

TEACHING SCOTLAND'S FUTURE

Report of a review of teacher education in Scotland

Graham Donaldson
December 2010

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Letter to the Cabinet Secretary for Education and Lifelong Learning



30 December 2010

Dear Cabinet Secretary

In November 2009, the Scottish Government asked me to conduct a fundamental review of teacher education in Scotland. I began my Review in February 2010 with a remit which covered the entirety of teacher education for primary and secondary schooling. I attach my Report which discharges that remit.

Together with my team, I visited each of the universities providing teacher education in Scotland and a selection of local authorities and schools. We also met with a wide range of interested bodies and individuals. I commissioned a literature review to look at the available evidence on teacher education worldwide and, where it highlighted interesting practice, pursued this through discussion with colleagues in that country. I also issued a call for evidence which received almost 100 responses, and a questionnaire for serving teachers which received just under 2500 responses. The analysis in this report reflects this very broad and inclusive evidence base. Understandably, there were strongly held and often divergent views about the best way to proceed. However, the response from individuals and organisations alike has invariably been open, thoughtful and constructive.

I have made 50 recommendations, covering the entirety of teacher education, which are designed to help to build the professional capacity of our teachers and ultimately to improve the learning of the young people of Scotland. In that way education can strengthen further its vital role in building Scotland's future.

Yours sincerely,

A handwritten signature in black ink, appearing to read 'Graham Donaldson', with a horizontal line underneath.

Graham Donaldson

Acknowledgements

I would like to thank all those groups and individuals who took the time to respond to one or more of the calls for evidence, or questionnaires issued by the Review or who took part in discussion forums or who met me personally to exchange views about the future of teacher education in Scotland.

I have been immensely gratified by the extent to which colleagues in the universities, local authorities, schools, professional bodies, the Scottish Government and the wider community have gone out of their way to provide advice, opinion and evidence to me or my team. Similarly, colleagues in England, Wales and Northern Ireland, as well as some further afield, have shared their experiences of teacher education, providing interesting insights, ideas and encouragement. Sincere thanks are due to Young Scot and the Learning School in Shetland for their help in establishing the views of groups of young people in Scotland and abroad.

Ian Menter and colleagues at the University of Glasgow produced a very helpful Literature Review to unforgiving deadlines.

I am very grateful to Bernard McLeary and staff at Learning and Teaching Scotland for providing a base and other forms of direct support to the team and helping us ensure that a wide range of stakeholders had the opportunity to contribute to the Review.

HMIE's role in gathering evidence from local authorities to supplement that of the Review team is greatly appreciated, as was the report on initial teacher education which forms part of the evidence of the Review.

I am indebted to members of the Reference Group for the Review who bear no responsibility for the content of this report but have provided an excellent source of support and challenge throughout the period of the Review.

I would particularly like to thank the members of my team who, in the face of impossibly tight deadlines have supported me superbly throughout and without whom this would have been a much shorter and much poorer document.

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Chapter 1: Overview

Over the last 50 years, school education has become one of the most important policy areas for governments across the world. Human capital in the form of a highly educated population is now accepted as a key determinant of economic success. This has led countries to search for interventions which will lead to continuous improvement and to instigate major programmes of transformational change. Evidence of relative performance internationally has become a key driver of policy. That evidence suggests, perhaps unsurprisingly, that the foundations of successful education lie in the quality of teachers and their leadership. High quality people achieve high quality outcomes for children.

It is in this context that I have undertaken this Review. Taken as a whole, the evidence gathered in the course of the Review highlights five major ideas which are almost axiomatic and which underpin its recommendations.

- The two most important and achievable ways in which school education can realise the high aspirations Scotland has for its young people are through supporting and strengthening, firstly, the quality of teaching, and secondly, the quality of leadership.
- Teaching should be recognised as both complex and challenging, requiring the highest standards of professional competence and commitment.
- Leadership is based on fundamental values and habits of mind which must be acquired and fostered from entry into the teaching profession.
- The imperatives which gave rise to Curriculum for Excellence still remain powerful and the future well being of Scotland is dependent in large measure on its potential being realised. That has profound and, as yet, not fully addressed implications for the teaching profession and its leadership.
- Career-long teacher education, which is currently too fragmented and often haphazard, should be at the heart of this process, with implications for its philosophy, quality, coherence, efficiency and impact.

The established strength of the teaching profession in Scotland, together with the steps taken by successive governments to improve it further, have created a secure platform upon which to build. The breadth of commitment across Scottish education to the importance of professional development is impressive. Having an all-graduate profession, bolstered by the existence of a framework of standards set by the General Teaching Council for Scotland (GTCS), structured induction for newly qualified teachers, the valuable contributions to professional learning made by national organisations, local authorities, teacher and headteacher associations, and contractual provision for teachers to engage directly in the education of new colleagues and to pursue their own continuing professional development all place Scotland in a strong position when compared with other countries internationally. Recent developments in initial teacher education and in leadership development together with the developing culture of self evaluation in Scottish schools provide further points of growth. One main requirement, therefore, is to make the most of what we already have.

