise subject knowledge.

Recruiting a balance of male and female teachers from a wide range of backgrounds

Teachers in rural areas are usually members of the school communities. We share the same economic and social fortunes with their parents and our children attend the schools we teach in. ... I adapt the syllabus to the day-to-day values of the community and the reality of our lives.

– Fwanshishak, teacher, Kaduna state, Nigeria

Children who feel that their teachers have nothing in common with them or cannot communicate with them are less likely to engage fully in learning. Making sure there are enough female teachers and recruiting teachers from a wide range of backgrounds are important strategies for providing an inclusive, good quality education. Flexible policies for entry qualifications may be required to improve diversity of the teaching force. Recruiting teachers from under-represented groups to work in their own communities ensures that
children are taught by teachers familiar with their culture and language. Local recruitment can also help increase the supply of teachers in areas affected by conflict.

The presence of female teachers can improve girls’ enrolment and achievement, especially in more conservative settings where the movement and life choices of girls and young women is restricted. In Punjab province, Pakistan, girls’ standardized test scores were higher if they had a female teacher [Aslam and Kingdon, 2011]. Increasing the proportion of female teachers in a district has been found to improve girls’ access to and achievement in education in 30 developing countries, especially in rural areas [Huisman and Smits, 2009a; 2009b].

However, many factors limit the number of women recruited into teaching, particularly in disadvantaged areas. There may simply be not enough women educated enough to become teachers, especially in rural communities and among indigenous and minority populations. In the Lao People’s Democratic Republic, for example, few ethnic minority women have become qualified teachers, partly because the number of girls completing school is low [Kirk, 2006].

More stringent qualification requirements can limit the pool of women able to enter teaching, especially those from disadvantaged groups. In Cambodia, for example, policy changes in the late 1990s raised the entry requirement for teachers from 10 to 12 years of basic education, resulting in very low recruitment of women from rural areas, where few have access to upper secondary schools [Geeves and Bredenberg, 2005].

To ensure adequate recruitment of female teachers, affirmative action may be needed. In Mozambique, government action resulted in the numbers of female teachers in grades 1 to 5 almost tripling between 1998 and 2008 and increasing sixfold in grades 6 and 7. The Ministry of Education encouraged the heads of teacher training colleges to take measures aimed at recruiting more women, including allocating more places for female students. As a result, the proportion of women students in these colleges has consistently been at or above 50%. Such affirmative measures have helped increase the number of women teachers quickly [Beutel et al., 2011].

In Afghanistan, women teachers are urgently needed, but the lack of girls’ education until recently has meant very few women qualified to become teachers. In 2008, less than 30% of those in initial teacher education were female, even though the numbers had been increasing thanks to programmes enabling women to enter teaching with lower qualifications [Wirak and Lexow, 2008].

Working with secondary school girls to raise their interest in teaching and offering financial assistance is another strategy that can potentially increase the number of female teachers, as experience from South Sudan illustrates [Box 6.1].

Recruiting teachers from under-represented groups, such as ethnic minorities, to serve in their own communities is one approach to improve the supply of teachers in these areas and ensure that children are taught by teachers familiar with their cultural context. Where access to quality education has been limited, flexible policies on academic requirements can help ensure that greater numbers are recruited. In Cambodia, where teacher trainees normally have to have completed grade 12, this entry requirement is waived for remote areas where upper secondary education is unavailable, increasing the pool of teachers from ethnic minorities. This policy has increased the number of teachers who understand local culture, are motivated to stay in remote areas and can teach in the local language [Benveniste et al., 2008b].

Deploying teachers to conflict zones is difficult because of the dangerous working conditions, particularly as schools and teachers are sometimes attacked. In conflict-affected parts of the Central African Republic and the Democratic Republic of the Congo, teachers have been recruited from local communities to keep education going [UNESCO, 2011].

People with disabilities are likely to face large barriers to achieving the level of education needed to train as a teacher. Flexible policies for entry into teacher education programmes are a possible way to help overcome this. Scholarships and appropriate college facilities and resources for students with disabilities can also support their opportunities for training. In Mozambique, Escolas de Professores do Futuro,
Teacher education should include classroom experience

community-based teacher training colleges, run teacher education programmes for primary teachers in rural areas. One of these has been training visually impaired primary school teachers for more than ten years. Each year visually impaired graduates from mainstream schools are identified, with assistance from the local School for the Blind, and encouraged to apply for a scholarship at the college. All teacher educators have been trained in Braille by the school for the blind and the national Union of the Blind, and a number of them read and write Braille fluently. During their training, the visually impaired student teachers teach in practice schools nearby. Communities have become familiar with their children being taught by visually impaired teachers, resulting in a positive change of attitude and helping create a more welcoming environment for teachers and students with disabilities (Lewis and Bagree, 2013).

Box 6.1: South Sudan encourages secondary school girls to go into teaching

In South Sudan, where there is an enormous shortage of qualified teachers, less than 1% of girls complete secondary school. Decades of civil war coupled with cultural factors have undermined the role of women in public life and deprived most girls of the opportunity to attend school. Women make up about 65% of the post-war population, yet less than 10% of all teachers are women. Gender equity at all levels of education will be significantly harder to achieve if girls continue to lack female teachers who can support their learning and serve as role models.

To increase the number of female teachers, the Gender Equity through Education Programme provided financial and material incentives to over 4,500 girls to complete secondary school and to train young women graduates to enter the teaching profession. Schools with no female teachers were encouraged to identify a mentor for girls, a local woman who could come to the school regularly to discuss questions, concerns and ideas with girls. Communications materials with positive messages about women teachers and their role in the newly independent country were developed to reach young women. The programme distributed kits containing sanitary pads, developed and distributed learning materials, and supported other government programmes aimed at increasing gender equity in education.

The programme achieved significant success, including greater awareness among teachers and school personnel of girls’ needs. The provision of stipends in particular was linked to a substantial increase in the retention of girls in secondary schools. However, about one in five girls said they planned to pursue a career other than teaching, partly because of the low status of the profession. The police, the military and security companies pay three times as much, and teaching is seen as a stepping stone towards other jobs or post-secondary education opportunities. If such initiatives are to ensure that prospective teachers know enough about the subjects they are going to teach.

Initial teacher education must promote equitable learning

Initial teacher education should prepare teachers to support the learners who need the most help, especially in early grades when disadvantaged students are at risk of leaving school before they have learned to read a single word. But initial teacher education is not always effective in preparing teachers to deliver good quality, equitable education.

The length and institutional arrangements of initial teacher education vary across countries, as well as within countries depending on the level at which teachers will be teaching (Karras and Wolhuter, 2010). In some programmes, academic subjects are studied concurrently with educational and professional courses; in others, courses in pedagogy are offered to trainees who already have a degree in a specialized subject. A third approach is school-based training, which is...
more like apprenticeship (Tatto et al., 2012). In addition, flexible distance teacher education is becoming popular for resource-constrained governments wishing to expand their qualified teacher base.

All teacher education programmes aim to ensure that teachers meet proficiency requirements before being certified as ‘qualified’ or ‘trained’ – but the quality of teachers graduating from such widely varying programmes can also differ, depending on the quality of the content and how teaching practice is organized. Teacher quality cannot be improved simply by increasing the length of training; the quality of training also needs to be improved. In 14 anglophone African countries, for example, a longer duration of initial teacher education, while positive, was not found to have an impact on the English and mathematics scores of grade 6 pupils, according to an analysis of SACMEQ data (Fehrler et al., 2009).

**Initial teacher education should make up for weak subject knowledge**

Prospective teachers should ideally enter teacher education programmes knowing enough about the subjects they are going to teach. Teachers’ subject knowledge tends to be clearly reflected in student scores or achievement gains (Glewwe et al., 2011).

One way of gauging teachers’ knowledge is to see how they perform on tests that their students take. In Peru, as part of the 2004 national assessment of student learning, the teachers of 12,000 grade 6 students from 900 primary schools also took the mathematics and reading comprehension tests. In schools where both subjects were taught by the same teacher, students who scored well in mathematics tended to have teachers who also scored well in that subject – a result which applied for rural and urban locations, and no matter the language spoken at home (Metzler and Woessmann, 2012).

In low income countries, however, teachers often enter the profession lacking core subject knowledge because their own education has been poor. In such circumstances, teacher education programmes need to start by ensuring that all trainees acquire a good understanding of the subjects they will be teaching.

Weak subject knowledge can be found among primary school teachers. In a 2010 survey of primary schools in Kenya, grade 6 teachers scored only 61% on tests of grade 6 mathematics material; none of the teachers had complete mastery of the subject (Ngware et al., 2010). In India, where student learning outcomes remain low, particularly for poor populations, only 9% of primary school teacher candidates passed the Central Teacher Eligibility Test introduced by the government in 2011 with little improvement in subsequent years (Chudgar, 2013).

In some countries, teachers are not sufficiently proficient in the language of instruction. In Kano state, northern Nigeria, 78% of 1,200 basic education teachers were found to have ‘limited’ knowledge of English when tested on their reading comprehension and ability to correct a sentence written by a 10-year-old (Education Sector Support Programme in Nigeria, 2011). In the Gambia, teacher testing undertaken as part of an Early Grade Reading Assessment found that primary teachers, who teach in English, scored poorly on basic English language tests. Only 54% correctly identified which of four words (heavy, hard, huge and rotten) was closest in meaning to ‘enormous’ (Mulkeen, 2013).

Students being taught by teachers with weak subject knowledge inevitably face difficulties in learning. In southern and eastern Africa, teachers were given similar reading and mathematics tests as their grade 6 students as part of the 2007 SACMEQ. In South Africa, an increase of about 100 points in the teacher score was found to increase the student score by 38 points (Altinok, 2013a). Students with the opportunity to be taught by a teacher from the best 10% instead of a teacher from the worst 10% would see their score improve by 110 points, equivalent to the difference between Mpumalanga province, with the third lowest performance out of nine provinces, and Western Cape, with the highest (Moloi and Chetty, 2010).

Teacher education programmes of the highest scoring countries on the Teacher Education and Development Study in Mathematics in 2007/08, including Singapore and Taiwan Province of China, offer more balance between training in subject knowledge, methods of teaching subject knowledge and general teaching methods than some other countries (Babcock et al., 2010).
In developing countries, teacher education institutions that need to upgrade trainees’ weak subject knowledge often do not have time to do so, due partly to competing curriculum demands. For instance, in Uganda the curriculum for initial primary teacher education devotes 262 hours of instructional time to teaching methods and pedagogical theory, and only about 120 hours each to mathematics, language (English) and science. Most of this time is spent learning subject-specific teaching methods, which assume previous solid subject knowledge (World Bank, 2012c). In Kenya, teacher trainees are required to take 10 subjects and go on teaching practice in the first year, with 9 subjects and teaching practice in the second year. This leaves little time to fill gaps in trainees’ subject knowledge (Bunyi et al., 2013).

To address such problems in Ghana, teacher education was restructured in the early 2000s. Trainees have to pass an examination on foundation academic subjects at the end of their first year before they can proceed to the second and third years, which focus mainly on pedagogical skills. Trainees who fail can resit the examination, but those who fail a second time are withdrawn from training (Akyeampong, 2003).

Training teachers to teach, particularly in early grades

Teachers need not only sound subject knowledge but also training in how to teach. Knowledge of strategies for teaching subject content varies widely between and within countries. Trainee teachers of lower secondary school mathematics in Taiwan Province of China scored over one and a half times higher in pedagogical knowledge than their counterparts in Chile, for example (Blömeke, 2012). Within Chile, the weakest 5% of trainees scored below 200 points while the strongest 5% scored over 500 points (Tatto et al., 2012). Unless training tackles such divergences, it is bound to perpetuate inequality in student learning.

In sub-Saharan African countries, where learning outcomes are low and often very unequal, pre-service teacher education tends to be based on curricula that place little emphasis on the quality and variety of teaching methods. In Ghana, Kenya, Mali, Senegal, Uganda and the United Republic of Tanzania, for example, trainees are not trained in ways to ensure active participation in the classroom so that students understand the lesson (Akyeampong et al., 2013).

As a result, few primary school teachers demonstrate an adequate level in the methods for teaching their subject. Analysis of videotaped mathematics lessons in Botswana and in North West Province, South Africa, demonstrated that most teachers lacked the ability to help students learn the material. Teachers who did help students learn used a well-planned lesson, with richness and variety in the tasks presented, and had strong communication skills that conveyed mathematical concepts at pupils’ level of understanding (Sapire and Sorto, 2012).

Adequate pre-service teacher education is also essential to enable children to acquire good reading skills early. Children should be learning to read, decode and understand text within the first few years of schooling: those that do not risk being left behind. However, teachers are seldom trained to teach these skills. In Mali, a study of pupils’ skills using an Early Grade Reading Assessment and teacher observation found that few teachers were able to teach their pupils how to read. Teachers had been inadequately prepared to apply the required teaching methods and did not give sufficient attention to supporting pupils’ individual reading. This is no doubt an important reason why nearly half the pupils in Mali cannot read a word in their own language at the end of grade 2 (Varly, 2010).

Teacher education programmes need to support teachers in being able to teach early reading skills in more than one language and to use local language materials effectively. However, teachers are rarely prepared for the reality of multilingual classrooms. A small-scale study of mathematics teaching in Botswana indicated that bilingual teacher education was failing in its aim of preparing teachers for multilingual classrooms where pupils’ home language may be different from both the national language and English, the medium of mathematics teaching (Kasule and Mapolelo, 2005). In Senegal, where attempts are being made to use local languages in schools, training is given only in French, and a survey found that only 8% of trainees express any confidence about teaching reading in local languages (Akyeampong et al., 2013).
Preparing teachers to support learners from diverse backgrounds

Teacher education needs to prepare trainees to instruct students from diverse backgrounds, using a wide array of strategies. This is particularly important in poorer countries, where student needs are likely to be especially diverse as large numbers of marginalized children enter school for the first time.

Training in the use of diagnostic and formative assessment tools is crucial, so that teachers can identify weak learners and provide them with targeted support. Yet it is rarely part of initial teacher education in poor countries. For this reason, projects associated with Early Grade Reading Assessments that use diagnostic and continuous assessment to identify and address gaps in early grade reading skills in developing countries include in-service training and mentoring to support teachers in using such approaches (Gove and Cvelich, 2010) (see the section on Improving teacher skills through ongoing education).

Training in diagnostic and formative assessment is also insufficient in rich countries. In a study of EU countries, teachers in half the countries surveyed reported a lack of ability to diagnose student problems swiftly and accurately, and to draw from a wide repertoire of appropriate solutions (European Commission, 2012). Incorporating training in such skills into pre-service curricula, and ensuring that teacher educators know how to teach these skills, is vital so that teachers have a strong foundation for supporting children with diverse learning needs.

As a result of inadequate training, including overemphasis on theory rather than practice, many newly qualified teachers are not confident that they have the skills necessary to support children with more challenging learning needs, including those with severe physical or intellectual disabilities, in mainstream classrooms (Forlin, 2010). In Viet Nam, after the need for adequate human resources to support inclusive education initiatives was recognized, a core national curriculum and guiding framework for inclusive education was developed (Inclusive Education in Action, 2010). It includes learning modules designed to be stand-alone or incorporated into existing programmes at teacher training colleges and universities. In colleges, courses cover creating individual education plans for all learners, designing and adapting activities for children with different learning needs, and assessing learning outcomes of children with special needs or disabilities (Nguyet and Ha, 2010).

Among OECD countries, those where teacher education includes attention to addressing diversity achieve the best outcomes. Finland, which has one of the world’s highest PISA scores and very little inequality between students, trains future teachers to identify students with learning difficulties (OECD, 2011b).

Stagnating or declining learning outcomes in high income countries in recent years have prompted policy debate and reforms aimed at training teachers to help weak learners (European Commission, 2012). After scoring below average for OECD countries in the 2000 PISA assessment, Germany introduced teacher education reforms that helped improve student learning, as measured by PISA in 2009. Future teachers are recruited from the top third of high school graduates, and receive extensive preparation at university, with a focus on identifying and addressing problems faced by students with low achievement. They receive an extended period of mentoring by experienced teachers before becoming fully qualified teachers (OECD, 2011b).

