

Those who can?

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Executive summary

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The views expressed in this report are solely those of the authors.

Executive summary

The world in which teachers must now operate is much changed from that of the 1980s and even the 1990s. During that time, political reforms have both helped and hindered teaching. Developments in technology and media have altered the way in which information is accessed, processed and shared by young people and have changed leisure and social experiences beyond recognition. Shifts in family formation, which began before the 1980s, have continued to alter the context in which schooling takes place. It is increasingly the case that teachers cannot expect parents to have universal cultural norms or expectations about education, and must deal with varying levels of parental interest and engagement. And teachers have to deal with increasingly challenging behaviour, and are expected to perform expanded, more proactive roles in young people's lives.

This report considers the implications of these trends for teaching in England. It also explores the central role that teachers play in pupil attainment and development.

Teaching in a changing world

Exploring the implications of recent economic and social trends in more detail is illuminating. All of these trends have impacted on teaching and altered the importance of the teacher in pupil attainment.

Economic changes mean that to succeed in the labour market, school leavers increasingly require not only qualifications and solid academic skills but also psychological and communication-based skills (including financial capability and information and communication technology [ICT] skills but also less tangible qualities such as self-esteem, confidence, or gumption). As time goes on, increasing numbers of jobs are located in service industries. An ippr study shows that psychological skills became 25 per cent more important in determining earnings later in life for a cohort born in 1970 than for counterparts born in 1958, while academic attainment became 20 per cent less important for the later group.

Changes to families and communities mean that differences related to social class are growing in terms of who develops these psychological skills, making the role of the school more important in this area. Communities being less bonded today mean that cultural norms are less clear-cut than they once were, with families having very different expectations of the education system. Meanwhile, higher levels of in-migration, and the increasing diversity of backgrounds of those attending England's schools, mean that today English is not the first language of many children. The impact of this trend on teaching is not wholly negative, but it presents new challenges to delivering whole-class lessons. Teachers also note that although the amount of very challenging behaviour is declining, low-level disruptive behaviour is more prevalent than ever.

Political reforms such as the Government's accountability and choice agendas, have served, through an emphasis on testing and performance tables, to constrain teachers in what they can do and have undermined autonomy in some areas. The personalisation agenda and emphasis on assessment for learning have increased the importance of teachers in pupil outcomes and put more pressure on teachers to track individual pupil progress. The Every

Child Matters agenda and subsequent development of extended services has shifted attention to the pastoral and welfare aspects of schooling and the role of teachers in developing social and emotional skills; this is beginning to feed into curriculum change via the SEAL (Social and Emotional Aspects of Learning) programme and emphasis on cultural learning. The teaching profession is now also having to respond to increased demand for vocational education, partly as a result of new diplomas and partly driven by the raising of the school leaving age to 18.

The role and impact of teachers

ippr's original analysis of recent pupil outcomes shows the difference between an 'excellent' and 'bad' teacher is equal to one GCSE grade, all other things being equal. This means that a poor performing teacher can literally make the difference between a C and a D. This is increasingly acknowledged by the Government and by schools. But there are concerns about how one drives up teacher quality, particularly for those teachers who are not poor performers *per se* but are unlikely to use creative and energetic teaching methods and are thus deemed 'uninspiring'.

The ability to provide **specialised vocational instruction** is increasingly required of teachers, in areas such as carpentry, mechanics and engineering. Political agendas, including the raising of the school leaving age and the introduction of 14-19 diplomas, will mean that many more students will request vocational teaching in secondary school in the future. Teaching these subjects requires not only different and specialised subject and professional knowledge, but different teaching skills, such as the ability to hold dynamic and active lessons with hands-on experience for pupils and within less traditional classroom environments. Early research suggests that teaching vocational subjects successfully may be more challenging and require more training than teaching academic subjects.

Teaching psychological skills is also increasingly required: as the need for schools to focus on emotional and social development increases with social change, so new evidence is coming to light about the way teachers can develop these skills. Teachers can have a great impact on psychological development, through lesson content, and in their interactions with students and class-management techniques. But few teachers are confident in teaching these skills – largely because training and Continuing Professional Development (CPD) are inadequate. There is a prevailing expectation that Personal, Social, Health and Economic Education (PSHEE) can provide the full psychological education a pupil requires. But PSHEE is a low status subject, which often gets squeezed out of the curriculum. As a result, pupils tend not to take it seriously and misbehave during those lessons.