The immediate context for the Review is Curriculum for Excellence with the opportunities it offers and the challenges it poses for teachers, schools and the wider education system. Curriculum for Excellence is much more than a reform of curriculum and assessment. It is predicated on a model of sustained change which sees schools and teachers as co-creators of the curriculum. In that respect it is different from previous reforms which have worked more directly through the central development of guidance and resources. It is therefore critically dependent on the quality of leadership at all levels and on the ability and the willingness of teachers to respond to the opportunities it offers. The Teachers' Agreement in 2001¹ laid the foundations for this kind of twenty-first century professionalism but the impact of that agreement on children's learning has yet to be fully realised.

As the Literature Review² which was undertaken as part of this Review outlines, the last 30 years have been dominated internationally by a search for increased 'effectiveness' in the work of schools and of teachers. This approach has placed a strong emphasis on governance arrangements, technical accomplishment, management processes, and measured and measurable outcomes as part of wider assumptions about the relationship between such measures and the contribution of education to economic growth. Within that environment, there have been moves to stress the importance of practical competence in teacher education.

However, the most successful education systems do more than seek to attain particular standards of competence and to achieve change through prescription. They invest in developing their teachers as reflective, accomplished and enquiring professionals who have the capacity to engage fully with the complexities of education and to be key actors in shaping and leading educational change.

This view implies that teacher education must build throughout a career and go well beyond recreating the best of past or even current practice. It must help to develop a teaching profession which, like other major professions, is not driven largely by external forces of change but which sees its members as prime agents in that change process. Within that culture, leadership qualities and skills are developed and practised throughout.

The Review affirms this more proactive view of teacher education, and the implications for all stages are very significant. It requires a more integrated relationship between theory and practice, between the academic and the practitioner, between the provider of teacher education and the school. The capacity of the teacher should be built not just through extensive 'teaching practice' but through reflecting on and learning from the experience of supporting children's learning with all the complexities which characterise twenty-first century childhood. The 'craft' components of teaching must be based upon and

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¹ A Teaching Profession for the 21st Century, SEED January 2001

² Literature Review on Teacher Education in the Twenty First Century, Menter, Hulme, Elliot And Lewin (2010)

informed by fresh insights into how best to meet the increasingly fast pace of change in the world which our children inhabit. Simply advocating more time in the classroom as a means of preparing teachers for their role is therefore not the answer to creating better teachers. The nature and quality of that practical experience must be carefully planned and evaluated and used to develop understanding of how learning can best be promoted in sometimes very complex and challenging circumstances.

There is an urgent need to challenge the narrow interpretations of the teacher's role which have created unhelpful philosophical and structural divides, and have led to sharp separations of function amongst teachers, teacher educators and researchers. There is currently an over-emphasis on preparation for the first post and less focus upon the potential of the initial and early period of a teacher's career to develop the values, skills and understandings which will provide the basis of career-long growth and in so doing create a broader and deeper leadership pool. The Review's recommendations aim to entrench the interconnections between schools, universities and other agencies, and between theory and practice. Teachers should see themselves as educators not just of the young people in their charge but of their colleagues locally, nationally and internationally. The implications of this 'extended professionalism' are taken forward throughout the report in relation to a teacher's developing career.

The Review's recommendations are designed to ensure that career-long teacher education achieves the kind of continuous quality improvement which underpins Curriculum for Excellence by addressing the need to:

- agree the fundamental qualities and skills needed for twenty-first century teaching and leadership;
- achieve greater coherence between the various components of lifelong career learning;
- build stronger partnerships;

The foundations of a high quality teaching profession lie in the nature of the people recruited to become teachers. Every effort must be made to attract, select and retain individuals with the qualities which are essential in a twenty-first century teacher and potential school leader.

Selection processes must relate to these qualities, and should be competitive. In recent years, Scotland has not suffered the same supply problems as many other countries and is in a strong position to select the most able and promising students. Current selection processes vary considerably and entry requirements tend to rise and fall with supply pressures. We need to broaden the base of selection to involve local authorities and schools as more equal partners and to include more consistent attention to interpersonal skills. Equally, the difficulties with literacy and numeracy displayed by some newly qualified teachers need to be addressed at entry and during the course.

Although there are currently unacceptably high numbers of newly qualified teachers who cannot find posts in teaching, the existing workforce planning model is in itself quite systematic. However, lead times of up to six years between acceptance onto courses and

attaining full registration allow unforeseen developments to upset planning assumptions. A degree of error is also inevitable given the current separation in the decision-making processes governing the recruitment, funding and employment of teachers. The Review recommends improvements in information flow which would help to increase the reliability of planning. There is also a need to improve labour market intelligence for students as they move through their courses in order that they can make timely and informed decisions about the likelihood of employment when they qualify. In addition, when employment prospects in teaching are limited, this report's proposals about the nature of undergraduate degrees should improve the currency of those degrees beyond teaching.

Wider questions exist about access to teaching more generally. There are two main routes into teaching in Scotland: four-year undergraduate degrees, normally BEd, or a one-year postgraduate diploma (PGDE). In contrast to England and some other countries where there have been significant problems with teacher recruitment, Scotland has not seen the need for employment-based, school-based or assessment-only routes. Alternative routes which meet the requirements of GTCS could, however, be helpful as a means of increasing diversity and broadening the base of the profession by encouraging even more part-time opportunities and mid-career recruitment. The improvements to existing undergraduate and postgraduate routes which I am proposing should in themselves bring about significant improvements in quality but employment-based opportunities which have sufficient academic rigour are worthy of further investigation.