A study of pre-service teacher education for lower secondary mathematics teaching in 15 countries found that none of the countries included preparation for student diversity as a key focus of teacher education. In several countries, including Germany and Poland, only a few future teachers indicated they had received professional preparation that included measures to prepare for student diversity. Five countries were classified as having strong preparation for professional challenges: Botswana, Chile, Malaysia, the Philippines and the United States. Student teachers in these countries have more opportunities to learn how to teach students from diverse cultural or socio-economic backgrounds, as well as those with physical disabilities (Blömeke, 2012).

Finland trains future teachers to identify students with learning difficulties

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2. Botswana, Chile, Taiwan Province of China, Georgia, Germany, Malaysia, Norway, Oman, the Philippines, Poland, the Russian Federation, Singapore, Switzerland, Thailand and the United States.
In remote or under-resourced schools and classrooms, some teachers need to teach multiple grades and ages in one classroom. In some countries in sub-Saharan Africa, including Burkina Faso, Mali, Niger, Senegal and Togo, at least 10% of students study in multigrade classrooms. In Chad, almost half of students are taught in such classrooms. In some countries, class size is higher in multigrade classrooms: in Mali, for example, there are over 73 students per class, compared with an average of 57 students in single grade classes (UIS, 2012b).

Pre-service education and ongoing training on the needs of the multigrade class are vital. When training in teaching multigrade classes is provided, teacher skills can be raised and learning outcomes improved. For example, a small project in Sri Lanka trained teachers to develop lesson plans and grade-appropriate tasks for classes combining grades 4 and 5. Results found that such methods had a positive impact on pupils’ achievement in mathematics (Vithanapathirana, 2006).

Teachers also need adequate preparation to understand and address gendered dimensions of school and classroom interactions that can negatively affect girls’ and boys’ learning experiences and outcomes. Teachers, both female and male, need training to understand and recognize their own attitudes, perceptions and expectations, and how these affect their interactions with pupils. In Turkey, a one-term pre-service teacher education course on gender equity had a significant impact on female teachers’ gender attitudes and awareness. Those participating in the course, which included topics such as gender socialization, selection of teaching materials and the school environment, showed significant improvement on a scale designed to measure attitudes to gender roles (Erden, 2009).

The Forum for African Women Educationalists has developed a Gender-Responsive Pedagogy model to address the quality of teaching in African schools. The model includes training teachers in the use of gender-equitable teaching and learning materials, classroom arrangements and interaction strategies, along with strategies to eliminate sexual harassment and encourage gender-responsive school management. Since 2005, over 6,600 teachers have been trained using this model (Forum for African Women Educationalists, 2013). Case studies of schools where teachers were trained using this model – as part of a wider package of activities – reported that teachers were more responsive to gender issues and provided greater support to girls; the studies also found improved participation and learning outcomes (Forum for African Women Educationalists, 2006; Haugen et al., 2011).

**Initial teacher education needs to provide classroom experience**

> I think that academic training gave me huge support in learning subject knowledge, but, without a doubt, the training which helped me improve the most was the daily work in the classroom.
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> – Elena, teacher, Madrid, Spain

Opportunities for teaching practice are essential to ensure that teacher trainees succeed later in improving students’ learning. Countries that have achieved high student learning outcomes are also those that ensure sustained periods of learning to teach in classrooms under the supervision of expert teaching staff (OECD, 2011a, 2011b; Schleicher, 2012).

Teacher education programmes in developing countries often fail to ensure that trainees get adequate experience of learning to teach in classrooms, which contributes to the poor quality of teaching. Time spent on teaching practice can be as short as nine weeks out of six months of training in Senegal, or nine weeks out of two years in Kenya. In both countries, teaching in the lowest three grades is supposed to be included as part of teaching practice, but many trainees were not able to experience the breadth of curriculum and grades that they were promised (Akyeampong et al., 2013).

Even where initial teacher education programmes include school-based experience and teaching practice, the timing can be problematic. In some African countries, school-based practice may take place some time after the training programme, severely limiting opportunities for feedback and critical reflection on classroom experiences. A lack of mentoring and erratic support from tutors further compound the problem (Pryor et al., 2012).
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Strategy 2: Improve teacher education so all children can learn

To improve teacher quality, Pakistan is committed to replacing traditional training methods such as lectures and seminars with those promoting practical skills and child-centred pedagogy (USAID, 2008). But trainees still spend only around 10% of their course time on practical teaching experience (Nordstrom, 2013).

In poor countries, teachers need to be prepared for the practical challenges of under-resourced and diverse classrooms, particularly in remote, rural areas. Development Aid from People to People, an international non-profit development organization, has established teacher training colleges in Malawi that offer pre-service education designed to equip new teachers with the skills necessary for rural schools. A strong practical orientation and ample time for school-based experience and community work help prepare teachers for the realities of living and teaching in rural areas (Box 6.2).

Box 6.2: Practically oriented pre-service teacher education supports teachers in rural Malawi

Malawi has one of the world’s most dramatic teacher shortages, resulting in primary school classes with around 76 students on average. Unless urgent action is taken, the country is unlikely to close the teacher gap by 2030. Shortages are particularly problematic for rural areas, where teachers, especially women, are often unwilling to teach. These circumstances contribute to some of the lowest learning outcomes in the world.

To increase the number of primary teachers equipped to teach and stay in rural areas, Development Aid from People to People Malawi recently established four teacher education colleges in rural districts. Training programmes emphasize the integration of theory and subject content, the practical application of teaching skills, student-led research and reflection, community outreach and social development. Opportunities for teaching experience are provided during initial college-based training and one year of teaching practice. On graduation, the new teachers are expected to work effectively in rural areas, including using teaching and learning materials produced from locally available resources. The training programmes place a strong emphasis on supporting the needs of all learners, including learners at risk, and establishing community-based projects such as school gardens to support vulnerable children.

The training follows a 30-month cycle, divided into eight periods. During the first five periods, trainees are based at the college to build academic, practical and social skills, and are encouraged to carry out research in surrounding communities on strategies for teaching and working in rural areas. They learn about local development issues and partner with nearby schools for experience in classroom teaching, extracurricular activities and community outreach. The sixth period is a full school year in teaching practice, with a pair of trainees taking responsibility for a class, assisted and supervised by a mentor at the primary school and the tutors at the college. The trainees return to the college for the seventh and eighth periods – for reflection, specialization and preparation for final examinations.

In a recent evaluation of the programme, 72% of trainees identified the school practice component as the area of study that most prepared them for teaching in rural areas. The evaluation concluded that the strong practical orientation of the programme provided better preparation than the more theoretical approach in government colleges. The evaluation also found that 80% of the trainees gained experience in providing remedial support to trainees, compared with just 14% in government colleges.

The programme has been particularly beneficial in encouraging young women to train as rural teachers. Of the female students in the programme, 80% found that school practice topics prepared them adequately for teaching in rural areas, compared with 38% of female students in government colleges. Furthermore, 87% of female students in the programme said they would opt for a rural post, compared with 67% of those in government colleges.

The Ministry of Education posted graduates of the programme to rural government schools. By 2011, 564 newly qualified teachers were working in rural primary schools, an additional 750 were training and 1,420 children were receiving remedial lessons. Given the large numbers of rural children needing such support, government colleges need to learn from the programme to ensure that all trainee teachers acquire the skills to teach in areas where they are most needed.

Sources: DeStefano (2011); Development Aid from People to People (2013); Mambo (2011).
Part 3: Supporting teachers to end the learning crisis

Chapter 6

Improving teachers’ skills through ongoing education

Ongoing professional learning has been essential for me. Initial teacher education was not enough. Hearing from experienced teachers, discussing experiences, trialling ideas in the classroom, team teaching, attending conferences that challenge as well as reinforce my knowledge – all are essential.

– Marian, teacher, Caulfield South, Australia

All teachers require continuing support once they reach the classroom to enable them to reflect on teaching practices, to foster motivation and to help them adapt to change, such as using a new curriculum. Teachers who have received some in-service training are generally found to teach better than those who have not, although it depends on the purpose and quality of the training received (Glewwe et al., 2011).

Ongoing training is even more important for teachers who enter classrooms with little or no pre-service teacher education, or whose training has not sufficiently exposed them to the reality of the classroom. Ongoing training should not be seen only as a way of compensating for low subject knowledge and a lack of initial teacher education. It should also play a key role in improving learning outcomes by providing teachers with new ideas throughout their career about how to support weak learners.

In Shanghai, China, all primary school teachers are expected to complete 240 hours of professional development within five years.

Upgrading knowledge and skills of untrained and undertrained teachers

Policy-makers with a constrained budget may be forced to choose between providing initial and in-service training. Recruiting untrained community and contract teachers at the local level, and providing them with in-service training, is sometimes seen as a more rapid and cost-effective way of addressing teacher shortages than going first through an expansion of the initial training system.

As a result, there are large numbers of untrained teachers in some countries, where initial teacher education has been sacrificed in times of resource scarcity. In Benin, for example, the pre-service training colleges (écoles normales) were closed between 1987 and 2006 as the country stopped recruiting civil service teachers due to budget constraints. Large numbers of community and contract teachers were hired locally, and have not received any pre-service training. Even though the colleges have reopened, they cannot meet demand because of increases in enrolment. Many of the community and contract teachers have received some form of ongoing training – usually of short duration and without certification – from an uncoordinated network of public, private and NGO providers (Pôle de Dakar and République du Bénin, 2011). To improve this situation, a programme designed in 2007 offers these teachers three years of training to give them qualifications equivalent to those of civil service teachers.

Those designing ongoing training for qualified and underqualified teachers can learn from non-formal programmes that aim to build basic foundation skills among out-of-school children. Community teachers on these programmes often receive a short introductory methods-based orientation, on-the-job support and frequent, localized in-service training, with a focus on the practical aspects of teaching (DeStefano et al., 2006; Nicholson, 2007).

Regular supervision and ongoing training have the potential to address knowledge gaps and upgrade and reinforce acquired skills. In Mexico, the Consejo Nacional de Fomento Educativo system provides an intensive training and support package for untrained teachers in
community-run pre-schools in disadvantaged areas. They also receive a scholarship for tuition to continue their secondary or post-secondary education. Trainers are assigned to clusters of 10 schools and participating community teachers meet monthly for supervision and training (Yoshikawa et al., 2007). In Malawi, community teachers recruited into the government’s second-chance basic education programme participate in weekly training and planning sessions run by supervisors and receive more intensive training in both content and teaching methods during holidays, led by tutors from government teacher training colleges (Allsop and Chiuye, 2010).

Teachers in conflict zones, including refugee camps, are among those most in need of a coherent training strategy to compensate for the low levels of qualifications of most refugee teachers (Box 6.3).

**Tailoring teacher education to improve learning in the early grades**

Gaps in the quality and relevance of initial teacher education can limit teachers’ effectiveness. In-service training can bridge those gaps, but often fails to foster the skills teachers need to respond to particular learning needs, especially in the early grades. One way to make sure teachers acquire those skills is to tailor their training to student needs as revealed through classroom assessments.

The Early Grade Reading Assessment, a tool designed to assess basic skills, enables educators to identify schools and classrooms with particular needs. Once areas for improvement have been identified through the assessment, the results can be used to develop programmes to train teachers in instructional approaches that strengthen particular foundation skills.

One successful example is the USAID-funded Girls’ Improved Learning Outcomes, a three-year project in Egypt that aims to improve quality of teaching and learning for girls in primary schools in four governorates by training teachers to teach reading in Arabic. In 2008 an Arabic version of the assessment materials was developed to assess learners’ basic literacy.

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3. Beni Suef, Faiyum, Minya and Qena.

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**Box 6.3: Improving teacher development in Dadaab, the world’s largest refugee complex**

Dadaab is the largest refugee settlement in the world, and has existed close to the Kenya-Somalia border for 20 years. It is home to around 474,000 refugees, including an entire generation of Somali youth who have grown up in the camps. In addition, Dadaab experienced a recent population surge as a result of conflict and drought in the Horn of Africa in 2011. Providing education in Dadaab’s five camps is a major challenge: 81,590 children are crowded into 39 schools, and current enrolment rates represent only 36% of the total population of school age children.

The camps have an acute shortage of trained teachers, which worsened in 2012 when around 20% of teachers left the profession, reportedly because of low pay for refugee teachers and a heavy workload. As a result of these poor conditions, Dadaab’s exam scores in the Kenya Certificate of Primary Education in 2012 averaged 163 out of 500, ranking it second from the bottom in the country.

A lack of training adds to these problems. In the camps, about 10% of teachers are qualified Kenyan teachers, the remaining 90% being refugee teachers drawn from the camps. Although most refugee teachers have at least completed secondary school, their pass rate is likely to have been very low. Only 2% of refugee teachers are qualified; they are ineligible for admission to higher education institutions in Kenya, and so would require alternative qualification options.

Several international NGOs provide new teacher recruits with between 5 and 14 days of induction training. Its content has been haphazard; workshops offer a range of topics but without a common framework identifying the basic knowledge and skills teachers should be expected to demonstrate.

To solve these problems, a teacher management and development strategy for 2013–2015 has been produced. Instead of individual partners running their own training projects and management systems, the strategy proposes a harmonized, standardized approach to make more efficient use of resources and improve accountability on the part of both teachers and partners. It recommends a shift towards school-based development and problem-solving, with training including school-based practice where possible. The strategy also proposes qualification and certification options for teachers who meet minimum higher education admission requirements, as well as options for the majority who do not meet the requirements. It recommends links with Somali education authorities to explore cross-border certification as well, with a view to eventual repatriation of Somali refugee teachers.

Sources: Dryden-Peterson (2011); Inter-Agency Education Coordinating Group (2013).

The baseline study in 2009 revealed that out of 2,800 pupils in 60 schools, nearly two-thirds of grade 2, 3 and 4 pupils were unable to read a single word from a simple paragraph (RTI International, 2012).

The 2009 assessment recommended an intervention to strengthen phonics instruction in the Arabic alphabet to enhance overall reading performance. On the strength of this, a package was developed, combining training, support and resources for grade 1 and 2 teachers. After six
months of improved phonics instruction, grade 2 pupils in intervention schools were, on average, correctly reading nearly three times as many syllables as pupils of the same grade in control schools (USAID, 2012).

Another project that has made a substantial impact on pupils’ progress by training and supporting teachers in how to teach, monitor and assess early reading is EGRA Plus: Liberia. A two-year pilot programme, subsequently extended, included intensive training and follow-on support, backed by detailed curriculum-based lesson plans and diagnostic and formative assessment tools (Box 6.4).

**Box 6.4: Helping teachers track pupils’ progress in Liberia**

EGRA Plus: Liberia was born out of the poor results in Liberia’s Early Grade Reading Assessment, which found that around one-third of grade 2 students were unable to read a word. In 2008, the Ministry of Education, with USAID support, launched the programme to improve reading skills through evidence-based reading instruction and assessment. EGRA Plus: Liberia was designed to investigate the impact of the programme on learning outcomes for grade 2 and 3 pupils. Schools were assigned to one of three groups: full intervention, light intervention or no intervention. All schools participated in an assessment of pupils’ reading skills to identify literacy, decoding, and fluency comprehension levels.

Full intervention consisted of teacher education and support, structured lesson plans, teaching resource materials, and books for children to take home. Teachers participated in an intensive one-week course in early grade reading instruction and how to use formative and diagnostic assessment to identify and support weak learners. This was followed up with classroom-based support from trained mentors for the full programme duration of two years. Parents and community members were regularly informed of learner assessments. In the second year the programme provided sequential, scripted lesson plans that gave teachers and pupils a clear structure. The light intervention was minimal: informing parents and community members of pupils’ reading levels through report cards, to examine whether such ‘accountability’ affected achievement.

The final reading assessments demonstrated that the full intervention had accelerated children’s learning. Pupils receiving the full intervention increased their reading comprehension scores by 130%, compared with 33% in light or no intervention schools.

The programme had a higher impact on girls, bringing them up to boys’ level from a slightly lower starting position. For example, girls in grade 2 increased their scores by 193% while the boys’ increase was 149%. Due to the success of the pilot, the government and USAID have scaled up the programme in 1,300 schools. However, the costs of going to scale are considerable. It is estimated that reading materials alone cost over US$1,000 per school. Teacher education activities, coaches’ salaries and transportation add substantially to the costs, requiring measures to ensure the programme’s sustainability.