A whole-school approach, not a curriculum bolt-on via PSHEE, is needed in order to teach psychological skills seriously. All teachers must be trained in how to integrate concern for psychological development into their lessons and interactions with students.

What makes an effective teacher?

While we would prefer a wider measure of effectiveness that included social and emotional skill development such as communication and application when defining a good teacher, we are only able to use data that uses *pupil attainment* as a marker, due to the limits of the evidence, and the difficulty in identifying other characteristics. In addition, what might be effective teaching for one pupil may not be for another.

With this proviso, however, there is a set of common characteristics that influence the quality of teaching. A teacher's own levels of literacy and academic ability affects student performance more than any other measurable attribute, and as such should be more effectively used in identifying suitable candidates for Initial Teacher Training (ITT). Yet just as important are 'soft' attributes, which are very difficult to measure. These include commitment to the job and having high expectations of students, both of which can be tested for to an extent in interviews for ITT but are also determined by other factors such as relationships with other staff, the nature of the school environment and how effective the head teacher is. These factors may change greatly over the time a new teacher takes to complete ITT and enter school as a qualified teacher.

Teachers need to understand the way needs differ according to age group. For example, for 4- to 11-year-olds, the opportunities for autonomous work, which increases self-esteem, and the chance to work in groups to improve communication and empathy, are required. For 14- to 18-year-olds, project-based autonomous work is essential. Approaches are also likely to be more or less effective depending on whether a child is male or female, but the data is limited in demonstrating this.

Certain classroom practices are proven to be effective for all age groups, particularly the use of assessment techniques that enable a teacher to track the progress of individual pupils throughout the duration of a lesson. But there are tensions between teaching academic, psychological and vocational skills: in particular, vocational learning requires a more interactive and dynamic classroom environment than the other kinds.

Teacher training and CPD would also benefit from being more personalised to the needs of the individual teacher, in terms of specific techniques appropriate for the age group they wish to teach, and aimed at addressing their particular skills and development needs.

A model for an effective 21st-century teacher

Below we present a model of the kinds of attributes that are needed in a 21st century teacher, in order to inform our understanding of how we should train and develop the current and future workforce.

Today's teachers need to be:

- **Subject specialists:** able to teach in specialised subject areas.
- **Life coaches:** able to equip pupils with financial, communication, psychological, social and behavioural skills.
- **Pedagogical experts:** able to deliver personalised learning in increasingly mixed ability classes, in which some pupils may not have English as a first language; able to assess pupils diagnostically and create supportive environments for them.
- **Curriculum designers:** able to be flexible, making the curriculum relevant to pupils.
- **Professionals:** committed to teaching and interested in learning and using pedagogical techniques that work.

The current standards set for those achieving Qualified Teacher Status (QTS), which drive content of Initial Teacher Training, relate to the three areas 'Attributes', 'Knowledge and understanding' and 'Skills'. Although these appear to cover the right areas, we believe that they are too vague to be useful. Consolidating them along the lines we suggest above would make it easier to judge whether trainee teachers meet all that is required of them.

Drawing on the evidence of what works

How can we ensure our teaching workforce is able to meet this challenge? Drawing on evidence from other countries, we can begin to get a sense of which are the most important factors in improving teacher effectiveness.

The factors and practices that explain teacher effectiveness in top-performing education systems include:

- Recruiting and hiring the right people to become teachers
- Training teachers effectively
- Continuing Professional Development (CPD) of the workforce
- Supporting and incentivising good performers and managing poor performers.

Factors and interventions that can improve teaching include:

- Observation of peers in the classroom
- Linking CPD to the appraisal process
- Building 'learning communities' in schools, where teachers can learn from each other
- Leadership that encourages a focus on development and training
- Using classroom practices that are proven to be effective.

Barriers to improvement

Having ascertained where we would like to get to and which factors are most important in getting there, below we look at the problems currently standing in the way of achieving a fully effective teaching workforce.