The period of initial teacher education, induction and the early years of employment lay the foundations of a teaching force which will still be working well into the second half of the century. This vital early phase in the development of new teachers must be relevant, coherent and of high quality. Our prospective teachers deserve and are capable of more than we currently ask of them.

Initial teacher education has already undergone significant change over the decade or so following the Sutherland Report³. Mergers between the former colleges of education and universities were designed to help to raise the status of the profession and to allow future teachers to benefit from the wider academic and research culture of a university. Those aims have at best only been partially achieved and there remains considerable scope to improve the synergies between dedicated teacher education schools and the wider university. Undergraduate student teachers should engage with staff and their peers in other faculties much more directly as part of their general intellectual and social development. In particular, opportunities should be created for joint study with colleagues in cognate professions such as social work. The values and intellectual challenges which underpin academic study should extend their own scholarship and take them beyond any inclination, however understandable, to want narrow training of immediate and direct relevance to life in the classroom. In achieving this goal, universities will need to build on existing experience with concurrent study to create pathways which allow study of subjects outwith education.

³ Teacher Education and Training: A Study, Sir Stewart Sutherland, HMSO 1997

While much of the evidence given to the Review pointed to good experiences for students, undergraduate and postgraduate, there were many examples of uneven and inconsistent expectations and practices. Looking across Scotland, the nature of any student's experience is subject to variations stemming from the university they attend, the staff they engage with, the schools they are allocated to, and the teachers they work with in those schools. Uniformity is neither necessary nor desirable but the process of teacher education should provide a better guarantee of quality than exists at present. A number of the Review's recommendations are designed to help achieve greater consistency and higher quality overall. For example, the role of the GTCS in approving courses should be extended to ensure that the actual experience of the student is of a high quality. Universities should meet clear criteria for teacher education which go beyond the content of the courses themselves. Self-evaluation, inspection and direct feedback from students should all become stronger features of the approval process and of ongoing evaluation and improvement. Partnership with local authorities and schools should be strengthened to create relationships which are collaborative rather than complementary.

A recurrent theme over the years has been the difficulty in striking the right balance and connections between university experience and school experience in both undergraduate and postgraduate courses. Because these elements have tended to be seen as separate but complementary aspects of the course the precise nature of the relationship has been unclear. At its most extreme, the school can feel that it is helping the university out rather than being a full partner in a joint endeavour. There is now a need to create a new kind of collaborative partnership within which all aspects of the student's development are a shared responsibility and respective roles and responsibilities are clear. The implications of such an approach are significant but the changes are essential. Selection for entry to teacher education should be carried out jointly. The school experience should be designed along with the university experience to allow reflection on practice and its interpretation in ways which bring theoretical and research perspectives to bear in relation to actual experience. Information and communications technologies (ICT) should be used much more widely to enable remote access to classrooms and to allow students and their teachers to observe and analyse different learning approaches and environments. Theory should be developed through practice with a particular focus on those aspects which are particularly significant, challenging or problematic. Thus, for example, the fundamentals of the acquisition of literacy and numeracy, the impact of home background and other environmental factors on learning, the nature of barriers to learning such as dyslexia or forms of autism, behaviour management, and wider theories of learning should be explored at least in part as a direct reflection on the actual school experience of students. All newly qualified teachers should have a sound understanding of these aspects together with the capacity to deal with them in practice. Moves which the universities have already taken in this direction need to be strengthened further.

Schools should nominate themselves to be selected to participate in teacher education on the basis of the quality of the experience they will provide. Current experiments involving a more intensive relationship between a university and identified schools, analogous to teaching hospitals, should be pursued as possible models of practice more generally. Joint appointments between schools and universities, for example, would provide a very tangible form of partnership as a practical expression of the theory/practice relationship. The creation of a network of such

'hub school' partnerships across all authorities and also involving national agencies would enable much more direct engagement of university staff in school practice, with research as an integral part of this strengthened partnership rather than as something which sits apart.

Assessment of students while in schools has also given rise to concern, particularly that high-stakes assessments might be unduly affected by personalities or minor incidents in lessons. Given the kind of collaborative relationship described earlier, there is scope to give prime responsibility to school staff to make the assessments, with appropriate selection, training and support, and with appeal mechanisms as a backstop.

One of the greatest areas of difficulty, particularly in postgraduate courses, is striking the right balance between breadth and depth in what is covered in the course, sometimes referred to as the 'quart into pint pot' problem. There is clear evidence of courses trying but failing to keep pace with an ever-expanding set of expectations of what should be included, particularly in primary education. Concerns abound about students' depth of understanding of both what they are teaching and about how to employ teaching approaches which meet the needs of their pupils and of the particular subject matter. Resolution of this difficulty requires all available time to be devoted to relevant tasks and study, together with absolute clarity about priorities for the initial and subsequent stages of a teacher's education, and about who does what and when.

The Review makes some important recommendations in relation to initial teacher education. Through them I have sought to: clarify the relationship between the school and the university; strengthen undergraduate provision through greater engagement with staff and courses in the wider university; make much greater use of blends of different kinds of high quality learning approaches; clarify priorities for the initial stages of teacher education and those which may require longer timescales; make more effective use of ICT; extend available time by identifying opportunities for study beyond the conventional university year; and achieve much better integration and progression between initial teacher education and the period of induction during probation.