Sources: Davidson and Hobbs (2013); Gove and Cvelich (2010); Piper and Korda (2011).

**Mentors offer valuable support to new teachers**

Previous to mentoring, the teachers taught according to their own liking. The topics they found perplexing were either left out or taught in a way the students found hard to comprehend. Now, it’s not like this because they ask for our advice and, through model lessons, we guide them.

– Arif, teacher mentor, Punjab, Pakistan

Mentoring new teachers once they are in the classroom is vital, particularly in poorer countries where teachers have limited prior practical experience. As part of Ethiopia’s second Teacher Development Programme, teacher candidates are expected to work in schools with mentor teachers and supervisors (Nordstrum, 2013). In Ghana, trainees are paired with experienced teachers in early grades (Akyeampong et al., 2013).

The countries that achieve the highest scores in international learning assessments such as PISA and TIMSS emphasize mentoring of all newly qualified teachers, supported by additional resources targeted to their schools (Darling-Hammond et al., 2010). Time is allocated to enable new teachers and their mentors to participate in coaching and other induction activities, and for training of mentors. For example, New Zealand funds 20% release time for new teachers and 10% release time for second-year teachers so that they can meet with mentors, observe other teachers, engage in professional development activities and familiarize themselves with the curriculum (Darling-Hammond et al., 2009; NZEI Te Riu Roa, 2013). Similar models are found in several high performing East Asian countries.

In several countries, including England [United Kingdom], France, Israel, Norway, Singapore and Switzerland, mentor teachers are given formal training. In Norway, principals assign an experienced staff member as a mentor to each new teacher; a teacher education institution then trains the mentor and takes part in in-school guidance (OECD, 2005). Singapore provides government funding for experienced teachers to train for a postgraduate degree to become mentors for other teachers (Darling-Hammond et al., 2009).
Ongoing training to adapt to new teaching and learning approaches

We have started involving students in the classroom. The role of the teacher has changed into a facilitator and a guide. The rest of it is up to the children. They actively take charge of their learning. We have moved to activity-based learning, which is not like we used to teach – writing on the board, giving homework and not being concerned about whether students understood anything or not.

– Mubarak, teacher, Punjab, Pakistan

In many low income countries, teaching relies on traditional approaches such as lecturing, rote learning and repetition, reflecting what teachers experienced themselves at school and how they were taught in teacher education institutions (Hardman, 2012). Many countries have been trying to move from these teacher-dominated approaches towards a learner-centred one in which students are encouraged to ‘learn to learn’. Such an approach emphasizes critical thinking, with teachers expected to help students actively construct knowledge through activities, group work and reflection (Vavrus et al., 2011).

Without training, teachers can find the shift to learner-centred pedagogy demanding, particularly in schools with few resources. In rural India, for example, primary school teachers experienced tensions in what they saw as the handing over of greater classroom control to pupils (Sripракash, 2010). Teachers need ongoing support to help them adapt to new approaches.

A school-based teacher development programme in Kenya shows that such training can be effective in helping teachers adopt learner-centred methods. A teacher development programme for 47,000 primary school teachers in English, mathematics and science combined six months of self-study, based on distance learning materials, and meetings with tutors at cluster resource centres. The programme included 54 hours of self-study in pedagogical practice and 54 hours on the three subjects, and led to certification. It was found to increase teachers’ use of their students’ mother tongue, of lesson planning and of teaching aids produced with students. Teaching became more interactive, and attitudes towards students, especially girls, became more positive (Hardman et al., 2009).

The Healthy Learning programme, also in Kenya, uses in-service support to primary school teachers to improve pupils’ understanding of health and nutrition through active teaching and learning methods. The programme, initiated in 2008 by the Ministry of Education in partnership with the Flemish Association for Development Cooperation and Technical Assistance, includes short training workshops, on-the-job support, exchange visits and practical school projects. Rather than changing the curriculum or introducing new topics, it encourages active teaching and learning approaches within the existing curriculum through practical school-based activities, such as school gardens, agroforestry technology, livestock development and water management, making use of locally available resources at school and district levels. The programme, being implemented in 163 public primary schools in disadvantaged arid and semi-arid areas, has been found to be relevant and effective (Management for Development Foundation, 2013).

Interventions that seek to complement traditional teaching are often organized by NGOs. In a programme in the Philippines, teachers received two days of training to conduct one hour of reading activities every day. After one month, grade 4 students’ reading scores had increased significantly (Abeberese et al., 2013). In the Indian state of Bihar, government school teachers received training to use new learning materials adapted to the local context. Combined with other initiatives, including using village volunteers to provide children with support outside school hours, the programme increased achievement (Walton and Banerji, 2011).

The benefits of ongoing training can be short-lived if resources are inadequate and the learning environment unsupportive. In 2005/06, Uganda developed a primary school ‘thematic curriculum’ based on three main principles: rapid development of basic literacy, numeracy and life skills in the early grades; the use of themes relevant to children’s lives; and teaching in languages in which children were already proficient. Teachers were asked to use learner-centred methods and to adapt the direction of lessons to take children’s reactions into account. Teachers received 10 days of intensive training before the new curriculum was introduced nationwide in early 2007. Teachers
interviewed later that year said the training had been too short for them to understand the new curriculum and be prepared to teach it [Altinyelken, 2010].

Traditional pre-service teacher education and school examination practices can prevent teachers from introducing learner-centred approaches. Jordan undertook curriculum reforms and training to promote transferable skills for the ‘knowledge economy’, including creativity, critical thinking and teamwork. Teachers, however, still relied on rote learning, as this was what the secondary school graduation examination required (Box 6.5).

**Box 6.5: In Jordan, rote learning hampers teaching of transferable skills**

Jordan has made progress in enrolling its rapidly growing child and youth population, with 91% in primary school and 86% in secondary school, higher than the average rate for middle income countries. Yet while learning outcomes improved in the early 2000s, they have stagnated or even deteriorated in recent years. In 2011, the proportion of students passing the minimum benchmark in mathematics in the TIMSS assessment was lower than in 2007, and national assessment scores in communication and information management in all grades were also well below the targets set by the Ministry of Education.

Progress in the early 2000s might have been facilitated by the first phase of the Education Reform for the Knowledge Economy (2003-2009), which provided in-service training for teachers in using ICT in the classroom and promoting critical thinking and problem-solving by encouraging students’ active participation. Implementation of the reform has been limited, however, by the emphasis on rote learning in the Tawjihi, the secondary school graduation examination on which admission to universities depends. In addition, teaching practice is short and most mentors lack the skills needed to train future teachers.

To avoid further deterioration in learning standards and ensure that students acquire the skills needed for Jordan to participate fully in the knowledge economy, the Tawjihi needs to be modernized and teachers need to be trained to adopt strategies that improve learning outcomes.

Responding to training needs, the Queen Rania Teacher Academy, established in 2009, provides subject-based professional development programmes for teachers that focus on using active learning for implementing the national curriculum, and has developed an induction programme for newly appointed teachers. The academy also supports a Schools Network initiative that provides opportunities for teachers, school leaders and supervisors to share ideas regarding instruction and receive support during and after training. The challenge will be for initiatives like this to reach the many teachers who need such support.

**Trainers also need training**

The key role that teacher educators play in shaping teachers’ skills is often the most neglected aspect of teacher preparation systems. Many educators seldom set foot in local schools to learn about the challenges prospective teachers face and how they might address them. Few education policies acknowledge the need for teacher educators to have close contact with schools, or educators’ own training needs. There is, therefore, an urgent need to train teacher educators to prepare teachers adequately and effectively.

In most developing countries, teacher educators have very little training. In countries including Kenya, Uganda and the United Republic of Tanzania, teacher educators have no instruction in training teachers for basic education [Pryor et al., 2012].

Analysis of teacher education practices in six sub-Saharan African countries found that educators training teachers in early reading were rarely experts in the field by either experience or training. Trainers’ limited knowledge of approaches used in the field impeded their ability to help trainees develop a wider repertoire of effective skills in teaching reading in the early grades. In Mali, teacher educators had no background in teaching how to read. Often educators’ understanding of how children could progress in reading was based on the teacher education curriculum, little of which reflected the requirements of the primary education curriculum. For example, a quarter of teacher educators surveyed in Ghana and Uganda thought that comprehension was a skill to be taught only in upper primary, even though it was a stated benchmark for grade 3 in both countries. Significantly, mathematics tutors in all six countries had no special training in teaching primary mathematics at initial teacher education level [Pryor et al., 2012].

One example of supporting teacher educators as a key way of improving teacher training programmes comes from Nicaragua, where a professional development module was designed to address the instructional gaps identified in an Early Grade Reading Assessment in 2008. A first step was a four-day training workshop for about 180 teacher trainers and ministry...
A four-part strategy for providing the best teachers

Strategy 2: Improve teacher education so all children can learn

staff, focusing on using assessment tools to inform and improve instruction. The ministry funded adaptation of the workshop materials – sample lessons, assessment instruments and training materials – and made them into training guides (USAID, 2010).

Curriculum reform requires teacher educators to be adequately prepared to orient teachers in curriculum changes. In Rajasthan state, India, the School and Teacher Education Reform Programme, established in 2010, aims to move schooling away from rote learning and towards teaching based on understanding and grounded in the local context of the child. In an innovative move to build legitimacy and ownership among teacher educators, a group made up of faculty from state, private and NGO teacher training colleges and universities was established to help develop teacher education and school curricula and materials (Saigal and Joshi, 2013).

Reforms aimed at helping weak students need to ensure that teacher educators are trained to give teachers appropriate support. In Viet Nam, where a national core curriculum framework on inclusive education has been developed, many teacher educators had limited awareness of how to deal with diversity. To address this, training was provided for teacher educators from universities and colleges to act as experts on inclusive education in pre-service programmes. In 2008, 47 teacher educators took a five-day intensive training course. All aspects of the new framework were discussed and opportunities were provided to learn, identify and practice the pedagogical skills needed for teaching an inclusive curriculum (Forlin and Dinh, 2010; Inclusive Education in Action, 2010).

With immigrant populations continuing to increase in OECD countries, classrooms are becoming more and more diverse. Teacher educators need to be able to help teachers respond to the learning needs of children from immigrant groups, but this issue is not receiving the attention it deserves. In an online survey about dealing with diversity in classrooms, around half of teacher educators in OECD countries who responded said they felt that teacher education did not sufficiently prepare teachers to handle diversity effectively, with the needs of immigrant children being particularly prominent (Burns and Shadoian-Gersing, 2010).

Distance education can boost countries’ capacity to train teachers

What I have learned through online articles and interactive forums is invaluable. I am currently enrolled in an online programme and have discovered great sources of knowledge, inspiration and debate.

– Imza, teacher, Kigali, Rwanda

Not only is the quality of teacher education often lacking, but many teacher education institutions also lack the capacity to train the huge numbers of people that need to be trained, and expansion is costly. Using technology to provide training from a distance is one way to reach larger numbers of trainees more cheaply. Distance learning can be effective if it is complemented by mentoring and face-to-face support at key stages.

Many low and middle income countries in sub-Saharan Africa and South and West Asia are using distance learning to train more teachers, especially those in rural areas who might otherwise be denied the opportunity. Malawi and the United Republic of Tanzania, for example, used distance learning to help expand the number of teachers rapidly after primary enrolment rose when school fees were abolished (Lewin and Stuart, 2003; Mulkeen, 2010). In 2010, Malawi revived distance learning to address severe teacher shortages. The current distance learning programme provides selected trainees with three weeks of orientation, after which they are deployed to schools in the zones where they were recruited. They spend two years at their assigned schools while completing and mailing in self-guided learning modules to a tutor from the local teacher training college. Mentoring is also provided within schools (DeStefano, 2011).

Distance education for teachers increasingly uses new technologies to deliver lessons more flexibly, to provide materials and feedback, and to enhance tutor-student interactions. In China, the Gansu Basic Education Project used a wide range of media to train teachers between 2001 and 2006. The project reached over 103,000 teachers through EU-funded resource centres that provided satellite television, video, Internet access and other computer-based resources. Around 1,600 teachers went on to gain professional diplomas (Robinson and
Since the 1990s, China has also built a multilevel network connecting national and provincial institutions with county and school-based training centres, using distance learning to increase the organization, implementation and effectiveness of professional development for rural teachers. A key strategy in this approach is the use of the Internet to establish effective communication and learning support for distance learners through the National Teachers’ Web Union and accompanying Continuing Education Website (McQuaide, 2011).

In Zimbabwe, the Virtual and Open Distance Learning programme was recently introduced to alleviate shortages of trained science teachers. The programme combines print-based distance learning modules, online instruction and one-month periods of face-to-face tuition, and support from tutors at seven centres opened across the country in 2010 and 2011. Although the programme is still in its early days, and has faced problems including high attrition rates and inadequate ICT infrastructure, it has gained support from the government for continued expansion. While the number of graduates from the university’s conventional programme totalled 1,087 over the previous decade, enrolments in the distance programme reached 1,438 in 2011 alone (Pedzisai et al., 2012).

Technological advances have supported distance learning even in low income countries. However, the extent to which ICT is used in distance learning for teacher education is dictated by ICT infrastructure and resources, and the needs of target audiences. Low connectivity in countries with less advanced ICT infrastructure can pose difficulties for both institutional hubs and participating teachers in remote areas. In South Africa, the Advanced Certificate in Education, a professional qualification in education management offered as a modular distance learning programme by the University of Pretoria, targets teachers in rural areas. Initial surveys revealed that only 1% of teachers had regular Internet access, but the vast majority had access to mobile phones. The university thus returned to paper-based distance learning, supplemented by text messaging (Aluko, 2009).

The absence of hardware, software and Internet access need not preclude the use of technology to expand teacher education, however. Battery or solar-powered equipment can be used to bring instructional videos and interactive learning modules to teacher trainees, even in remote areas. The USAID-funded Malawi Teacher Training Activity programme provided portable, battery-powered DVD players and projectors together with interactive instructional DVDs to teacher training centres for use during pre-service education (Nordstrum, 2013).

Attrition rates can be high in distance education programmes, as they demand considerable time and teachers may not be able to afford the fees, equipment and materials. For example, a distance learning programme for a certificate course in child guidance and counselling in India resulted in only a 16% completion rate: student teachers were required to put in 480 hours of study with limited tutor support and had to pay their own fees (Perraton, 2010).

Distance teacher education programmes nevertheless have the potential to reach more future teachers at lower cost than programmes in teacher education institutions. Costs per student graduating from distance programmes have been estimated at between one-third and two-thirds of conventional programmes. For example, Pakistan’s Primary Teachers Orientation Course cost between US$128 and US$178 per completing teacher, or between 45% and 70% of the costs for conventional university graduates. Similarly, course costs at the China Television Teachers’ College for unqualified primary and secondary teachers were reported to be at most two-thirds of those for conventional colleges (Perraton, 2010). The cost per graduate of Ghana’s Untrained Teacher Diploma in Basic Education, which combined distance learning with short residential sessions, was twenty times less than the cost of training a teacher in the full-time three-year residential teacher education programme (Ghana Education Service, 2010).

These examples show that distance learning has the potential to expand the reach of teacher education programmes and enhance flexibility, providing support and training for teacher candidates in more remote areas and those with family responsibilities who cannot spend long periods away from home. Despite its benefits, however, distance education is currently reaching only a small proportion of trainees in some countries that urgently need to expand the teaching force. In Ethiopia, for example, there is still reliance...
on residential teacher education courses, with only around 3% of graduates in 2010/11 enrolled in distance programmes (Nordstrum, 2013).

To realize the potential of distance education for teachers, substantial investment is necessary to ensure that programmes are of adequate quality, include mentoring and are complemented by face-to-face support for students. The use of ICT for distance education also requires investment in infrastructure, hardware and materials. South Africa is an example of a country that is addressing this need through innovation in Open Education Resources (South African Institute for Distance Education, 2010), which can dramatically reduce costs for participating institutions and learners.