Unsatisfactory quality and selection processes

Teaching currently attracts candidates in the top 30 per cent of graduates in England, rather than only those with the very highest academic achievements. For comparison with a culturally similar country, in Finland teaching candidates currently hail from the top 10 per cent of graduates. Finland also tests prospective candidates for academic ability through a nationally-set written test. In England, while some teacher training providers do set written tests, many do not, and this affects the quality of accepted candidates.

The point at which Qualified Teacher Status is achieved is also weak: only 1 per cent of trainees fail ITT, a far lower proportion than in other countries, suggesting that in England poor candidates are not being weeded out.

Inconsistent quality of training

Training providers are of variable quality, although the Training and Development Agency for Schools (TDA) is effective at awarding good providers over bad, and providers are vetted by the education inspectorate Ofsted. But training overall is considered by teachers to be inadequate and too short in duration. It falls down in particular in the areas of psychological development and pedagogical techniques. This is largely because the ITT course tries to achieve too much in too short a time.

Not enough policy attention is given to the role of school-based mentors. There is poor retention and recruitment of mentors, which impacts significantly on quality of training of new teachers. This may be partly because the position is often under-funded in schools.

Having completed Initial Teacher Training, most teachers find that once they are newly qualified teachers they have little time to continue training, despite this being a requirement of their first year in a school (the 'induction year').

Inadequate performance management

Appraisals are annual, rather than biannual or even constant as in countries that achieve better results. Only 25 per cent of teachers report that they are regularly observed in classroom practice, despite this being a key driver of teacher quality. Many teachers report having poor managers.

Very few teachers are fired for poor performance. Ofsted estimates that around 5 per cent of teachers could be described as poor performers. Head teachers regularly complain that it is too difficult to remove poor performers and the overwhelming majority of those taken through capability review processes merely leave their school rather than the profession. Few undertake training or other development opportunities in order to address problems in their skill or knowledge base, even though it is possible to do so as part of the capability review.

Inadequate professional development

Teachers report that only 3 per cent of their time is spent on Continuing Professional Development, despite this being essential for effective teaching. Teachers have less time for development than those in other OECD countries. This is probably because there is very little contractual time for teachers to undergo CPD (other than the five days of in-service training a year) and because funding is devolved to schools, not teachers, and is not ring-fenced, meaning that it may be used for purposes other than CPD.

Furthermore, teachers face weak incentives to engage in CPD and provision is often patchy, coming from Local Education Authorities, schools and private companies. Quality assurance systems are only now being developed and there is no body that assesses the impact of the various forms or that strategically drives development of CPD. Currently there are concerns that providers are not responsive enough to the particular needs of each local area.

Problems associated with leadership

Head teachers complain of having too many day-to-day management issues, which undermines their capacity to provide adequate line management and inspirational leadership. While school governors' expertise often lies more in the business and operational aspects of running a school, these roles would usually be better performed by school bursars. This would leave governors free to perform a trustee-style role, giving advice and support to head teachers about the issues involved in running a business, many of whom currently complain that this is lacking. However, the role of school governors in overseeing head teachers and managing their performance remains unclear.

There are currently growing concerns about the implications of large numbers of teachers reaching retirement by 2015. Estimates suggest that around 40 per cent of head teachers will have retired by this point, risking the loss of a very great amount of expertise and knowledge of schooling and school management.

Impact of the wider school context on teaching

The effectiveness of teaching is also affected by particular contexts of individual schools and by the education system. Impacts come from five broad areas:

- The curriculum, assessment and testing
- Children's services in schools

- Transitions between different stages of learning, particularly just after the transition to compulsory education for 5- to 7-year-olds and just after the transition to secondary school
- The structure of the school year
- The physical learning space.

These areas are examined in detail in a concurrent ippr project on school reform, Thursday's Child (Sodha and Margo 2008, forthcoming).

Recommendations

Bold action is needed if we wish to achieve a genuine improvement in teacher quality and effectiveness. Below we propose a series of hard-hitting recommendations for selection, training and recruitment processes, followed by a realistic timeframe and the scale of investment necessary, to transform today's teaching workforce into one that is world-class.

1. Selecting teachers

- Expand and roll out a Teach Next scheme to attract professionals into teaching via elite routes.

In order to attract higher quality candidates into the profession, we recommend widening specialist and employer-based routes into teaching. We support the Government's Transition to Teaching programme for those already in employment, particularly scientists.