The induction scheme which followed the Teachers' Agreement is rightly much admired internationally and was praised as 'world-class' in the 2007 OECD country review of Scotland⁴. The guarantee of a paid place on the scheme ended the fractured probation arrangements which had hitherto characterised the experience of many newly qualified teachers. In providing protected non-contact time and mentoring, the scheme also reflected acknowledged best practice internationally. Specific issues, including the role and training of mentors and some duplication with pre-service courses do, however, need to be addressed. I am proposing that the induction year should become an integral part of an extended experience leading to the Standard for Full Registration (SFR). Taking this more coherent approach will allow better provision to be made for the range of requirements for the SFR including a reinforcement of the reflective role and extension of knowledge and technical skills through both theory and practice.

⁴ Quality and Equity of Schooling in Scotland OECD (2007)

In many ways, continuing professional development (CPD) presents the biggest challenge for teacher education. It should be seen in the same light as, and as progressing from, learning during the pre-service and induction periods: that is, as the basis for continuing to build the teacher as a growing professional who is able to make increasingly powerful contributions to students' learning and to the wider work of the school, and who is equipped to work with colleagues in other services to achieve these ends.

Scotland has some strong features of CPD upon which to build. A commitment to the importance of CPD can be seen in the contractual arrangements put in place following the McCrone Report⁵ as well as the introduction of chartered teachers and a number of leadership developments including the Scottish Qualification for Headship (SQH). Understanding has grown that external courses should form only a small part of an overall CPD strategy and we have seen an increase in the range of approaches to CPD, including more networking amongst teachers. Moves towards distributive leadership have seen more teachers taking initiatives and leading developments within a more collegiate and professional culture. ICT, although not yet realising its potential, is making an increasing contribution as a source of ideas and of networking.

Although there has been an improving picture over the last decade, much current provision is more haphazard than the formal arrangements and these encouraging developments might suggest.

The somewhat anxious response of many teachers to Curriculum for Excellence (Glasgow University 2009⁶), particularly in the secondary sector, at least in part reflects a desire for more direct support and training than the Curriculum for Excellence philosophy embodies. Professional review and development (PRD) is at best patchy in its impact and is not fulfilling its intentions. There remains a need to set clear expectations about professional growth allied to a more consistently effective system of PRD. I am therefore recommending that GTCS develop a new 'Standard for Active Registration' which can be used to signal the kind of enhanced professionalism which should characterise an experienced professional and which could also form part of any system of reaccreditation. This Standard should help teachers to develop and improve in a planned way which reflects their growing expertise and their ability to work effectively in different contexts. In turn, the PRD process should provide a basis for identifying and responding to the kinds of experience, deployment and learning which an individual teacher may need in his or her situation.

We have increasing evidence about what forms of CPD are likely to make the biggest difference. The impact of one-off courses or events, however stimulating, tends to dissipate on return to the realities of the classroom. The most powerful forms of development are local, collegiate, relevant and sustained. Much of the recent approach to CPD in Scotland is already moving in this direction. There is a danger, however, that without some form of external stimulus, the horizons of groups of teachers may be too narrow, with a failure to look for ways forward which go beyond the repertoire of the individuals concerned. In looking at the ways to improve CPD, the main avenues for development lie in establishing communities of practice which operate

⁵ A Teaching Profession for the 21st Century: The McCrone Report, SEED May 2000

⁶ Collection, analysis and reporting of data on Curriculum for Excellence draft experiences and outcomes: Final Report, University of Glasgow, 2009

locally but which, crucially, have access to the kind of external support and challenge which can be provided by dedicated local or national organisations or universities. The school–university partnership hubs which we have advocated for initial teacher education should continue to be developed to support learning for teachers at all stages in their careers. As with other areas of teacher education, we need a much more determined integration of ICT into this process, challenging assumptions that networking requires physical proximity. Blends of different forms of high quality learning, supported by dedicated resources, should become much more the norm in our approach to professional development. Encouraging early evidence of the Curriculum for Excellence support role being played by inspectors in secondary schools may offer an example of this approach in action.

Current CPD is too often characterised by mass ‘force-feeding’ linked to a particular development or cascading of guidance in contexts which do not allow real and sustained engagement on tasks which will lead to identifiable impact on learning. The proposals in this Review are designed to help create a more relevant, sustained and effective approach within a culture of ‘pull’ from teachers rather than ‘push’ from outside the classroom. Part of that culture should include greater encouragement for teachers to gain advanced qualifications. While I am not advocating a ‘Masters profession’ as a key policy driver, I do believe that advanced study is part of the enhanced professionalism which runs through the Review’s recommendations, and that the quality and demands of CPD should reflect these expectations.

Preparation for formal leadership roles overlaps naturally with the planned, career-long professional development described above. Reflective and enquiring teachers who are engaged in continuous improvement are developing the attitudes and habits of mind which are integral to leadership.

Much of the preparation should take place through the range of roles and posts a teacher may experience, including the leading of developments, but we also need to establish more explicit pathways for those who aspire to formal leadership posts. In addition to structured opportunities, greater flexibility in, for example, movement between posts or engagement in short-term projects beyond the school should be encouraged.