The donor community needs to make a commitment to wider investment in the education sector in countries with severe teacher shortages so that demand for distance education programmes can be met and trained teachers deployed effectively. In Malawi, the introduction of the current distance education programme doubled the government’s capacity to supply teachers. However, the number of teacher candidates recruited to the programme is still limited by the budget available to pay them once they become teachers and the capacity of teacher education colleges to support and supervise the trainees (DeStefano, 2011). For the first cohort of recruits in 2010, 22,000 applicants were deemed eligible, but only 3,800 were admitted to the programme (Steiner-Khamsi and Kunje, 2011).

One example of what donor funding can accomplish is the Untrained Teacher Diploma in Basic Education programme in Ghana, which has trained over 16,000 teachers and is being extended to alleviate teacher shortages in remote districts. Currently over half of the untrained teachers in the 57 most disadvantaged districts are being trained using this distance education programme, which will provide an additional 8,000 trained teachers. Financial support from donors will meet many of the costs that student teachers incurred in the past, including tuition, food and accommodation during residential sessions, and self-instruction modules (Ghana Education Sector Mission, 2013).

**Strategy 3: Get teachers where they are most needed**

In January, we were called by the Department of Education to come and work here. There are no roads, it’s underdeveloped. There are so many psychological and emotional problems with the learners, so five of the [teachers] left because of the area.

– Lazola, teacher, Eastern Cape, South Africa

Teachers are understandably reluctant to work in deprived areas, which sometimes lack basic facilities such as electricity, good housing and health care. If the best teachers seldom work in remote, rural, poor or dangerous areas, the learning opportunities of children who are already disadvantaged suffer as a result because of larger class sizes, high rates of teacher turnover and a scarcity of trained teachers. Uneven allocation of trained teachers is a key factor in wide equity gaps in learning. Governments thus need to devise strategies to ensure that teachers are equally allocated, but few have succeeded in doing so effectively.

While in many countries teacher allocation officially depends directly on student enrolment numbers, with minimum and maximum class sizes per school, actual teacher deployment often does not match student numbers. In Yemen, schools with 500 students were found to have between 4 and 27 teachers: in Ryma governorate there were 13 teachers for each average-sized basic school, while in Abyan governorate there were 28 (World Bank, 2010a). In Benin, enrolment in primary schools with four teachers ranged from fewer than 100 to almost 700 students (World Bank, 2009).

Such wide differences in teacher allocation are reflected in the quality of education students receive. South Sudan presents a particularly extreme case. The government stipulates a pupil/teacher ratio of 50:1 for primary schools, but teachers do not seem to be deployed and transferred on this basis. Excluding volunteer teachers, average pupil/teacher ratios vary from 51:1 in Central Equatoria to 145:1 in Jonglei (World Bank, 2012a).

Unequal distribution of teachers is one reason some children leave school before learning the basics. EFA Global Monitoring Report team

Unequal distribution of teachers is one reason some children leave school before learning the basics.
calculations, based on data from the Bangladesh education management information system, show that the proportion of students reaching the last grade of primary school is 60% in subdistricts where there are 75 students per teacher, compared with three-quarters where there are 30 students per teacher.

Inequality in deployment leads not only to fewer teachers in deprived areas but also to disadvantaged students being taught by teachers with weaker subject knowledge, exacerbating inequality in learning outcomes. According to the SACMEQ survey, in South Africa teachers with better subject knowledge in mathematics and reading were more commonly deployed to urban and better-resourced schools. The average reading score of a teacher at a school serving the wealthiest quartile of students was the highest in southern and eastern Africa, other than Kenya. By contrast, subject knowledge of teachers serving students in the poorest quartile was the worst in the region (Altinok, 2013a).

The problem of teachers with weaker subject knowledge being assigned to more disadvantaged students is not limited to sub-Saharan Africa. In Mexico and Peru, teachers with the best subject knowledge work in urban areas (Guadalupe et al., 2013; Luschei, 2012b; Metzler and Woessmann, 2012).

The unequal allocation of teachers is affected by four main factors – geography, ethnicity and language, gender, and the subjects taught:

**Urban bias:** Teachers are often reluctant to be posted in communities that offer poor living conditions due to lack of infrastructure (electricity, telephone, water, health care) and accessibility. This puts rural areas at a disadvantage and creates imbalances within them; for example, a village that is not on a paved road will find it much more difficult to retain teachers than a village with good transport to the nearest town. In Swaziland, teachers are reluctant to be posted in rural areas and receive no bonus for being positioned there. Remote rural schools are mostly staffed with newly recruited, inexperienced teachers, teachers with low qualifications or those with family ties in the area (Steiner-Khamsi and Simelane, 2010). Malawi has one of the world’s most severe teacher shortages but also allocates teachers inefficiently, deploying them based on aggregate district enrolment rather than according to individual school requirements. As a result, there are surpluses in urban schools and severe shortages in rural areas, aggravating poor learning outcomes (Destefano, 2011).

**Ethnicity and language:** Because ethnic minorities often receive less education than majority groups, fewer minority group members are available for recruitment as teachers. In India, all states have a caste-based reservation of posts to ensure that teachers are available in more disadvantaged areas and schools, but teachers with lower levels of qualifications are hired to fill the reserved positions. There are not enough teachers who speak local languages, and very few bilingual teachers belong to minorities, which compounds the disadvantage children face when their home language is not the medium of instruction. In Mexico, teachers of children whose mother tongue is an indigenous language often have less education and training than other teachers, because fewer teachers entering the profession speak these languages (Chudgar and Luschei, 2013). 

**Gender:** While women teachers provide role models for girls and may make schools safer for them, they are less likely than men to work in disadvantaged areas. Safety is a key concern, especially for unmarried women, who may also find it difficult to find accommodation in some social contexts. Uneven allocation leaves parts of some countries without female teachers. A survey of teachers in 10 districts of Rwanda showed that only 10% of primary school teachers were female in Burera district, compared with 67% in Gisagara district (Bennell and Ntagaramba, 2008). In Sudan, adequate accommodation rarely exists in rural areas, and married women teachers have to be deployed where their husbands live. As 67% of primary school teachers are women, this further reduces the pool of teachers available for rural areas (World Bank, 2012b). In Malawi, a female teacher can request a posting to another district to follow her husband and cannot be denied the opportunity to join him, no matter where he is (World Bank, 2010a).

**Subjects:** In secondary schools, in particular, there are often shortages of teachers in specific subjects, such as mathematics, sciences and foreign languages. Indonesia, for example, has a
surplus of teachers at junior secondary level in Bahasa Indonesia and in religion, but shortages in computer science (Al-Samarrai et al., 2012).

There are no simple solutions to unequal allocation of teachers. Governments attempt to overcome the problem by planning teacher deployment, enabling rural students to study in urban areas, providing incentives for teachers and recruiting teachers from the local community, but all these approaches have met with mixed success.

**Planned deployment needs to be well-managed**

To achieve a balance of teachers across the country, some governments post teachers, usually newly qualified ones, to disadvantaged areas. Such planned deployment works where the government has control over the assignment of teachers to schools. In Eritrea, the government assigns teachers to one of six regions and to specific schools, strictly depending on student numbers. Young teachers who start their careers as part of national service are sent to the most difficult schools. By 2004/05, the association between teacher and student numbers was strong in all six regions; pupil/teacher ratios ranged from 30:1 to 53:1 (Mulkeen, 2010).

One reason for the Republic of Korea’s strong and more equitable learning outcomes is that disadvantaged groups have better access to more qualified and experienced teachers. About 77% of teachers in villages have at least a bachelor’s degree, compared with 32% in large cities, and 45% have more than 20 years of experience, compared with 30% in large cities (Luschei et al., 2013). Teacher hiring decisions are made at province or city level, with the highest priority given to disadvantaged areas. The practice of rotating teachers every five years to a different school within the city or province demonstrates commitment to distributing good teachers equitably. Teachers working in disadvantaged schools benefit from incentives such as an additional stipend, smaller class sizes, less teaching time, the chance to choose their next school after teaching in a difficult area and greater promotion opportunities. This helps ensure that disadvantaged groups have highly qualified teachers with strong subject knowledge (Kang and Hong, 2008).

In some countries, planned deployment can leave disadvantaged areas with the least experienced teachers. Oman has large numbers of teachers, resulting in pupil/teacher ratios of 12:1 at primary level and 15:1 at secondary level in 2009. Newly recruited teachers have no choice of school, but are allocated by the Ministry of Education. The distribution of teachers is even across regions, with the average pupil/teacher ratio for primary and secondary education varying in 2009 from 8:1 in Al-Wusta, a remote, sparsely populated region, to 14:1 in Al-Batinah, in the north. However, teachers can request a transfer after one year: in 2009, 5.8% of all teachers were transferred, mostly out of remote regions, which were left with a large proportion of inexperienced teachers. In Al-Wusta in 2009, 59% of teachers had less than five years of experience, compared with 26% nationally (Oman Ministry of Education and World Bank, 2012).

**Incentives to rebalance uneven teacher allocation**

Teachers should be provided with awards and rewards for serving in challenging schools and deprived areas. Teachers should be provided with required facilities, especially accommodation, child allowance, mobility allowance, health facilities for serving in such difficult areas.

– Nasreen, teacher, Islamabad, Pakistan

Incentives for teachers to accept difficult postings, such as housing, monetary benefits and accelerated promotion, are usually needed to ensure that all students are taught by good teachers.

Teacher housing is often used to attract teachers, especially female teachers, to rural areas where suitable housing is not available for rent. The Programme to Motivate, Train and Employ Female Teachers in Rural Secondary Schools in Bangladesh (1995–2005) provided women teachers in rural areas with safe housing near schools once they had completed training (Mitchell and Yang, 2012).

Financial incentives such as bonus payments and hardship allowances are another means of promoting deployment to rural areas, but they need to be large to outweigh the difficulties of living in remote areas. In Cambodia, teachers received US$12.50 extra per month for postings in rural areas, or US$15 for districts designated
as remote. However, teacher pay was too low for this top-up to be considered sufficient to offset difficulties faced by teachers living in remote areas away from extended family support and with fewer opportunities for additional sources of income, so the policy met with only limited success (Benveniste et al., 2008a). In contrast, in Malawi, the rural hardship allowance introduced in 2010 raises the basic pay of a newly recruited teacher by as much as a quarter (Steiner-Khamsi and Kunje, 2011).

To be attractive, incentives need to be set at an appropriate level. In the Gambia, for instance, teachers used to be allocated randomly by the central government to six regions, and by regional administration to schools. However, qualified teachers were able to refuse positions in rural remote areas; by 2004/05, their share varied by region from 42% to 82%. As a result, the Gambia introduced a hardship allowance of 30% to 40% of base salary for positions in remote regions at schools more than 3 kilometres from a main road. The incentive was large enough to change teachers’ attitudes: by 2007, 24% of teachers in the regions where the incentive was offered had requested transfer to hardship schools (Mulkeen, 2010).

An alternative approach adopted by Rwanda is to provide subsidized loans to trained teachers working in hard-to-reach areas. The vast majority of teachers in such areas have participated in the programme, making a minimum monthly contribution of 5% of their salary, with members allowed to borrow up to five times their savings (Bennell and Ntagaramba, 2008).

**Recruiting teachers locally**

Teachers need to be recruited from the local area to make sure there is continuity in the job.

– Nasreen, teacher, Islamabad, Pakistan

Another response to the teacher deployment problem is to recruit teachers from within their own communities. In Afghanistan, female teachers are vital for girls to be able to enrol in school, but women face cultural barriers in seeking work in areas where they are not chaperoned by family members. As a result there are twice as many female teachers as male teachers in the capital, Kabul, while in Uruzgan province, most of which is remote and unsafe, there are no female teachers who have the minimum qualification (Wirak and Lexow, 2008). Local recruitment of female teachers is one solution to such extreme inequality.

Local recruitment has its benefits, such as teachers’ greater acceptance of a rural posting and reduced attrition, but some of the most disadvantaged communities lack competent applicants where access to primary schooling is low, as is the case in Afghanistan. In Lesotho, a system of local recruitment allows school management committees to hire teachers, who apply directly to the schools for vacant posts. This ensures that only teachers willing to work in those schools apply; schools do not have a problem with teachers refusing postings. One major benefit of this system is that most teaching posts are filled, and there is relatively little difference in pupil/teacher ratios between rural and urban areas. Furthermore, almost three-quarters of teachers in the more remote mountainous areas are female. However, many of the rural schools recruit untrained teachers: school census data show that only half of teachers in mountain areas are trained, compared with three-quarters in the more populous lowlands (Mulkeen, 2006).

Teachers may also require incentives to return to their home areas. In China, the government established the Free Teacher Education programme in 2007 to give high performing students at the best universities incentives to teach in rural schools. In addition to having free tuition, graduates have 10 years of job security teaching in their home provinces. In 2007, 90% of participants came from central and western regions that are mostly less developed and economically stagnant. Even if a graduate finds work in an urban area, two years of rural teaching must be completed first (Wang and Gao, 2013).

Local recruitment can bring challenges in deploying teachers effectively over the span of their careers. In Indonesia, locally recruited teachers cannot be easily transferred, which poses a problem as the demographics of the country are changing (Box 6.6). Similarly, in Peru, most teachers are now recruited in the region where they were born and educated, and rarely change positions over their career (Jaramillo, 2012).
strategy 3: Get teachers where they are most needed

Box 6.6: Addressing uneven teacher deployment in Indonesia

Indonesia has no shortage of teachers. Due to massive recruitment since 2001, and a declining child population, by 2010 there were just 16 students per teacher in primary education, 13 in lower secondary and 11 in upper secondary. However, teachers are unequally distributed across regions, urban and rural areas, school levels and academic fields, so teacher shortages exist locally, especially in poor urban or remote rural areas. In 2006, 112 districts had pupil/teacher ratios in primary education below 16.1, yet 53 had ratios between 30.1 and 50.1. Only 20% of primary and lower secondary teachers in remote rural areas have a four-year university degree, compared with more than 50% in urban areas.

Decisions on hiring teachers have largely been decentralized – teachers hired directly by schools now make up 30% of the teaching force at primary level and 36% at lower secondary level. Five ministries issued a joint decree in 2011 providing guidelines to provinces and districts: primary schools with less than 168 students should have at least six teachers, and larger ones should have class sizes between 28 and 32; similar guidelines apply to lower secondary schools.

These standards are compatible with the overall size of the teaching force, but to implement them, 340,000 teachers, 17% of the total, would need to be redeployed. Teachers hired by schools cannot be transferred, however, so the burden would fall on civil service teachers: up to 27% of those teaching in lower secondary school would have to be transferred.

Teacher transfers have not been common in Indonesia, so the adoption of effective transfer systems at district level would be crucial. For instance, the Education Office in the district of Gorontalo identified 634 of its 5,000 teachers who could be redeployed, and implemented measures such as merging small schools, introducing multigrade teaching in schools with fewer than 90 students and providing incentives for teachers to move to remote schools. New teachers were recruited on the condition that they could be transferred. By 2000, some schools in Banjul district had particularly low pupil/teacher ratios, so schools with less than 150 students, not further than 1.5 km apart and not separated by obstacles such as rivers or highways were merged. Teachers supported the changes because they were assured that they would be transferred to schools close to their homes. At the central level, a remote area allowance was introduced in 2007, but it has not been implemented on a large enough scale.

In the near future, a further challenge will be the need for a massive transfer of teachers to urban areas, as two-thirds of Indonesia’s population is expected to live in urban areas by 2025, compared with half in 2005.

Sources: Al-Samarrai et al. (2013); World Bank (2010c).

Box 6.7: Teach for America – a success, but not a solution

Attracting newly qualified professionals who are committed to supporting children in disadvantaged areas is one way to extend the teaching force to these areas. Teach for America was founded as a non-profit organization in 1989 to reduce inequity in education and redress teacher shortages by recruiting outstanding recent college graduates and sending them to high need schools throughout the United States for a minimum of two years. The programme expanded rapidly, placing 500 teachers in 1990 but sending more than 10,000 in 2012/13 to teach around 750,000 pupils. The presupposition is that a strong academic background compensates for a lack of extensive teacher practice or training.

While traditional teacher education programmes typically consist of one to four years, Teach for America candidates attend a five-week training programme in the summer between graduating from college and beginning their teaching assignments.