There is a need to go further, however. We recommend building on the success of Teach First, which selects, trains, places and supports top graduates to work in challenging schools. Teach Next, which recruits those with previous professional experience, is currently being piloted; we recommend this scheme be rolled out on a similar model to Teach First, in order to inspire individuals with more career experience into the profession.

- Introduce a Teach Later scheme for older professionals.

We recommend the introduction of what we would call Teach Later to encourage recruitment of those nearing retirement in non-teaching sectors but who are keen to continue working. This would enable large numbers of individuals, from diverse backgrounds, to contribute their skills and experience. It could fill gaps in vocational teaching by providing trained engineers, carpenters, electricians and plumbers who would not qualify for traditional teacher-training routes.

- Introduce a nationally-set written examination for applicants for ITT.

Currently, we pass too many candidates who perform poorly in initial training and train too many who will never make good teachers. All applicants to Initial Teacher Training in any form should be required to sit a nationally-set exam to test cognitive skills, literacy and numeracy. This could be set nationally and be run by the Training and Development Agency for Schools.

- Use psychometric testing software alongside examinations to assess suitability for teaching.

Having ascertained the importance of particular personality attributes for teaching – especially commitment to the job and having high expectations of pupils – we recommend taking moves to ensure these attributes are properly tested for when choosing candidates for ITT. Psychometric testing, which assesses a person's ability or personality in a measured and structured way, could be used early in the process of recruitment to ITT to help providers to make quicker decision over which candidates are suitable.

- Increase training bursaries for all subjects, including non-shortage subjects, in line with inflation.

For school subjects in which there is no current shortage of teachers, trainee bursaries have been static since 2001. Bursaries for all subjects should be increased in line with inflation (although not raised significantly overall).

2. Training teachers

- Make ITT more flexible, with more modules covering pedagogical technique, psychological skill development and behaviour.

To increase the quality of ITT and the skills of those who have participated, we recommend a move to a more flexible ITT course that is more 'personalised', and has greater focus on pedagogical techniques. This would include additional modules on psychological skills and Special Educational Needs (SEN) teaching (already requirements for Qualified Teacher Status, these would benefit from additional time and focus). There should be specialised modules on age-specific pedagogy, and on teaching adolescents.

- Spread ITT over three years, integrated into the new masters level qualification.

To increase the scope and quality of ITT we recommend moving to training process that is longer than the current one year, which would be built seamlessly into the Government's plans for the new masters level qualification, which is being rolled out this year in a bid to raise skills. We propose the training would comprise two years of a mix of training and classroom practice, followed by one year's induction in a school, with one day per week of obligatory training. To complete the masters level qualification in teaching (if desired), a fourth then fifth year would involve studying part-time.

This system would help ensure there were opportunities for the performance of new trainees to be reviewed, and if necessary, for some to be encouraged to leave the profession. This would also help improve the status of the profession and sense of progression for the newly qualified and would drive retention of high achievers.

- Review the funding of school-based mentors with a view to giving schools greater support in providing this function.

The importance of the role of school-based mentors in supporting teachers in their training and in their jobs in school needs to be reflected by giving more funding to schools for this purpose.

3. Continuing Professional Development

- Replace the current five days of in-service training with 20 days of compulsory CPD for all teachers.

Increasing the amount of CPD would reflect its critical importance for driving up quality and skills of the current workforce. Ten days of this training would take place in the school (with an expectation that schools will facilitate this), and ten days outside via external providers, conferences, school visits or even visits to other countries.

- Give control of CPD budgets and responsibility for vetting CPD providers to the TDA.

In order to improve quality of CPD, the Training and Development Agency for Schools (which currently holds the budget for Initial Teacher Training) should have overall control of budgets, and be able to earmark money for individual teachers. Teachers should apply for information and CPD courses via the TDA; schools should also apply to a ring-fenced fund specifically for

in-school CPD. This would enable the TDA to reward good-quality providers and penalise poor quality, as it does currently with ITT providers, and to review and advise on plans by schools for in-school training and development, thus driving up quality. The TDA should also continue to facilitate improved CPD by setting performance management standards.

- Give the TDA responsibility for running the Teachernet website, and build it up to be a viable resource for teachers.