The Review gathered an extensive body of evidence which forms the basis for this report. The methodology is described in Appendix 1. Taken as a whole, the findings of the Review point to a number of important developments.

- Reinvigoration of professionalism, and a reconceptualisation of teacher education to reflect this.
- More rigorous selection of students applying to enter teacher education allied to more relevant courses, more efficient use of time and more consistent assessment of students’ progress.
- A coherent approach to teacher education which is underpinned by a framework of standards which signpost the ways in which professional capacity should grow progressively across a career.

- Development of leadership qualities from the start of a career.
- A new concept of partnership among universities, local authorities, schools, national agencies and other services which embraces selection, course content and assessment, which sets practical experience in a much more reflective and inquiring culture and which makes optimum use of ICT for professional learning.
- Much more efficient use of existing contracts and structures.
- A culture within which policy, practice, theory and accountability are better aligned to serve the needs of learners.
- A national and local infrastructure which sets, promotes and evaluates teacher education in ways which relate both current practice and innovation to their beneficial impact on learning.

The Report as a whole explores the issues covered in this overview in greater depth. It begins by looking at the qualities and skills needed for twenty-first century teaching and leadership. Thereafter it follows the career journey of a teacher, highlighting existing strengths in teacher education, looking at ways in which its relevance and impact might be improved and identifying recommendations to achieve these. Important implications arise from the Review's recommendations for everyone engaged in and with the teaching profession. I have not sought to spell out these implications in detail but in Chapter 7 I highlight areas to be addressed.

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Chapter 2: Twenty-first century teachers and leaders

This chapter explores what kinds of teacher Scotland needs for the future, taking account of the views of respondents and findings from international research on teaching and educational leadership, and considers the implications of the changing environment in which our teachers will be serving. It then begins to consider how teacher education can contribute to building a teaching profession which will have the capacity, qualities and skills which are most likely to lead to the best educational experience for our young people.

There is a very extensive literature on this subject, spanning several different perspectives. What comes through consistently, however, is that the expectations upon teachers have grown considerably in recent years and that the job has become increasingly complex and demanding.

Qualities and skills of twenty-first century teachers: respondents' views

We asked respondents to the Review to set out their perceptions of what should characterise a good teacher now and in the future. The analysis of that evidence⁷ highlighted a number of key features of good teachers. They should:

- be reflective, with critical and creative thinking skills;
- be committed to teaching as a vocation;
- be committed to the development and learning of each child;
- work in a range of partnerships to support the learning and development of each young person;
- have a passion for learning and deep understanding of and enthusiasm for their subject;
- have discernment to be able to put relevant theory into practice;
- share ideas and network with colleagues; and
- be keen to participate in their own personal learning and development.

Direct discussions broadly supported that set of characteristics. Parent groups also raised the need for a review of entry requirements and further development of coaching, mentoring, collaborative and group work skills. Young people, both within Scotland and internationally, placed high priority upon well-developed interpersonal skills. In a survey undertaken by Young Scot, for example, being enthusiastic and having a sense of humour rated highly. Young people also valued teachers' ability to enable them to learn independently. In the Young Scot⁸ survey, knowing a lot about a subject and being good at explaining things were also seen as important.

⁷ RTES Analysis of the Call for Evidence, George St Research, Scottish Government Social Research (2010)

⁸ Young Scot – Review of Teacher Education in Scotland Survey Results (Young Scot, 2010)

Evidence gathered from students and practitioners showed that they often perceived the ability to manage a class and to impart subject knowledge successfully as being paramount. This meant that they often assumed that 'time in the classroom' is the most useful element in teacher education: they saw teaching implicitly and often explicitly as a technical skill which is best acquired by being 'apprenticed' to experienced teachers. Being effective in the classroom and learning from able and experienced colleagues are both essential. However, overwhelmingly, the submissions to the Review would support a broader view of the teacher's role. That view is captured in the words of one consultee⁹:

'A professional teacher will work from a strong knowledge base informed by an understanding of current pedagogical research. They will be committed to a learner-centred approach and to enabling all learners to achieve their full potential. They will work within an ethical framework. They will receive good support and supervision. They will be encouraged to review and reflect on their practice and to engage in CPD. They will be committed to learning as a lifelong process.'

Qualities and skills of twenty-first century teachers: wider evidence

The most successful education systems invest in developing their teachers as reflective, accomplished and enquiring professionals who are able, not simply to teach successfully in relation to current external expectations, but who have the capacity to engage fully with the complexities of education and to be key actors in shaping and leading educational change. The International Alliance of Leading Educational Institutes published a report in 2008¹⁰ which drew together current evidence about teacher education and highlighted the need for a 'redefined professionalism' of teaching. It said:

'There is an urgent need to recognize (sic) teachers' work as complex and demanding, and improvement in teacher quality requires a reconceptualisation of how we prepare a new generation of teachers... It is manifested in qualities that require teachers to value and sustain the intellect, to work collaboratively with other stakeholders in education, to be responsible and accountable and to be committed to lifelong learning and reflexivity.'

The Teachers' Agreement and the philosophy of Curriculum for Excellence embrace this much wider concept of teacher professionalism whose successful realisation depends on the ability of teachers to respond in this way. This implies that teachers must be able to go well beyond recreating the best of current or past practice. It implies a teaching profession which, like other major professions, is not driven largely by external forces of change but which sees its members as prime agents in that change process.