After gaining some experience, Teach for America teachers have been found to improve student achievement, particularly in mathematics. Their impact, across different groups of students, has been roughly equivalent to an additional month of instruction.

Teach for America and similar programmes in other countries are playing a key role in getting good teachers to disadvantaged areas, while underlining the need in such areas for the best possible teachers. However, they cannot be seen as the solution to improve learning outcomes for all. Not only is there a high attrition rate among these teachers – sometimes 80% or more by their third or fourth year of teaching – but they make up only about 0.2% of the 3.5 million teachers in the United States. The scale on which they operate is similar in other countries: in the United Kingdom, Teach First has similarly been shown to be successful in improving learning among disadvantaged students but recruits only 1.2% of new entrants into teaching.

Sources: Glazerman et al. (2006); Heilig and Jez (2010); Xu et al. (2009); Sutton Trust (2011).
Strategy 4: Provide incentives to retain the best teachers

Salaries are just one of many factors that motivate teachers, but they are a key consideration in attracting the best candidates and retaining the best teachers. Low salaries are likely to damage morale and can lead teachers to switch to other careers. At the same time, teacher salaries make up the largest share of most education budgets, so they need to be set at a realistic level to ensure that enough teachers can be recruited. In some countries, including Burundi, the Democratic Republic of the Congo and Malawi, at least 80% of the education budget is spent on teacher salaries. Governments need to pay competitive salaries to attract the best teachers, but many face a dilemma: higher salaries would raise the public budget unless teachers numbers fell, which would increase class size. In countries where classes are already large, as in much of sub-Saharan Africa, this would reduce education quality.

The level of teacher salaries influences education quality. Six estimates published between 1990 and 2010 found that teacher salaries were directly linked to learning outcomes (Glewwe et al., 2011). And in 39 countries participating in PISA and TIMSS between 1995 and 2005, a 15% increase in teacher pay increased student performance by between 6% and 8% (Dolton and Marcenaro-Gutierrez, 2011).

Paying teachers enough to meet their basic needs

My salary is not enough to cover housing, transport, food and the payments on my student loan. It makes me feel unappreciated, and though my students reassure me every day that I have chosen the right profession, it would be wonderful to receive the same reassurance from administrators.

– Inga, teacher, Rwanda

In some poor countries pay levels do not even cover basic living costs. When salaries are too low, teachers often need to take on additional work – sometimes including private tuition – which can reduce their commitment to their regular teaching jobs and lead to absenteeism.

A comparison of salaries in terms of purchasing power parity, reflecting the money needed to purchase the same goods and services across countries, shows that teachers in high performing countries such as Denmark earn more than 10 times as much as those in countries struggling to ensure that children are learning the basics, such as Chad and Sierra Leone (Figure 6.1).

Teachers in some countries do not even earn enough to lift their households above the poverty line. A teacher who is the only or main breadwinner, and has at least four family members to support, needs to earn at least US$10 per day to keep the family above the poverty line of US$2 per day per person. However, average teacher salaries are below this level in eight countries. This is unacceptable. In the Central African Republic, Guinea-Bissau and Liberia, teachers are paid no more than US$5, on average. Teacher salaries are similarly low in the Democratic Republic of the Congo, where communities have to supplement their low pay. Communities that are too poor to do so suffer from further disadvantage, losing good teachers.

Another common way to measure teacher salaries is to compare them to the average wealth of a country in terms of GDP per capita. This comparison, however, cannot show whether the salary provides enough for teachers to live on or motivates the best teachers to stay in the profession. In a poor country like Niger, for example, teacher salaries are almost seven times GDP per capita, a level which some suggest is a signal that they are not affordable (Bruns et al., 2003). In terms of purchasing power, however, teachers in Niger earn just US$13 per day, barely above the amount needed to keep families above the poverty line.

National data on average teacher pay similarly disguise variations in pay among different types of teachers: salaries are often considerably less than average for teachers at the beginning of their career, unqualified teachers and those on temporary contracts. Averages also mask other differences related to pay scales. In Malawi, for instance, a qualified primary teacher in the lowest category, with two to four years of
A four-part strategy for providing the best teachers

Strategy 4: Provide incentives to retain the best teachers

Figure 6.1: Teachers in some poor countries are not paid enough to live on
Daily teachers’ wages in public primary institutions, latest available year

In the Central African Republic, where a family needs at least US$10 per day to live, teachers are paid only US$5 a day.

Source: Pôle de Dakar database; OECD (2013b).
secondary education and a teaching diploma, receives less than a third of the salary of a teacher in the highest category, predominantly head teachers [Steiner-Khamsi and Kunje, 2011]. Thus those entering the profession, or lacking the academic qualifications needed for promotion, barely have enough to live on: in 2007/08 their salary was equivalent to just US$4 per day [World Bank, 2010a].

Already-low teacher pay has even been falling in some poor countries. In Zimbabwe, teacher pay plummeted, as a result of dire economic conditions and hyperinflation, from around US$500 per month in the 1990s to US$2 per month in early 2009. Although an allowance of US$150 per month was awarded in 2009, teachers were still paid well below the country’s poverty line of around US$500 that year.4 Schools are often expected to supplement low teacher salaries through fees, but parents cannot always afford these costs, especially in rural areas where poverty is high. This has contributed to the wide inequality in teachers’ income between urban and rural areas, adding to the difficulty of attracting teachers to rural areas [Zimbabwe Ministries of Education Sport Arts and Culture and Higher and Tertiary Education, 2010].

In Cambodia, teachers’ basic salaries are very low and few teachers can afford basic necessities without taking a second job. In 2007, initial base monthly salaries were around US$44 for primary teachers and US$47 for lower secondary teachers, increasing over a teacher’s career by only around 30%. Many teachers expect to receive additional monthly allowances ranging from US$1.50 to US$3.00, depending on location and responsibilities, but these are often delayed or missing because payment procedures are poor [Benveniste et al., 2008a]. Salaries have not kept pace with inflation. For example, from 2007 to 2008 the price of rice rose by 94% and the price of fish, the source of some 75% of the protein in an average Cambodian diet, rose by 33%. At 2008 prices, 66% of a primary teacher’s base salary would go on these two items alone [Voluntary Service Overseas, 2009].

In rural Zambia, it may cost teachers up to half their wages to collect their pay

While teacher salaries have tended to decline in real terms in poor countries, they have increased in most rich countries, an indication of the better status teachers enjoy there. Between 2005 and 2011, average teacher salaries in most OECD countries rose by 14% for a primary teacher with 15 years of experience and 11% for a lower secondary teacher. In Luxembourg, primary teachers’ salaries increased by a third, and in Poland by almost 50%. There were some exceptions: in the United States salaries fell by 1% at the primary level and 2% at the lower secondary level; in France they fell by 4% at the primary level and 3% at the lower secondary level; in Japan they fell by 7% at both levels and in Greece they fell by 15% at both levels [OECD, 2013b]. The decrease in France has become an issue of public policy debate [see Box 6.11].

In poor countries, teachers are often paid not only too little but also too late, which can make it difficult for them to meet basic needs and lead them to look for other career options. In sub-Saharan Africa, late or incorrect payments create considerable difficulties for teachers without access to credit [Mulkeen and Crowe-Taft, 2010]. In addition, teachers may have to travel some distance to collect payments, which further reduces their take-home pay. In rural Zambia, for example, it may cost teachers up to half their wages for transport and accommodation to collect their pay from district offices each month [Bennell and Akyeampong, 2007].

Low pay for contract teachers – not a long-term solution to poor quality education

In sub-Saharan Africa and South and West Asia, policy-makers have responded to the need to expand education systems rapidly by recruiting teachers on temporary contracts. Contract teachers are usually paid considerably less than civil service teachers; some are hired directly by the community or by schools. Contract teachers tend to have little formal training and to be employed under less favourable terms than regular civil service teachers, on contracts often limited to one or two years with no guarantee of renewal [Kingdon et al., 2013].

In West Africa, where contract teachers made up half the teaching force by the mid-2000s

4. Based on a household of five children.
A four-part strategy for providing the best teachers

Strategy 4: Provide incentives to retain the best teachers

(Kingdon et al., 2013), their recruitment has been especially widespread, partly because the salaries of civil service teachers were perceived as high and unaffordable for the state as the need for teachers grew. By the latter part of that decade, there were far more teachers on temporary contracts than on civil service contracts in some countries: the proportion reached almost 80% in Mali and Niger and over 60% in Benin, Cameroon and Chad (Figure 6.2).

There is wide variation both in the amount contract teachers are paid and in the difference between their salaries and those of civil service teachers in West Africa. Senegal was one of the first countries to introduce contract teaching, which was adopted as national policy in 1995 after primary education became free. Teacher salaries then amounted, on average, to over six times GDP per capita and made up 90% of the education budget (Fyfe, 2007). By 2004, 56% of teachers were on temporary contracts that paid one-third of a regular teacher’s salary, allowing more teachers to be recruited for the same budget. As a result, the pupil/teacher ratio decreased from 49:1 in 1999 to 33:1 in 2011, while primary enrolment increased by 67%.

In Benin, where contract teachers earn around one-third as much as a civil service teacher, their share doubled between 2006 and 2009 to reach 41% of the teacher workforce (Figure 6.3). In Niger, 79% of teachers are on temporary contracts, earning half the salary of a civil service teacher. Recruiting contract teachers has enabled some countries with the largest teacher shortages, including Benin and Mali, to reduce significantly the numbers of pupils per teacher.

In parts of South and West Asia, too, expansion in enrolment has led to the recruitment of large numbers of contract teachers, who are paid a fraction of what civil service teachers earn. In India, several states no longer recruit civil service teachers, and contract teachers now account for 16% of government primary school teachers. In 2007, contract teachers received 14% of the salary paid to regular teachers in West Bengal state, 23% in Andhra Pradesh and 25% in Rajasthan (Kingdon and Sipahimalani-Rao, 2010). The proportion is also high in some Latin American countries, such as Chile, where 20% of all teachers are contract and community teachers (Kingdon et al., 2013).

In Niger, 79% of teachers are on temporary contracts, earning half the salary of a civil service teacher.

While hiring contract teachers helps alleviate teacher shortages in the short term, it is unlikely to meet the long-term need to extend quality education. Countries that rely heavily on contract teachers, notably those in West Africa, rank at or near the bottom for education access and learning (see Chapter 4).

In some countries, governments eventually hire contract teachers as civil service teachers; in others, the salaries of regular teachers and contract teachers gradually converge. In
In Indonesia, giving all contract teachers permanent status would increase the salary bill for basic education to about US$9 billion.

Indonesia, where contract teachers made up 35% of the primary school teaching force in 2010, regular teachers earned up to 40 times their salary but the government guaranteed that contract teachers would eventually attain civil service status. The implications for the education budget are immense: giving all contract teachers permanent status would increase the salary bill for basic education by 35%, to about US$9 billion (World Bank, 2013).

Similarly, in Benin, despite the share of contract teachers having increased, the average teacher salary rose by 45% in real terms between 2006 and 2010 because the salaries of contract and civil service teachers have been converging (Pôle de Dakar database). One reason for the convergence is that, since 2007, these teachers have been absorbed into the civil service and have received training (Pôle de Dakar and République du Bénin, 2011).

In some contexts, contract teachers can be at least as effective as civil service teachers. In India, most studies find that employing contract teachers does not lead to learning outcomes that are lower than those achieved by civil service teachers. However, achievement remains undesirably low in India regardless of the type of teacher a student is taught by (Box 6.8).

In some other countries, students of contract teachers tend to perform less well than those of regular teachers. In Niger, the overall impact of contract teachers on learning achievement in French and mathematics was negative for grade 2 and 5 students. In Togo, contract teachers tended to have a negative effect on pupils in grade 5 (Bourdon et al., 2010).

One reason why there is no clear difference overall in performance between contract teachers and regular teachers in some...
settings is that ultimately they face similar challenges. Interviews conducted in Lahore, Pakistan, showed that contract teachers experienced the same demotivating factors as civil service teachers – including transport difficulties for female teachers – so their absenteeism was only slightly lower. There was a perception that lower salaries encouraged absenteeism and that contractual employment led to frequent resignation and high teacher turnover (Habib, 2010).

Where contract teachers have been found to be more effective, the reasons for better student achievement is likely to have more to do with factors other than the type of contract that the teacher holds, such as greater parental or community involvement due to the local recruitment of teachers. In one experiment in Kenya, the benefit of halving class size by hiring a contract teacher was observed only in communities where parents had been trained to monitor teachers and relatives of local civil service teachers were not allowed to be hired as contract teachers (Duflo et al., 2012a). Similarly, in Mali, language and mathematics scores of grade 2 and 5 students were consistently higher under contract teachers who were closely monitored by the local community (Bourdon et al., 2010).

Should countries with an acute need for more trained teachers aim to recruit contract teachers on a large scale? Evidence suggests that scaling up will not necessarily address the problem of poor achievement. In 2009, the Kenyan government recruited 18,000 contract teachers, making them equivalent to 12% of the teaching force. The nationwide recruitment generated opposition and mobilization from teacher unions. The government was less effective than NGOs in implementing the programme, as shown by a randomized experiment run during a pilot phase. Of 192 schools, 64 received a contract teacher hired by the government and 64 contract teachers hired by an international NGO while the remaining 64 did not have any contract teacher. Learning outcomes improved in schools where contract teachers had been hired by the NGO, but not where they had been hired by the government. Contract teachers recruited by the government received fewer monitoring visits and experienced long salary delays; nepotism and interference by local political elites were also more common (Bold et al., 2013). This suggests that capacity problems facing government systems exist regardless of the basis on which teachers are hired, and that these problems need to be tackled to ensure that all children learn.

Another factor limiting the possibility of scaling up contract teachers’ numbers is that they inevitably start to demand the same rights as civil service teachers, thus increasing government budgets. In Benin, for example, contract teachers, with the support of teacher unions, campaigned to obtain more stable employment conditions as well as payment of 12 months of salary every year instead of 10. In late 2007, a six-week strike led the government to issue a decree absorbing into the civil service contract teachers who had achieved the required qualifications (Imorou, 2010).

Where contract teachers are paid by the community, their sustainability depends on the ability of parents to mobilize funding to help pay their salaries which puts considerable financial pressure on poorer communities. In some cases, this has led to the government taking over some of the responsibility, and so can ultimately add to the budget. In Chad, where community teachers make up over two-thirds of all teachers, subsidies were put in place to relieve parents of some of the financial burden of recruiting teachers. The subsidies were small, however, and often paid several months late. Furthermore, over 8,000 community teachers had yet to receive any subsidies five years after the programme began (World Bank, 2011b). In Madagascar, community teachers, who made up around half of all teachers in 2005/06, were hired directly by parent-teacher associations and generally received less than half of regular teachers’ salaries. Since 2006, the government has increasingly taken on the responsibility for paying these community teachers (Glewwe and Maïga, 2011).

Recruiting contract teachers on a large scale cannot be seen as a cost-saving solution to the learning crisis in the long term.
Ensuring that teaching is as attractive as similar professions

When teachers are paid less than people in comparable fields, the best students are less likely to become teachers, and teachers are more likely to lose motivation or leave the profession.

In Latin America, teachers are generally paid above the poverty threshold, but their salaries do not compare favourably with those working in professions requiring similar qualifications. In 2007, other professionals and technicians with similar characteristics earned 43% more than pre-school and primary school teachers in Brazil and 50% more in Peru. A similar gap is discernible between secondary school teachers and other professionals, who earned 46% more in Paraguay and 50% more in Ecuador. In addition, the gap between teachers and other professionals is wider for those with longer experience, because teachers’ salaries do not increase as much as other professionals’ pay over time (Mizala and Nopo, 2012).

Similar problems of a mismatch between the earnings of teachers and those of other professions are apparent in some OECD countries. In 2011, primary school teachers in OECD countries earned 82% of the average for other full-time workers aged 25 to 64 with tertiary education, and upper secondary school teachers earned 89% (OECD, 2013b). In such circumstances, the best students may not choose to become teachers. For example, across 42 of the countries that participated in PISA 2006, the mathematics scores of students who wanted to become teachers were below average in 32, and below the scores of students who wanted to become engineers in all countries except Poland (Bruns et al., 2011a).