The government website for teachers and school managers, www.teachernet.gov.uk, should be expanded. Currently run by the Department for Children, Schools and Families, it is of poor quality. To make Teachernet a viable resource for teachers, the TDA should be charged with running it on behalf of teachers and to build it up to be a resource where teachers can keep track of opportunities and courses offered.

- Place greater focus on action research in schools and seminar sessions for teachers, rather than on traditional training formats.

There should be more collaborative, schools-based CPD in the form of 'teacher learning communities', which offer dynamic and action-research-based training, as this has been shown to be more effective than traditional training.

4. Performance management and pay

- Schools should adopt a biannual appraisal process to replace the current annual review. This would improve the effectiveness of appraisals.

- All teachers should be required to observe a set number of lessons given by their peers. Classroom observation is found to be the most effective way to improve poor performers. All teachers should therefore be required to observe four lessons by colleagues per term. For senior management this should rise to eight lessons.

- Performance management systems should be integrated with the recommended CPD requirements.

Performance assessments should include CPD requirements so that pay becomes linked to levels of CPD and learning. In-school experience, conference attendance, and additional CPD should gain teachers 'credits'. Teachers must fulfil their CPD credits of 20 days per year in order to progress their pay and seniority. This would be modelled on the professional development of doctors, where progression requires having fulfilled a set of criteria from external development and training.

- The current capability review should be reformed in order to oblige poor performers to access appropriate training before they re-enter teaching.

Currently, head teachers do not like to fail teachers on capability review. Although the current system is flexible enough to allow line managers to direct a poor performing teacher to CPD or re-training before they return to teaching, this is not often done and is not an integrated part of the capability review. We recommend making this an obligatory stage. In addition, poor performers can choose to avoid capability review by changing schools, and this is often supported by head teachers. In order to ensure that poor performing teachers undertake re-training or CPD to address their needs before they re-enter teaching at any school, the General Teaching Council should be responsible for keeping teachers' performance records, so that these are linked to the teacher, not the school.

5. Classroom practice

- **Roll out formative assessment in all classrooms.**

Studies show that formative assessment – whole-class approaches where at regular intervals teachers ask pupils to raise their hand and indicate if they understand – can double the rate of pupil progress. We therefore recommend the Government’s intention that formative assessment be performed in classrooms is rolled out fully. CPD providers should offer courses on formative assessment to the whole teacher workforce to ensure this happens.

6. Leadership

- **A new, higher tier of managers should be developed from among head teachers due to retire in the next five to ten years.**

In order to improve the advice and support given to head teachers, and to keep expertise in the system, a new management tier should be introduced, modelled on the Canadian Superintendents. Superintendents in Canada are appointed by local School Boards, and provide a mentoring and support role to head teachers in their jurisdiction. Head teachers are also accountable to the superintendents and are appraised by them. In England, modelled on this system, each local authority should employ one Canadian-style Superintendent to be in charge of up to 20 schools. The scheme would be particularly suited to head teachers who have accrued more than 10 years’ leadership experience in a school and whose performance is excellent. But the scheme should specifically target those nearing retirement.

This scheme would draw on the best features of the existing School Improvement Partnerships (SIPs), which act as critical friends to schools, providing challenge and support to the school leadership, and acting as an interface between schools and local authorities, and Executive Head Teachers (EHTs), who are employed at critical points, when a school is failing or when additional support is required. Our recommendation is for a universal, ingrained system of support-and-challenge aiming to offset problems *before* they emerge (in contrast to the EHT scheme). Superintendents would remove this requirement from governing bodies, who often find that function difficult to carry out.

- **All schools should have dedicated funding for a school bursar.**

This position would assist head teachers in the day-to-day management issues of running a school, freeing some of their time for more pressing issues including line management and inspirational leadership.

7. Broader school reforms

In order to facilitate effective teaching, a broader set of reforms needs to be implemented in order to improve the school context and process. This is covered in more detail in Sodha and Margo (2008, forthcoming) but is summarised below.