⁹ RTES Analysis of the Call for Evidence page 43, Scottish Government Social Research (2010)

¹⁰ Transforming Teacher Education, National Institute of Education Singapore (2008)

The OECD report 'Teachers Matter'¹¹ concluded that:

'all countries are seeking to improve their schools and to respond better to higher social and economic expectations. As the most significant resource in schools, teachers are central to school improvement efforts. Improving the efficiency and equity of schooling depends, in large measure, on ensuring that competent people want to work as teachers, that their teaching is of a high quality, and that all students have access to high quality teaching'.

The Literature Review which was commissioned for this Review suggests '*...four influential "paradigms" of teacher professionalism: the effective teacher, the reflective teacher, the enquiring teacher and the transformative teacher... Each has a contribution to make in the contemporary context of A Teaching Profession for the Twenty First Century and Curriculum for Excellence'.* This spectrum of professionalism was captured in 1974 by Eric Hoyle where he suggested that '*...models of teaching existed at some points on a spectrum between "restricted" and "extended" versions of teacher professionalism... the effective teacher rests at the "restricted" end of the spectrum... with the other three models being at various points towards the "extended" end of the spectrum*'. In other words, a teacher at the 'extended' end of the spectrum is the kind of professional who is highly proficient in the classroom and who is also reflective and enquiring not only about teaching and learning, but also about those wider issues which set the context for what should be taught and why. In addition, engaging from the start of a career with these wider issues is an excellent preparation for future leadership roles. This concept of professionalism takes each individual teacher's responsibility beyond the individual classroom outwards into the school, to teacher education and the profession as a whole.

It is clear from the research evidence about teaching and the common threads in the views expressed to the Review that much of the work of teachers and teacher educators in Scotland already exhibits these features, but the future success of Scottish education depends on redefining and strengthening this 'extended professionalism'.

This Review endorses the vision of teachers as increasingly expert practitioners whose professional practice and relationships are rooted in strong values, who take responsibility for their own development and who are developing their capacity both to use and contribute to the collective understanding of the teaching and learning process. It sees professional learning as an integral part of educational change, acting as an essential part of well planned and well researched innovation.

¹¹ Teachers Matter, Organisation for Economic Cooperation and Development 2005

Leadership for twenty-first century learning

The importance of leadership for school improvement is well researched and documented. The findings from the *Teaching and Learning International Survey* (OECD, 2009) suggest that effective school leadership makes an important contribution to the development of other teachers in a school. The findings of McKinsey and Company 2010¹² suggest that, *'the overall performance of a school almost never exceeds the quality of its leadership and management'*. School leaders who demonstrate strong leadership are more likely to use further professional development to address teachers' weaknesses, foster better student-teacher relations and teacher collaboration, and recognise teachers for successful innovative teaching practices. In recent years, with moves towards the enhanced professional role of teachers, there has been greater focus on leadership for learning and distributive forms of leadership. Indeed, there is an expectation as a result of the Teachers' Agreement that all teachers should now be involved in developing, not only delivering, the curriculum. A culture of initiative and collegiality within which learning is always the prime focus embodies the kind of distributive leadership which is the hallmark of our most dynamic and effective schools.

There is an urgent need to extend the pool of potential leaders in Scottish schools. That means we need to develop and foster widely, and from an early stage, the qualities and skills which characterise effective leaders. The literature about those qualities and skills is voluminous but, in summary, the qualities which we have concluded are essential for the twenty-first century teacher also provide a strong basis for the development of leadership more widely. The people recruited into teaching, their experience during their early years as teachers and the ways in which we identify and develop talent across careers will all contribute to extending the size and quality of the leadership pool.

Scottish education has embarked on a highly ambitious programme of change through Curriculum for Excellence and related developments in early education and inclusion. It is likely that our approach to education will continue to develop in ways and at a pace which will outstrip anything we have experienced to date. Developments in communications technology will provide scope for quite different approaches to offering access to learning. They will also pose increasing challenges to conventional schooling, with much greater diversity in how schools and their partners organise themselves to provide for their learners. It is hard to predict what these changes will mean but it is clear that our teachers and promoted staff will have to be flexible, bold and creative if they are to continue to serve young people well. The next section considers this context in greater detail.

¹² Capturing the leadership premium, McKinsey & Company, 2010

The context for the profession of teaching in Scotland

Across the world, governments are reforming their education systems in quite radical ways as they try to address challenges arising from globalisation, societal change and technological development and to address their own specific national needs and aspirations. Scotland is no different. Curriculum for Excellence seeks to address these challenges, and indeed is very much at the leading edge of current international thinking about the curriculum, learning and teaching, and strategies of educational change.

The 2007 country report on Scotland undertaken by the OECD¹³ provided an external analysis of the strengths and areas for improvement in Scottish education. Drawing heavily on the Programme for International Student Assessment (PISA), national surveys of achievement and published reports from Her Majesty's Inspectorate of Education (HMIE), the OECD report concludes that *'...Scotland is building a strong platform of achievement in basic education'*. However the report also cautions that, *'Scotland could slip through the ranks. It could be bypassed economically and become more divided socially. Its population might become less well prepared to manage the demands of a global economy...'*. In a particularly memorable way the report also says that, *'In Scotland, who you are is far more important than what school you attend... the school system as a whole is not strong enough to make this not matter.'* The report goes on to identify a number of additional factors beyond the social background of young people which need to be addressed, highlighting barriers to successful learning which are *'...embedded in curriculum and teaching practice'* in Scottish schools as a whole. The messages about underachievement are for everyone involved in Scottish education, not simply those teachers working in areas of multiple deprivation.