In Peru, professionals with similar characteristics to primary school teachers earned 43% more

In the United States, higher salaries in other occupations were found to have led almost half of teachers with less than six years of experience to leave the profession between 1999/2000 and 2003/04 (Gilpin, 2011). The wage gap is large: after 15 years of experience, US teachers in lower secondary education earn 67% of the average for full-time, full-year workers aged 25 to 64 with tertiary education (OECD, 2013b).

Exceptions do exist. In countries including Canada, Luxembourg, New Zealand and the Republic of Korea, teachers are paid more than the average for full-time workers with tertiary education. In the Republic of Korea, for example, where the status of teaching and student performance are both high, lower secondary school teachers earn 20% more than other professionals with higher education (OECD, 2013b).

Performance-related pay needs to send the right signals

There’s a whole host of issues around performance-related pay. How do you judge the performance of a teacher? It’s really hard to quantify the impact that we can have on a young person’s life and how they perceive themselves, their self-image, their confidence, their aspirations, where they think they’re going in the future … how do you measure that?

– Caroline, teacher, London, UK

Teachers’ salaries – and the rates at which they increase – are conventionally determined by formal qualifications, the amount of training and years of experience. But pay structures based on these criteria do not necessarily lead to better learning outcomes. Relating teachers’ pay to the performance of their students has intuitive appeal. As a result, some governments advocate performance-related pay as part of a broader agenda of ‘accountability’ reforms to improve the quality of education (Bruns et al., 2011b; OECD, 2009).

The appeal of performance-related pay is indicated by analysis of 2003 PISA data from 28 OECD countries: those where teachers’ salaries are adjusted for student performance have higher scores in reading, mathematics and science (Woessmann, 2011).

However, a closer look at the evidence on performance-related pay from around the world shows that in practice it is not possible to conclude that it has clear-cut benefits. It is also hard to implement well, partly because of the difficulty in evaluating reliably which teachers are the best. It can have unintended side effects that distort or even worsen teaching and learning. If performance-related pay is implemented, it must be designed to avoid these harmful side effects while providing incentives that give the right signals to improve the learning of the weakest and most disadvantaged students.
The introduction of performance-related pay on a large scale in England (United Kingdom) from September 2013 is a recent example of such an approach. It is intended to replace teachers’ automatic progression according to length of service with advancement conditional on an annual appraisal (UK Department for Education, 2013). Each school is expected to decide how to implement the new arrangements, using evidence from various sources including teachers’ self-assessments, lesson observations and the views of other teachers (UK Department for Education, 2013).

The proposals for England reflect many of the ambitions of performance-based pay worldwide. The aim is to ‘raise the status of the profession, support professional development, and reward individuals in line with their contribution to improving pupil outcomes, enabling the most successful teachers to progress faster than at present on the basis of annual appraisal’ (UK Department for Education and School Teachers’ Review Body, 2012, p. vii). The reform is expected to provide greater flexibility for schools to develop pay policies tailored to their particular needs, support heads in attracting teachers in specific subjects based on their school’s needs, and help schools across the country recruit and retain excellent teachers (UK Department for Education, 2013).

Other countries with experience of performance-related pay have encountered a range of problems in evaluating and rewarding teachers’ performance, however, often with unintended consequences. Portugal, for example, recently introduced performance-related pay for similar reasons to England’s, but found that it reduced cooperation among teachers, which was damaging for student learning (Box 6.9).

Box 6.9: In Portugal, performance-related pay led to lower cooperation among teachers

In Portugal, the government reformed the education system after 2005 in response to the country’s poor performance in international assessments such as PISA. The government was particularly concerned that although public spending on education was high, and teacher salaries were comparable to those in other OECD countries, student learning outcomes had not improved.

A key aspect of the reform, which became law in January 2007, was breaking up the single pay scale for teachers into two scales. The gap between the last point in the lower scale and the first point of the higher scale was large, around 25%. Teachers in the higher scale were expected to play a special role in management and pedagogical tasks.

Teachers were no longer assured of virtually automatic progression from the bottom to the top of the pay scale over their careers. Instead, their advancement depended on the academic performance of their students and feedback from parents, along with other criteria including the teacher’s attendance record, attendance at training sessions, fulfilment of management and pedagogical duties, and involvement in research projects.

Even if a teacher did well according to these criteria, progression between the two pay scales depended on whether there were upper-scale teacher vacancies, which were determined every two years by the Ministry of Education as a function of the number of students in the school.

Despite the government’s best intentions, the new programme led to a decrease in student achievement. Teachers eager for promotion awarded higher internal assessment marks, which carried considerable weight in students’ final marks. The policy also inadvertently encouraged competition and reduced cooperation among teachers, which had a detrimental effect on student learning and lowered teachers’ job satisfaction.

Source: Martins (2010).

Other unintended consequences include encouraging teachers to ‘teach to the test’ and focus on the best students in order to lift average scores, and rewarding schools and teachers that are already the highest performers rather than those that have helped children improve the most, to the detriment of disadvantaged learners.
Assessing teachers for performance-related pay relies on sophisticated analysis that is difficult to undertake even in more advanced systems. In the United States, the ProComp programme was implemented in Denver, Colorado, between 2003 and 2010, providing bonuses to teachers based on their ‘value added’ – the gains in learning that could be ascribed to teachers by adjusting for students’ previous achievement and demographic characteristics. However, test scores increased not just for students whose teachers participated in the programme, but also for other students (Goldhaber and Walch, 2012). A key problem in the United States has been that the ‘value added’ measures used to determine performance do not accurately reflect differences in actual teacher quality (Hanushek and Rivkin, 2012; Rothstein, 2010).

Using school principals’ evaluations and classroom observation is an alternative way of identifying the value that teachers add. In Chicago, such evaluations were found to be an accurate reflection of teacher quality and a good proxy for student performance (Jacob and Walsh, 2011). While there is a risk of principals’ views being too subjective, the OECD Teaching and Learning International Survey found that, on average across 23 countries, 83% of teachers who received such appraisal and feedback believed it to be a fair assessment of their work (OECD, 2013b). Principals’ objectivity can be enhanced through training in teacher appraisal. Norway introduced a national programme in 2009 intended to ensure that principals were confident that they could make appraisals acceptable to teachers. Principals receive training in setting goals for teaching work, setting and enforcing quality standards, and guiding and giving feedback to teachers (OECD, 2013c).

Using multiple evaluators is another way of producing fair and successful teacher appraisals, but requires considerable time and resources on the part of the evaluators and those being evaluated. In Chile, principals share the responsibility with external accredited evaluators, a local assessment centre and peer evaluators (OECD, 2013c).

Getting the incentives right

Performance-related pay can send the wrong signals. Its use in the United States in relation to the No Child Left Behind Act has been seen as punishing rather than empowering teachers and school administrators, discouraging teachers from working with the lowest-performing students and generating unintended consequences, such as refusal to admit low performing students (Ravitch, 2010). In response to these difficulties, the Obama administration released a Blueprint for Reform on March 2010, giving autonomy to districts and schools in identifying ways to improve student achievement. Teacher evaluation includes classroom observation, peer reviews and professional development, along with test scores (US Department of Education, 2010).

Most performance-related pay programmes aim to provide incentives to individual teachers. Rewarding schools with collective bonuses, as part of a broader set of reforms, may be a more effective way to improve learning outcomes, as a comparison of Brazil and Mexico shows (Box 6.10).

Performance-related pay can have perverse outcomes if it rewards schools that were already performing well, as Chile’s experience shows. All public and state-subsidized private primary and secondary schools, which together account for 90% of enrolment, have participated since 1996 in a National System of School Performance Assessment. Schools are divided into homogenous groups based on their region, whether they are in an urban or rural area, and their students’ socio-economic status. Within each group, the schools accounting for the 25% of enrolment that has the highest index of student achievement in a national assessment receive a quarterly ‘teaching excellence subsidy’, 90% of which is shared among all teachers in the school, with 10% allocated by the principal to the best teachers. After the programme was introduced, average achievement increased (Rau and Contreras, 2011). However, the formula used works to the benefit of schools that were already doing well, rather than those that improve the most (Carnoy et al., 2007).
A comparison of the incentive structures in Brazil and Mexico’s performance-related pay programmes show that such programmes’ designs can lead to very different outcomes. Mexico pioneered performance-related incentives for teachers with the nationwide Carrera Magisterial programme, begun in 1993 as part of broader reforms to improve education quality. Teachers who score high enough on a teaching quality index that includes student test scores move to a pay scale that offers much higher salaries. Carrera Magisterial is unlikely to have contributed much to the improvement in learning outcomes in Mexico in recent years, however, partly because there is little incentive to improve on performance once teachers have been promoted, and few teachers have a chance to benefit from the programme.

The salary scale increases that Carrera Magisterial offers to public primary and secondary school teachers are conditional on success in a complex, year-long evaluation process that covers six components: highest degree earned, seniority, pedagogical skills acquired through professional development, peer review of teaching quality, subject knowledge and their students’ achievement on standardized tests. A formula combines the six components into a score of up to 100 points, with student achievement contributing a fifth.

For high scoring teachers, the awards are substantial. Teachers who score above 70 are promoted to level A of Carrera Magisterial, with pay 27% higher than the base wage. Teachers can then be promoted successively to levels B, C, D and E, the highest level carrying a 217% premium over the base wage. Participation is voluntary and has been consistently high. In the state of Aguascalientes in central Mexico, 70% to 76% of eligible teachers participated between 1999 and 2004, and in the northern border state of Sonora, 84% to 90% took part.

However, many teachers do not get a chance to participate in the programme: teachers with less than two years’ experience, interim teachers and those on part-time contracts are not eligible. This rule probably excludes a number of teachers deployed to rural schools and poorer municipalities with low student achievement. In addition, because it is the level of student achievement, rather than value added by the teacher, used in the formula, some teachers may be inclined to leave schools with lower student scores.

Other adverse effects have been noted. The weighting assigned to achievement in the formula is too low to provide sufficient incentive to improve students’ learning, and the fact that promotion is permanent weakens the incentive to perform once it has been granted. Evidence suggests that components of the Carrera Magisterial formula are not strongly correlated to student achievement. In Mexico City, between 1996/97 and 2000/01, while subject and pedagogical knowledge had a small positive impact on student achievement in secondary schools, other components were found to have no impact. Thus, efforts by teachers to be promoted may not necessarily enhance learning.

Reforms in Brazil in recent years have included collective bonuses linked to wider school performance, which have shown encouraging results. In the north-east, Pernambuco state’s Educational Performance Bonus, for example, is paid to all employees of a school, depending on how well the school meets student performance targets. Teachers in successful schools may receive a bonus larger than one month’s salary. In the first year of the programme, 52% of schools achieved their targets, and the average bonus amounted to 1.8 months of salary.

Between 2008 and 2009, learning levels across Pernambuco improved significantly. Average test scores in Portuguese increased in the grades tested, grades 8 and 11. The programme seems to have had a positive impact on learning achievement, especially for schools setting higher, more ambitious targets. The requirement that schools achieve at least 50% of their targets to receive a school performance bonus is a strong incentive; just missing out on the bonus in the first round had a positive effect on schools’ motivation and performance. Teachers in schools that had achieved the school performance bonus spent more time on teaching and were much less likely to be off task or absent from school.

Sources: Bruns et al. (2011a); Luschei (2012a); Santibáñez et al. (2007); Vegas and Petrow (2007).
A politically sensitive path

Implementing performance-related pay programmes on a large scale can be politically difficult. In the United States, teacher unions have opposed incentives based on improved student test scores (West and Mykerezi, 2011). Policy-makers should take into account unions’ concerns about a lack of societal consensus on the definition and measurement of a teacher’s ‘merit’, the complexity of programmes – with errors that may result in unfair distribution of bonuses – and distortion in education induced by excessive focus on achievement defined as test scores in a limited number of fields (Levin, 2010). Teacher unions have also argued that individual incentives encourage competition between teachers and discourage collaboration within and between schools, as the case of Portugal illustrates (see Box 6.9).

The mixed success of performance-related pay programmes suggests they need to be implemented with caution. While well-designed programmes can improve achievement, implementation on a large scale is difficult as incentives become weakened or distorted. Problems include identifying the value added by individual teachers, avoiding a reduction in teachers’ intrinsic motivation, and preventing teaching to the test and neglect of weaker students.

It should be noted, moreover, that some of the most successful education systems, such as that of the Republic of Korea, have not adopted performance-based pay. This suggests that there are other ways to attract and retain the best teachers, such as improving the status of the teaching profession and offering a path to career progression.

Motivating good teachers by providing a career path

Rather than using teacher evaluations to link pay directly to performance, a more appropriate way of motivating teachers to improve education quality is to offer an attractive career path, with promotion criteria that take into account initiatives by teachers in addressing diversity and supporting weak students. Too often, however, teachers have limited prospects of promotion on this basis. Some countries use teacher evaluations to determine career advancement and reward or censure performance by granting or withholding promotion. In Singapore, the evaluation process is extensive. A planning meeting at the beginning of the school year sets goals for student achievement, professional development and contributions to the school and community. It is followed by a review meeting at mid-year and a final evaluation based on portfolios of work, as well as input from senior teachers and department or subject area heads who have worked with the teacher (OECD, 2009).

Most OECD countries use promotion and career progression as incentives rather than directly linking performance appraisals to pay, although this approach does have an indirect link with salaries. In the Czech Republic, Estonia, Israel, Poland and the Republic of Korea, performance appraisals have a strong influence on promotion (OECD, 2013c).

In some OECD countries, the difference in pay between a more experienced teacher and a new teacher is small and there is little scope for offering chances of promotion. In England, for example, a beginning teacher earns US$32,000 while the most experienced teacher can receive, at most, US$15,000 more. By contrast, the Republic of Korea has a considerably steeper pay structure: a new teacher earns a similar salary to new teachers in England, but an experienced teacher can earn more than twice that (OECD, 2013b). Insufficient career management, together with other inadequate teacher policies, is contributing to a learning crisis in France, particularly for disadvantaged students (Box 6.11).

In many developing countries, teachers’ career structures are not sufficiently linked to prospects of promotion that recognize and reward teacher effectiveness. In 2010, Ghana began reviewing its teacher management and development policy to address such concerns. The new policy framework is intended as a mechanism for promoting teachers and ensuring that all teachers, irrespective of their qualifications and location, receive support to improve their teaching (Box 6.12).

Many teachers have limited prospects of promotion, however. Those teaching in remote areas may be especially affected. In Pakistan, teachers have to acquire additional qualifications...
A four-part strategy for providing the best teachers

Strategy 4: Provide incentives to retain the best teachers

Box 6.11: Inadequate teacher policies contribute to declining learning outcomes in France

Learning outcomes in France as measured by international assessments are below average OECD levels and are particularly unequal. They have also been declining continuously over the past decade.

A recent official report found that inadequate teacher management policies had contributed to the decline. For want of adequate information, teaching positions are not allocated to schools on the basis of the needs of their student populations. Meanwhile, teachers are deployed according to a formula that does not take their competencies into account but places a premium on seniority. This is detrimental to young teachers; at secondary level, for example, 45% of teachers assigned to their first position are sent to the two least sought after regional education authorities. Disadvantaged schools receive inexperienced teachers, many of whom request transfer after a few years.

Teachers' pay is 35% lower than that of other French civil servants at the same qualification level and between 15% and 20% lower than that of teachers in other European or OECD countries. Primary teachers are particularly badly paid. Pay depends mostly on seniority and does not reward the best teachers.

Career management is lacking. Teachers are supposed to teach the same way throughout their career, with geographical mobility the only change they can expect. Support for teachers has not evolved in ways that helps them achieve the official objectives of all students acquiring core competencies and 80% of a given cohort graduating from upper secondary education. The hours spent teaching in the classroom were defined for most categories of teachers in 1950 and are the only recognized working hours; other work, including team activities with other teachers and individual guidance to students, are not recognized as part of teachers’ working hours, even though a 1989 law states that the responsibilities of a teacher go beyond classroom teaching. Teachers have limited interaction with principals. There are no mentors in schools to support teachers facing difficulties in the classroom.