Foundations for learning

- **Curriculum and testing:** reform of the curriculum is necessary in order to allow teachers to focus on broader life skills for pupils in a more coherent way. Reforms to the assessment framework need to support more ongoing assessment.
- **Accountability:** accountability measures and mechanisms need to be reformed so that we hold schools accountable for a broader range of outcomes than we do currently. Superintendents should be responsible for reporting school progress on this broader range of outcomes in conjunction with schools.
- **School and other children’s services:** if schools are to do more to promote social and

emotional wellbeing, the process of working with other services and agencies needs to be improved. Many schools do not currently feel able to rely on local children's services, including social services and health services. In particular, better provision is needed for excluded pupils for whom mainstream education is not effective for the short or even long term. There needs to be a more positive, proactive approach to children and young people's emotional wellbeing. Schools should have trained school counsellors to support an in-school wellbeing agenda and children's services, including child psychology services, mental health services, health services and social work, should be drawn together in an umbrella service along the Children's Centre model.

- **The school year:** the school year should be standardised and the long summer holiday reduced in light of evidence of pupil regression during the holiday and to respond to concerns about youth antisocial behaviour, which peaks in the summer. This would also help tackle the burn-out experienced by many teachers at the end of very long school terms.

Age-specific reforms

- **5-7 learning:** curriculum reforms are needed in light of evidence that young children learn best through educational play structured by teachers and with a mix of adult- and child-initiated interaction. These curriculum reforms should be complemented with reforms to the PGCE for teachers of 5- to 7-year-olds and an emphasis on instilling a sense of fun and enjoyment around learning, including reading for pleasure.
- **11-14 learning:** adolescents require additional support in the transition to a secondary school environment. Schools should be supported in piloting and experimenting with different kinds of school organisation that promote multi-disciplinary learning, and that reduce the number of teachers coming into contact with this age group.
- **Physical learning space:** the Government is currently investing in a Building Schools for the Future programme. We recommend that specific thought be given in relation to providing in-school CPD, including space that facilitates 'learning communities', in which communal lesson planning can be undertaken, and 'teacher teaming', in which teachers of classes in the same year group combine lessons. The former simply requires private access to ICT facilities away from pupils and spare classrooms; the latter could require different use of the school space, with, for example, classrooms that could open into each other for occasional shared lessons.

Roadmap to reform

What is the realistic timeframe to achieve this kind of change? Reforms to selection, including the introduction of Teach Next and Teach Later recruitment schemes, and changes to classroom practice and performance management, could be implemented quite quickly and are relatively straightforward. However, the recommended changes to Initial Teacher Training, Continuing Professional Development and leadership are more resource-intensive and would require more fundamental shifts.

In order to roll out a new management tier of Canadian-style Superintendents, we would recommend piloting such a scheme in at least three local areas over the next two years, with a view to introducing the scheme by 2015, depending on the outcome of the pilots.

We estimate that it would take between five and seven years to introduce the proposed changes to Initial Teacher Training and Continuing Professional Development. These should be introduced in phases, with the expectation that by 2010 teachers will spend 10 days a year in

CPD (both in school and externally), increasing to 20 days by 2015. We would recommend that training providers be ready to deliver the proposed changes to ITT by 2015.

The financial investment

Delivering these reforms will require significant upfront investment. We have estimated that delivering these reforms would cost in the region of £481 million each year. This total breaks down as follows:

- We estimate that to move from a one-year-based Initial Teacher Training course (including a mix of provider-based training and in-school development) to a **two-year based ITT course** would cost roughly double the current amount, at £850 million a year, requiring an extra investment of **approximately £425 million a year**. This is based on the Government having spent £258.8 million on ITT and £165.9 million on training bursaries in 2006/07, funded through the Teacher Development Agency – totalling £424.7 million.
- **Quadrupling teacher entitlement to CPD from five days to 20 days a year** would cost roughly four times the current amount, at £75 million a year. This requires extra investment of **approximately £56 million a year**. This is based on the Government having spent £18.7 million on CPD in 2006/07, again funded through the TDA.

While this is a significant investment, the Government has already signalled its intention to boost investment in teacher training and development through the rollout of the Masters qualification in teaching, which could be wrapped up in these reforms. ippr's analysis shows that investment in teacher training needs to be prioritised in future education investment, which, according to the Treasury, is forecast to continue rising at around £4-5bn a year, from £81.9bn a year in 2008/09 to £86.1bn in 2009/10 and £91.5bn in 2010-11.