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¹³ Quality and Equity of Schooling in Scotland, OECD (2007)

The challenges facing Scottish education, and so Curriculum for Excellence, are summed up in the OECD Report as being:

- the widening achievement gap from about P5;
- marked social differences in basic achievement;
- declining student engagement and interest (especially in early secondary);
- marked gaps in Scottish Qualifications Authority (SQA) attainment;
- staying-on rates that have ceased to grow;
- wide regional variations in post-compulsory participation; and
- a worrying, comparatively high level of young people not in education, employment or training.

In its overview of Scottish education in 2009, 'Improving Scottish Education'¹⁴ (ISE), HMIE highlight substantial strengths including the professionalism of teachers and increasing expertise in self-improvement. However, ISE similarly identifies a number of entrenched issues which need to be addressed. These include the growing underachievement relating to social background which the OECD report also cited, as well as issues relating to:

- raising overall levels of achievement;
- strengthening literacy and numeracy skills in order to ensure that all children can progress in their learning and development;
- creating more challenging and interesting learning; and
- establishing a stronger and more consistent base of general education before young people embark on qualifications.

HMIE importantly highlight the need to have '*...a commitment to personal and professional development on the part of every educator.*'

The findings of OECD and HMIE are broadly consistent with much of the body of other evidence about the performance of Scottish education. The most recent 2009 PISA study¹⁵ also broadly confirms that analysis. Its results published on 7 December 2010 show that Scotland, in general, has held but not improved upon its place as a mid-ranking performer.

Meeting these challenges will depend ultimately on the quality of our teachers and their development as extended professionals. We need teachers who can understand the broader context within which they are working. That means recognising and tackling 'wicked', persistent issues and having the confidence and capacity to do so successfully. It also means that our teachers must be able to engage directly and willingly with the change process. Extended professionals are agents of change, not passive or reluctant receivers of externally-imposed prescription. They actively seek, apply and evaluate approaches to supporting children in ways

¹⁴ Improving Scottish Education, HMIE (2009)

¹⁵ PISA 2009 Results: What Students Know and Can Do, OECD, 2010

which result in tangible improvement in learning. They are increasingly able to develop, sustain and use partnerships and networks both to achieve the best outcomes for each child and to extend and deepen professional learning.

Teachers should be confident in understanding and addressing the consequences of various barriers to children's learning and their needs for additional support. To address the serious weaknesses in literacy and numeracy, for example, all teachers need an understanding of how children, including those with additional support needs such as dyslexia, acquire and continue to develop vital skills in these fundamentals of learning throughout their schooling. This will also reduce the risk that early difficulties with literacy and numeracy lead to increasing inability to cope with the curriculum as a whole as a young person progresses through school and ultimately suffers serious impairment of life chances in adulthood.

Taken as a whole, this evidence points to the need to reinvigorate efforts to bring about significant improvement both in teaching and learning and in the leadership of Scottish education at all levels. Teacher education has a major part to play in that endeavour. This agenda is broad and will demand considerable depth of knowledge and skill from every teacher and those in formal leadership positions. That has implications both for what teachers have a right to expect from teacher education and for what they need themselves to put into that process.

Education policy in Scotland should give the highest priority to further strengthening the quality of its teachers and of its educational leadership.

Education policy should support the creation of a reinvigorated approach to twenty-first century teacher professionalism. Teacher education should, as an integral part of that endeavour, address the need to build the capacity of teachers, irrespective of career stage, to have high levels of pedagogical expertise, including deep knowledge of what they are teaching; to be self-evaluative; to be able to work in partnership with other professionals; and to engage directly with well-researched innovation.

We explore these implications in depth in the chapters which follow.

Chapter 3: Getting the right people in the right numbers

The foundations of a successful education system lie in ensuring an appropriate supply of high-quality teachers covering geographical areas, education sectors and curriculum specialisms. Achieving that goal with any consistency has proved difficult for countries across the globe, including in Scotland. It needs teaching to be seen as an attractive option for well-qualified individuals who have a commitment to young people and their learning. It also requires good, flexible workforce planning and careful selection of students into initial teacher education courses. This chapter explores these two themes in turn.

Background

The challenge of having the right number of teachers is not new. After the Second World War, for example, the burgeoning birth rate led to an acute shortage of teachers. It was forecast in 1957 that the shortage could rise to some 3000 teachers within four years. There was also an increasing gender imbalance, with men making up only 17% of the total intake in 1962. 'Emergency' and 'Special Recruitment' schemes were established to attract returning service personnel, but these failed to address the underlying problem of undersupply.

By the late 1970s the earlier shortfall in teacher numbers had become an oversupply, owing to a dramatic decline in the size of the school population. Falling birth rates and curbs on public expenditure in the early 1970s led to reductions in numbers of students training to be teachers. Discussions at national level about the resulting over-capacity in the colleges of education were followed by the publication of the Government's policy document *Teacher Training from 1977 Onwards* (SED, 1977)¹⁶. The proposed scale of reductions in student intakes called into question the survival of all of the existing ten colleges of education. The solution was merger, and in 1981, then again in 1987, the teacher training system in Scotland was reduced first to seven and then to five colleges.