As a consequence, the French education system is failing to motivate qualified applicants to become teachers (since 2010/11, applicants have to hold a master’s degree), despite high unemployment in the country. Between 2009 and 2012, the number of applicants per primary teacher position fell from 6.4 to 3.8, and in 2011 and 2012 more than 20% of positions could not be filled in six fields of secondary education, including mathematics and English.

Source: Cour des Comptes (2013).

Box 6.12: Ghana’s new teacher development policy aims to make promotion evidence based

Ghana’s teacher development policy replaces promotion on the basis of years of experience with evidence-based promotion under a new career structure that is intended to motivate teachers to improve their instructional practice.

The new structure aims at enhancing the social status of teaching and is based on clearly defined competencies. For example, to become a ‘principal teacher’, a teacher is expected to be able to mentor other teachers and implement strategies that lead to improvements in teaching and learning. Teachers have to produce evidence through teaching portfolios to support their application for promotion. Participation in in-service training is also linked to career advancement. New career levels provide a basis for mapping salaries to job responsibilities in the classroom and school.

Teachers may choose or be recommended for a career path in education management only after they have demonstrated their capacity for improving education quality, along with management and leadership competence.

The policy took about three years to develop and involved wide-ranging consultations with teacher representatives, teacher unions and NGOs. It was also endorsed by the Ghana Education Service Council, which certifies pre-tertiary education policies.

The policy holds considerable promise for better recognizing teachers’ accomplishments and thereby creating new incentives for teacher growth and improvements in quality education. The real challenge is to set up functioning structures that operate transparently to give teachers confidence that their achievements will be duly recognized and rewarded, including for supporting the students who are the most disadvantaged.

in order to be promoted, which limits the chances of those working in rural areas, especially women, who have fewer opportunities to study (Bennell and Akyeampong, 2007).

Sometimes mechanisms for promotion are unclear, or teachers believe the system is not sufficiently transparent. A survey of 600 teachers in North West and Northern Cape provinces in South Africa found that 70% felt their career paths and prospects for promotion were unclear. Most had not been promoted within the previous five years and at least 60% did not think they would ever be promoted (Quan-Bauffour and Arko-Achemfuor, 2013).

If promotion criteria are uniform, without recognizing the particular achievements of teachers who help improve learning for disadvantaged groups or weak learners, there is little incentive for good teachers to work in deprived areas or move to more remote schools to help improve education quality. Unfortunately, career structures rarely take this factor into account.

Strengthening teacher governance

Better teacher governance is vital to reduce disadvantage in learning. If days are lost because teachers are absent or devoting more attention to private tuition than classroom teaching, for example, the learning of the poorest children can be harmed. Strong school leadership is required to ensure that teachers are accountable: that they show up on time, work a full week and provide equal support to all. Understanding the reasons behind these problems is crucial for the design of effective strategies to solve them.

Gender-based violence, which is sometimes perpetrated by teachers, damages girls’ chances of learning. Strategies to prevent and respond to teacher misconduct, and take action against perpetrators of abuse, require advocacy and support from school leadership, teachers and their unions, as well as parents and their communities, if they are to protect girls and safeguard their learning.

Combating teacher absenteeism

One of the main reasons for [teacher] absenteeism is the weather. With heavy rains, the dirt roads were closed, and teachers could not get to school. Also, the rain made it impossible to teach, as the noise from the metal roof was deafening.

– Zenaida, teacher, Quezon City, Philippines

While many more children are getting to school worldwide, teacher absenteeism sometimes significantly reduces the amount of teaching they receive, undermining their learning. Efforts to reduce absenteeism need to target the reasons teachers fail to turn up to school, which can include low pay and poor teaching conditions.

Teacher absenteeism reinforces disparities in learning

The scale of absenteeism is evident from surveys carried out in a range of poor countries over the past decade. At 100 primary schools each in Bangladesh, Ecuador, Indonesia, Peru and Uganda in the mid-2000s, teacher absenteeism ranged from 11% in Peru to 27% in Uganda (Chaudhury et al., 2006). Similar surveys yielded figures of 15% in Papua New Guinea and 17% in Zambia (Kremer et al., 2005). Teacher absence is often underreported: in the Indian state of Andhra Pradesh, for example, school registers filled in by head teachers showed an absence rate of 18% while direct observation yielded a rate of 25% (Rogers and Vegas, 2009).

In countries where large teacher shortages are already harming children’s learning, absenteeism exacerbates the problem. In Kenya, where the typical primary school faces, on average, a shortage of four teachers, 13% of teachers were absent during school visits (Uwezo Kenya, 2011). In February 2013, the United Republic of Tanzania reported poor Form 4 national examination results, with 61% of students failing, compared with 46% in 2011. Teacher absenteeism was found to be one reason for the poor performance. A national survey of 2,000 households reported that 10% of primary and secondary school students said no teacher taught them on the last day they were in school (Tiweweza, 2013).
Teacher absenteeism can have particularly adverse effects on poor students and those in remote rural areas. Across Indian states, absenteeism varied from 15% in Maharashtra and 17% in Gujarat – two richer and more urbanized states – to 38% in Bihar and 42% in Jharkhand, two of the poorest states (Kremer et al., 2005). In Peru, the rate was 16% in rural areas and 9% in urban areas. It reached 15% in communities with a poverty rate above 60%, and up to 20% in schools further than 15 km from a paved road (Alcázar et al., 2006). Absenteeism can also reinforce gender disparities. In rural Pakistan, where girls and boys are enrolled in separate schools and taught by a teacher of the same gender, 18% of female primary school teachers were absent in 2004, compared with 9% of male teachers (Ghuman and Lloyd, 2010).

There is much evidence of the harm done to students’ learning because of teacher absenteeism (Glewwe et al., 2011). In India, for example, a 10% increase in teacher absence was correlated with 1.8% lower student attendance (Kremer et al., 2005). In Zambia, an increase in teacher absence by 5% reduced the learning gains that grade 5 students made over the year by about 4% in English and mathematics (Das et al., 2007). In Indonesia, a 10 percentage point increase in teacher absenteeism was estimated to lead to a 7 percentage point decrease in mathematics scores, on average, and absenteeism was most likely to harm weaker students: the teacher absence rate was 19% for the quarter of students with the highest mathematics scores, and 22% for the quarter with the lowest scores (Suryadarma et al., 2006).

Although absenteeism is less widespread in high income countries, where substitute teachers are often available in case of longer-term absence, it still has an impact on student learning. In the United States, public school teachers miss 5% to 6% of school days (Miller et al., 2007). In a school district in the northern United States, 10 days of teacher absence resulted in a decrease in mathematics test scores (Miller et al., 2007). In New York City, between 1999/2000 and 2008/09, the availability of substitute teachers did not compensate for the absence of the usual teacher, as the quality of substitute teachers was very low (Herrmann and Rockoff, 2010). Disadvantaged students are most likely to suffer. In North Carolina, teachers in the 25% of schools serving the poorest children were absent one more day per year, on average, than teachers in the 25% of schools serving the richest children (Clotfelter et al., 2009).

**Tackling the root causes of teacher absenteeism**

I do not get angry with the teachers when they don’t come to school as I understand that they may have some problems themselves.

– B. Shravani, student, Andhra Pradesh, India

In some countries, high levels of absenteeism are due to many teachers missing more school days than can be explained by non-teaching duties or illness, rather than extreme absenteeism by a minority of teachers who might be easily identified. In Bangladesh, Ecuador, India, Indonesia, Peru and Uganda, illness accounted for just 10% of absences. In India, official non-teaching duties accounted for only 4% (Chaudhury et al., 2006). In Peru, according to answers given by head teachers, official duties explained 13% of teacher absences, sick leave or authorized leave 23% and unauthorized leave 10%, but no reason was given for 42% (Alcázar et al., 2006).

Even though teacher absenteeism is widespread in some countries, it is not inevitable, a fact that suggests it is a response to working conditions. In Bangladesh, Ecuador, India, Indonesia, Peru and Uganda, teacher absenteeism was lower when teachers were born in the district where they worked, where the school had better infrastructure and where students’ parents were literate (Chaudhury et al., 2006).

Policy-makers need to understand why teachers miss school days. A wide range of teacher, school and community characteristics affects attendance, including their salary, workload, work environment and professional development, as well as school location and various aspects of school management (Guerrero et al., 2012).

Policy-makers need to identify how teachers’ motivation can be improved, and how absenteeism can be penalized. They usually have some room for manoeuvre in alleviating non-teaching duties, as well,
and providing better health care to teachers to reduce sick leave.

One way of combating absenteeism is for head teachers and the school administration to take action against teachers who take unauthorized leave. In Cambodia, in the areas where head teachers had greater autonomy in taking staff disciplinary action, lower secondary teachers reported fewer absences (Benveniste et al., 2008a). However, penalties often do not exist for civil service teachers, or are not enforced. In Peru, for example, it can take many months to dismiss a teacher who has been absent for long and repeated periods, and it seldom happens (Alcázar et al., 2006).

Head teachers themselves are sometimes absent, impeding effective monitoring of teacher attendance and demonstrating inadequate leadership regarding the problem. A 2011 survey of schools in Uganda found that, on average, 14% of teachers and 21% of head teachers were absent on the day the schools were visited (Uwezo Uganda, 2011).

Hiring teachers on a contract basis gives head teachers more control over hiring and firing. Such accountability mechanisms do not always improve teacher attendance, however. For instance, contract teachers are more likely to attend school than civil service teachers in Benin and India, but more likely to be absent in Indonesia and Peru (Alcázar et al., 2006; Bhattacharjea et al., 2011; Chaudhury et al., 2006; Senou, 2008). Absenteeism may be lower among contract teachers in countries such as Benin and India partly because they typically live in communities where schools are located and have fewer non-teaching responsibilities than civil service teachers.

Experiments have been undertaken in some countries to identify whether monitoring teachers’ attendance can help improve their performance. In 2003–2006, in 120 NGO non-formal education centres in rural Rajasthan, India, photographs were taken of teachers and students every day at the beginning and end of class to monitor attendance and the length of the school day. Teachers’ pay depended on the number of days they taught at least eight students for at least six hours. Over the period of the programme, teacher absenteeism fell from 44% to 21% (Duflo et al., 2012b). The key finding of this often-cited experiment – that linking pay with attendance is effective – is important. However, it is less clear whether camera-based monitoring of attendance could be scaled up and extended beyond NGO education programmes. Extending such surveillance on a large scale could undermine the image of the teaching profession and limit its appeal to good candidates.

Combining monitoring with incentives could be more beneficial than penalties. In a study of 178 primary schools in rural Peru, teacher attendance was monitored three times a day by parents trained for the task. In most schools bonuses based on the achievement of individual and group attendance targets were distributed. Average attendance was higher by 17 days a year in these schools than in those with monitoring only: the combination of bonuses and monitoring proved effective. The impact on student achievement in mathematics and reading was limited, however: only grade 5 mathematics scores had increased by the end of the year (Cueto et al., 2008).

Other interventions aimed at enhancing teacher accountability are often expected to reduce teacher absenteeism, but do not necessarily do so. Greater involvement of parents and the community in school management, for example, had limited impact on teacher attendance in El Salvador, India and Madagascar, and no impact on student achievement (Kremer et al., 2009).

The most appropriate way to address teacher absenteeism is to tackle its root causes, which vary according to context. In some countries, teachers are absent because their pay is extremely low, in others because working conditions are poor. A good working environment that values teachers’ contribution can enhance job satisfaction and reduce absenteeism.

In Malawi, where teachers’ pay is low and payment often erratic, 1 in 10 teachers stated that they were frequently absent from school in connection with financial concerns, such as travelling to follow up and collect salaries or securing credit and making loan payments (Moleni and Ndalama, 2004).
In countries struggling with the HIV/AIDS epidemic, high morbidity and mortality rates can take their toll on teacher attendance. In high HIV prevalence districts in Malawi, the three main reasons primary teachers gave for absence from school were personal sickness, attending funerals and caring for sick family members (Moleni and Ndalama, 2004). Malawi and Zambia have introduced strategies to improve living conditions for HIV-positive teachers, including greater access to treatment, provision of nutritional supplements and monthly allowances or loans (Chetty and Khonyongwa, 2008; UNESCO and Education International EFAIDS, 2007). Low pay and poor payment processes may also affect teacher absence, possibly by undermining teachers’ motivation. In Cambodia, teachers who did not have to miss school to collect pay reported fewer absences (Benveniste et al., 2008a).

Overall, effective monitoring of teacher attendance, coupled with bonuses or penalties, can only be effective in reducing absenteeism if it tackles root causes such as low or irregular pay and poor working conditions.

**Strengthening legislation to address teacher misconduct and gender violence**

Gender-based violence, which encompasses sexual and physical violence, intimidation and verbal abuse, is a major barrier to the achievement of quality and equality in education whether it is perpetrated by teachers, community members or pupils. In addition to physical and psychological trauma, gender-based violence has long lasting health consequences such as unwanted pregnancy and the spread of HIV/AIDS, and often prevents students from completing their education.

Gender-based violence in schools is often not reported, so much of it may remain hidden. It is often committed by male pupils, although male teachers may be the main perpetrators of the most extreme forms of abuse and exploitation. A survey of 1,300 students from 123 primary and secondary schools in Sierra Leone found that 27% of incidences of unwanted sexual touching and 22% of incidences of verbal abuse were perpetrated by male pupils at school. A small percentage of cases were attributed to male teachers (4% and 3%, respectively). Almost a third of cases of forced or coerced sex in exchange for money, goods or grades were perpetrated by male teachers (Concern et al., 2010). A survey of gender-based violence in schools in Malawi found that around one-fifth of teachers said they were aware of teachers coercing or forcing girls into sexual relationships. Of those who reported awareness of such incidents, almost three-quarters knew of cases happening at their own school (Burton, 2005).

Programmes and policies addressing gender discrimination and gender-based violence need to protect and empower girls, challenge entrenched practices, bring perpetrators to light and enforce action against them. Legal and policy frameworks that provide general protection for children need to be strengthened and publicized, and teachers need to be made aware of their own roles and responsibilities.

Codes of conduct for teachers need to refer explicitly to violence and abuse, and ensure that penalties are clearly stipulated and consistent with legal frameworks for child rights and protection. In Kenya, for example, a range of penalties is available to discipline teachers in breach of professional conduct, including suspension and interdiction; new Teacher Service Commission regulations state that a teacher convicted of a sexual offence against a pupil is to be deregistered (Kenya Teachers Service Commission, 2013). Conviction rates for sexual violence are notoriously low, however; in Sierra Leone, 1,000 cases of sexual assault were filed in 2009, but no action was taken against perpetrators (Concern et al., 2010).

Advocacy and lobbying through national networks and alliances is an important first step in ensuring that adequate legal and policy frameworks are in place to prevent and respond to gender-based violence in schools:

- In Mozambique, the Stop Violence against Girls in School programme, working with a network of civil society organizations, has published a detailed analysis of laws and policies relating to girls’ education and protection. It informed the government’s revision of the penal code, which now makes explicit and strengthens laws against sexual violation of minors (Leach et al., 2012).
In Malawi, the Safe Schools project used national advocacy networks to lobby successfully for revisions to teachers’ codes of conduct and call for stronger enforcement of regulations relating to misconduct. Awareness workshops were held for school supervisors and school committee members, who then ran sessions with teachers, pupils, counsellors and parents on the revised code. Manuals developed for training teachers and counsellors included modules on the code as well as support, referral and reporting procedures. An evaluation of the project found that the proportion of teachers who reported having seen the code of conduct rose from about three-quarters to almost all. The number of teachers who said they knew how to report a violation of the code increased by over one-third, and virtually all of those said they had a responsibility to report violations (DevTech Systems, 2008).

In Ghana, earlier versions of the teachers’ code of conduct were consolidated into a single revised version explicitly addressing gender violence. As in Malawi, a consultative approach was adopted, with a team running workshops for representatives of regional education offices, schools and communities. Once the revised code was approved by a national review committee in 2008 and endorsed by teacher unions, meetings were held with all 428 head teachers and teachers in the 30 project schools to familiarize them with the revised code (DevTech Systems, 2008).

Working directly with teacher unions is a way to build support for taking action against teachers who violate codes of conduct. In Kenya, the Stop Violence against Girls in School advocacy team collaborated with the Teachers’ Service Commission, the Ministry of Education, the Kenya National Union of Teachers and the Children’s Department to draft a parliamentary bill based on a 2010 Teachers Service Commission circular on sexual abuse. The bill aims to reinforce procedures for reporting incidences of abuse or violence carried out by teachers, and to ensure that convicted teachers are not simply transferred to other schools (Leach et al., 2012). The circular states, moreover, that any failure to report or attempt to cover up an incident would lead to disciplinary action |Kenya Teachers Service Commission, 2010). The union, which previously was often a block to reform, is now reported to be committed to avoid protecting teachers found guilty of an offence, and a centralized database has been established to track teachers convicted of sexual offences (Leach et al., 2012).

Even where existing laws provide adequate legal protection against gender-based violence, enforcing them remains a challenge. A survey in Ghana, Kenya and Mozambique found that reporting mechanisms were generally weak. Of 842 girls who reported experiencing gender-based violence, only a few saw their cases referred through official channels, and a small minority were reported to the school management committee, district education office or police. In Ghana, no more than 7% of cases of various types of sexual violence were reported to the school management committee, 2% to district education offices and 14% to police. In Kenya, a greater proportion of cases, predominantly of forced or coerced sex, were reported to the management committee or district education offices. In Mozambique, by contrast, no girls who experienced sexual violence reported the incidents (Parkes and Heslop, 2011).

In order to take action against teachers involved in violence or abuse of pupils, it is critical to ensure that reporting procedures are transparent and child-friendly. A national study in Sierra Leone noted that girls were often fearful of reporting teachers, and schools, parents and community members may be complicit in helping teachers avoid prosecution, especially for serious offences (Concern et al., 2010). Complex bureaucratic processes also tend to dissuade victims and their families from pursuing matters. The establishment of Family Support Units within the Sierra Leone Police, set up to tackle gender-based violence, is a more innovative approach to the problem. ‘Mother clubs’ in Sierra Leone negotiate difficulties faced by girls wishing to report cases of abuse, and provide moral and sometimes financial support (Concern et al., 2010).
Private tutoring versus classroom teaching: protecting the poorest

Teachers are not paid enough. They have family to care for, and they also need to care for themselves – their health is their wealth. Hence, they go after private tuition, which earns them more income, but also distracts from their main duties in the workplace.

– Emmanuel, teacher, Kano state, Nigeria

Private tuition, if unchecked or uncontrolled, can be a detriment to learning outcomes, especially for the poorest students who are unable to afford it. Whatever perspective policy-makers may have on private tuition, management policies are required to ensure that teachers teach the assigned number of hours and cover the whole curriculum so that private tutoring does not displace classroom teaching.

Some countries where private tutoring is long established, such as Hong Kong (China) and the Republic of Korea, have strong school systems, but elsewhere private tutoring by teachers is often a symptom of badly functioning school systems and low pay that forces teachers to supplement their income. Parents tend to believe that classroom teaching is insufficient for their children to master the curriculum and to perceive private tutoring as an integral part of education (Brehm et al., 2012).

In Cambodia, teacher salaries are very low – they do not cover living expenses, including food, housing and health care – and are often distributed late. As a consequence, a 2004 public expenditure tracking survey found 13% of primary school teachers tutored students, including 42% of those in urban areas and 8% in rural areas. On average, tutoring earnings increased teachers’ base salary by two-thirds. Among secondary teachers, 87% reported tutoring after school hours (Benveniste et al., 2008a).

Private tutoring by teachers reinforces disparities between students whose parents can afford to pay the fees and those who cannot. Student achievement in Khmer and mathematics was much higher among those who were privately tutored, especially in urban areas. In rural areas, grade 9 students scored 6.8 points out of 10 in Khmer with tutoring and 3.9 points without. In urban areas the gap was even greater: 8.3 points compared with 3.8 points (Brehm et al., 2012).

Private tuition has also spread in former socialist countries of Central and Eastern Europe and Central Asia since the early 1990s, with teachers forced to earn extra income to escape poverty. By 2010 in Lithuania, 17% of grade 12 students were receiving tutoring from their own teachers, 22% from another teacher at their school and 41% from a teacher from another school (Bray, 2011).

Private tutoring by teachers is also reported to be common in sub-Saharan Africa and South and West Asia. In sub-Saharan Africa, tutoring has become more prominent largely as a means to generate extra income for teachers. SACMEQ II data show that 82% of grade 6 pupils in Uganda received extra tutoring, and that over half of these paid for their tuition (Bray, 2009).

In Bangladesh, about one-third of students in government primary schools and almost two-thirds in secondary schools were privately tutored in 2005, and teachers were reported to expect that students would do most of their learning at home, limiting their classroom responsibility to giving and checking homework (Hossain and Zeitlyn, 2010).

In Egypt, although private tutoring is officially forbidden by the Ministry of Education it continues to occur, displacing teaching in the classroom, to the detriment of the poorest students (Box 6.13).

Some countries have tried to restrict private tuition. Mongolia and Ukraine responded to parental complaints by banning private tuition on school premises and tutoring by teachers of their own students (Bray, 2009). Completely banning private tutoring is likely to be impractical, however. Some countries have tried to do so, but have faced difficulties in implementation. In India, the 2009 Right to Education Act states: ‘No teacher shall engage himself or herself in private tuition or private teaching activity’; it covers grades 1 to 7 in government schools and ‘aided’ private schools, which receive government funding. The law, however, sparked outrage from teachers, who said they needed fees from tutoring to supplement their salaries to reach decent income levels (Iyer, 2012).
Box 6.13: In Egypt, private tutoring damages the educational chances of the poor

In Egypt, children whose families cannot afford private tutoring suffer the consequences of a poor quality formal education system in which teachers are more likely to spend their energy and resources on private tutoring than in the classroom. In urban areas, 44% of students receive private tuition, and in rural areas the share is 35%. In Lower Egypt over half of students receive private tuition. The proportion reaches 60% among secondary school students.

The amount spent annually on private tutoring is reported to be US$2.4 billion, equivalent to 27% of government spending on education in 2011. Private tuition is a significant part of household education spending, averaging 47% in rural areas and 40% in urban areas. The investment is viewed as worth the financial strain for families that can pay. However, not everyone can afford it: children from rich households are almost twice as likely to receive private tuition.

An important reason for widespread private tuition is that the social status of teachers in Egypt has declined in recent decades as the government began hiring less qualified teachers to meet the demand of growing public education. School-leavers often become teachers not by choice but as a last resort. The undervaluing of teachers in Egyptian society has led to teaching being one of the lowest paid government jobs, with a base salary of between US$20 and US$60 per month in 2006. Teachers thus turn to private tutoring to supplement their salaries. If they charge around US$3 per lesson per student, just two lessons per month with four students earn them more than the regular salary of a teacher at the bottom of the salary scale. Private tutoring may actually serve as some teachers’ main source of income, even if they keep their low paid government jobs to provide legitimacy and as a means of recruiting customers.

Students complain that, as a result of private tutoring, teachers do not cover the curriculum during the school day, so students need to take private tuition to cover the syllabus to enable them to pass exams. Teachers may also be their students’ private tutors, and so are responsible for their grades. Illegal private tutoring is so widespread that, in response, the government has organized study groups after school that are taught by regular teachers for a nominal fee. They are not as popular as other forms of private tuition, however, and are used only by those who can afford nothing else.

Sources: Central Agency for Public Mobilization and Statistics (2013); Elbadawy et al. (2007); Hartmann (2007); UNESCO (2012a).

Are low fee private schools better at ensuring that the disadvantaged learn the basics?

Private schools that charge low fees are seen by some observers as a promising way of expanding access to better quality education for disadvantaged children in areas where government schools are failing. Such schools are also seen as a less expensive way of achieving quality, because they can recruit teachers at lower cost than government schools. Advocates of low fee private schools argue that students in these schools achieve better learning outcomes than students in government schools, but such differences arise partly because teachers in government schools often face more difficult conditions, teaching larger classes and children with a wider diversity of learning needs.

Some evidence for higher learning outcomes in low fee private schools comes from Pakistan, where a child in a private school performed better than the average child in the top one-third of children in government schools, after wealth, age, gender and parental education were taken into account [Andrabi et al., 2008]. Even though many low fee private schools perform better than government schools, however, pupils in both systems often barely reach expected levels in key subjects. For example, a study in the Indian state of Andhra Pradesh found that at the age of eight, 72% of private school pupils could not solve a basic two-digit by one-digit multiplication problem, while 79% could not divide – results that were only slightly better than those for government school students [Singh and Sarkar, 2012]. According to analysis for this Report by the Annual State of Education Report team in Pakistan, 36% of grade 5 students in private schools could not read a sentence in English, which they should have been able to do by grade 2. Similarly, 45% of children in grade 5 could not do division, which they would be expected to have covered in the curriculum by grade 3.

Teachers in low fee private schools are often recruited on temporary contracts and receive very low wages, sometimes below the minimum wage – conditions similar to those of contract teachers in government schools. In two of the largest Indian states...
(Uttar Pradesh and Madya Pradesh), teachers’ salaries in low fee private schools are estimated to be one-eighth of government school teachers’ salaries in the same district or village (Goyal and Pandey, 2009). In Kenya, across four districts, low fee private school teachers receive around half the basic pay of a government teacher and lack the pension and health insurance arrangements that government teachers are entitled to (Stern and Heyneman, 2013). Teachers in low fee private schools in a slum area of Lagos, Nigeria, receive an average wage of around US$80 per month, compared with the state’s minimum wage of US$116 and the starting salary for a government teacher of about US$167 per month (Härmä, 2011).

Low fee private school teachers tend to have less experience than government teachers. In Andhra Pradesh, India, teachers in government schools have more than seven years of experience, on average, while those in private schools have fewer than five years (Singh and Sarkar, 2012). In Punjab, Pakistan, the proportion of teachers who reported having more than 20 years of experience was 43% in government schools but 5% in private schools (Aslam and Kingdon, 2011).

In addition, low fee private schools often have fewer trained teachers. In Ghana, less than 10% of teachers in private schools in economically disadvantaged districts were trained, while nearly half the government teachers in schools serving the same area were trained (Akaguri, 2011). Differences in wages are not, however, due only to the lower experience and training that teachers in low fee private schools often have. In Punjab, Pakistan, private teachers were paid one-third as much as government teachers, even once differences in age, education, training and experience are taken into account (Andrabi et al., 2007).

Low fee private schools often employ young people, especially young women, who are willing to work for wages that are unlikely to be sufficient to support a family. In Pakistan, private schools are more likely to be present in rural areas where there is a government secondary school nearby, with female graduates becoming teachers at local private schools: 76% of private school teachers are women, while they make up only 43% of the government teacher workforce (Andrabi et al., 2007). Similarly, in Andhra Pradesh, India, women make up 69% of the mathematics teacher workforce in private schools but only 34% in government schools (Singh and Sarkar, 2012).

Why do some low fee private schools achieve better learning outcomes? One reason is that lower salaries enable low fee private schools to hire more teachers and keep pupil/teacher ratios low. In 23 private schools across four districts in Nairobi, for example, there are 15 students per teacher, compared with 80 in government schools (Stern and Heyneman, 2013). In Patna in Bihar state, India, there are 22 students for every private school teacher, compared with 42 for every government school teacher (Ramgaraju et al., 2012).

Not only is class size smaller in low fee private schools, but the amount of time spent actually teaching in school is greater. In rural India, government school teachers have been found to spend 75% of their time at school teaching, compared with 90% for private school teachers (Kingdon and Banerji, 2009). Another Indian study found that private school pupils received three to four times as much teacher contact time as pupils in government schools (Muralidharan and Kremer, 2009).

Such conditions enable private school teachers to provide more feedback to their pupils. In Andhra Pradesh, around half of teachers in both private and government schools used traditional methods of teacher-directed instruction, but private school teachers offered more feedback to students: 82% of teachers in private schools regularly corrected exercises given to children, compared with 40% of teachers in government schools (Singh and Sarkar, 2012). A survey in Lahore district in Punjab province of Pakistan showed that private school teachers were more likely to try to identify what pupils actually understood, by asking them questions in class, and spent more time planning their lessons. This made a significant impact on pupils’ learning (Aslam and Kingdon, 2011).

Teachers in low fee private schools are predominantly hired from within the communities they serve, so they are more likely to understand the challenges children face. In Andhra Pradesh, for example, the proportion of
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It is vital that all children, regardless of their background and the type of school they attend, have the opportunity to learn.

teachers who reside in the village their school serves is 66% in private schools but 37% in government schools. About 30% of the government school teachers lived in a village or town in the same district but had to go a long distance to school, while only 16% of teachers in private schools had to do so (Singh and Sarkar, 2012).

Teacher absenteeism is generally lower in private schools, partly because private school teachers tend to have closer links with the community. In Andhra Pradesh, teacher absenteeism in private schools was found to be nine percentage points lower than in government schools (Singh and Sarkar, 2012). In an unannounced census of private and government schools in low income areas of Hyderabad in India, 6% of teachers in government schools were absent, compared with 4% in unrecognized schools and less than 1% in recognized private and unaided schools. In addition, teachers were found to be teaching, rather than doing some non-teaching activity, in 75% of the government schools but in 91% of unrecognized schools and 98% of recognized private unaided schools (Tooley et al., 2010).

However, teacher absenteeism can also be prevalent in low fee private schools, partly because their teachers receive low salaries and hence need to take on additional work. In Lagos, 11% of private school teachers were absent during unannounced visits (Härmä and Adefisayo, 2013). In rural Pakistan, absenteeism was 13% among government school teachers and 12% at private schools (ASER Pakistan, 2013).

Private school teachers are generally thought to work under conditions of greater accountability. A nationally representative study in India found that only one head teacher in 3,000 government schools reported dismissing a teacher for repeated absence. By contrast, 35 private school head teachers, out of 600 surveyed, reported having dismissed teachers for this reason (Muralidharan and Kremer, 2009). In Andhra Pradesh, about 24% of private school head teachers reported having made dismissals, around half of which were for poor-quality teaching and around one-third for unjustified absence. But no government school head teacher reported dismissing any teachers.

Only 12% of head teachers in government schools said they conducted inspections, compared with 22% of private school heads (Singh and Sarkar, 2012).

Cases where learning outcomes are lower in government schools, however, can often be explained partly by the greater challenges government teachers face in the classroom, including a wider diversity of learners, and students who face disadvantages that affect their ability to learn. In rural Uttar Pradesh, 77% of children from scheduled castes were studying in government schools (Härmä, 2009). Government school teachers are also more likely to be teaching the poorest of the poor. In Andhra Pradesh, over 70% of students attending government schools belong to the poorest 40% of households, compared with 26% in private schools. Around one-third of teachers in government schools are teaching students of different ages in multigrade classrooms, compared with 3% in private schools (Singh and Sarkar, 2012).

Moreover, expanding private schooling on a large scale can widen inequality in access to quality education, leading to widespread dissatisfaction and social unrest, as Chile’s experience shows. This is a particular risk if such expansion triggers a decline in the quality of government schools mostly serving the disadvantaged. In Chile, where private schools have expanded rapidly in recent years, 94% of enrolment in these schools is from the wealthiest quintile, while two-thirds of those in state schools are from the poorest half of the population (Mizala and Torche, 2012).

A number of lessons can be drawn from experiences with low fee private schools. Smaller class size enables greater classroom interaction, for example, and closer engagement with the community means private school teachers may be less likely to be absent. However, such benefits do not mean that low fee private schools are better per se; often their students face far fewer disadvantages than students in government schools. There are no excuses for students not having the right conditions to learn: ultimately, it is vital that all children, regardless of their background and the type of school they attend, have this opportunity.
Conclusion

Achieving equitable learning outcomes rests on securing an adequate number of trained teachers who are equitably deployed. To achieve this goal, countries must prioritize teacher reforms to select the best-qualified candidates for teaching, provide good quality pre-service and ongoing teacher education, and strengthen teacher governance. Through these approaches, together with an effective career structure and incentives that attract and retain the best teachers in the areas where they are most needed, governments can give every child, irrespective of their circumstances, an equal chance of receiving a quality education that can lead to a better future.