Following devolution in 1999, Government policy gave priority to increasing the number of teachers in Scotland to 53,000 and then to reducing class sizes. However pressures on education budgets and falling school rolls have resulted in fewer teachers than expected being employed and, instead of rising as predicted, teacher numbers fell by almost 800 between 2009 and 2010 to 52,188¹⁷ (*Summary Statistics for Schools in Scotland, No.1 | 2010 Edition*).

This lower than forecast demand has resulted in high levels of teacher unemployment, particularly among those who have just completed their induction year. The *GTCS Employment Survey 2009-2010 Probation Teachers October 2010 (1)*¹⁸ showed that only 16.1% of those who responded had full-time permanent contracts. A further 19.5% had full-time temporary contracts. This has led to demands for improvements to the Government's workforce planning to ensure that the numbers entering initial teacher education match the number of posts available more closely.

¹⁶ *Teacher Training from 1977 Onwards* (SED, 1977)

¹⁷ *Summary Statistics for Schools in Scotland, No. 1; 2010 Edition*

¹⁸ *Employment Survey report Probationer Teacher 2009-10, GTCS 2010*

TABLE 1: EMPLOYMENT BASIS OF ALL RESPONDENTS TO GTCS SURVEY OF PROBATION TEACHERS

Some employment as a teacher in Scotland	Percentage of all respondents					
	2004 – 2005	2005 – 2006	2006 – 2007	2007 – 2008	2008 – 2009	2009 – 2010
Full-time Permanent Contract	63.3	47.8	40.8	30.6	20.2	16.1
Part-time Permanent Contract	2.7	2.4	2.7	2.8	3.2	1.6
Full-time Temporary Contract	14.5	21.1	21.0	16.1	15.3	19.5
Part-time Temporary Contract	3.1	6.7	7.0	5.5	7.6	8.8
Full-time Supply Contract	11.1	13.9	16.4	23.9	4.4	8.5
Part-time Supply Contract					5.8	4.9
Supply List					16.0	13.6
Not employed	5.3	8.2	12.2	21.0	27.5	27.1

(from GTCS Employment Survey 2009-2010 Probation Teachers October 2010)

Initial teacher education is a subject where numbers are controlled. Annually, in consultation with an advisory group comprising representatives of GTCS, the local authorities, teacher unions and the universities, the Scottish Government carries out a teacher workforce planning exercise. The basis of this exercise is a model which looks at expected pupil numbers at each stage in the years going forward, calculated from national population data. It then works out the number of teachers required, given the same number of schools and size of class. The model then looks at how many teachers there were the previous year, how many are expected to leave the profession either on a temporary or a permanent basis in the coming year and how many are likely to return to the profession. It then calculates the student intake required to fill the gap between supply and demand. Where government policy calls for an increase in teacher numbers, the student numbers required to meet the additional demand are added to the baseline total at the end of the process. At the end of this process the Scottish Government issues a letter of guidance to the Scottish Funding Council. It is a matter for the Council to determine overall intakes and the distribution between universities.

At present the teaching profession in Scotland does not sufficiently reflect the demographics of the Scottish population as a whole. An overall gender imbalance (76% women to 24% men) is particularly marked in the primary and pre-school sectors (92% and 95% female respectively) and has been consistent over a number of years (75.7% in 2007, 75.8% in 2008 and 76% in 2009). This trend is reversed, however, in promoted posts (headteacher/depute headteacher) in secondary schools where only 31% of headteachers are female, and 49% of deputy headteachers¹⁹ (Statistical Bulletin: Education Series: Teachers in Scotland 2009).

Historically this was not always the case. Until the 1872 Education Act, teaching in Scotland was dominated by males possessing a university degree or a teaching certificate. However, with the

¹⁹ Statistical Bulletin: Education Series: Teachers in Scotland 2009.

introduction of compulsory schooling for children between five and 13 the demand for female teachers grew rapidly. By 1911, 70% of teachers in Scotland were women, whereas in 1851 the figure had only been 35%²⁰.

Ethnic minority populations are also under-represented in the teaching profession. Ethnic background data was given by 97.3% of teachers in the 2009 census, which showed that 1.6% were from minority ethnic groups as compared to 5% of their pupils (Statistical Bulletin, Education Series, Teachers in Scotland, 2009).

For several years, and in all parts of the UK, there have been difficulties attracting science and mathematics graduates into the profession. In Scotland, there are also significant differences in recruitment geographically, with relatively fewer applicants to some areas outwith the central belt. Future policies need to address these challenges.

Building in flexibility in teacher numbers

Historically, numbers wishing to enter teaching tend to fluctuate over time.

In previous periods of oversupply for teaching posts significant numbers of those failing to find posts have left the profession entirely. When there has been a lack of applicants, immigration from other parts of the UK and abroad has provided a solution to bridge the gap between supply and demand.

An effective policy for workforce planning must contain mechanisms to deal with periods of both high and low demand for teaching posts. The process needs to be looked at in two ways: first, what can be done to predict the required numbers earlier and with greater certainty; and second, what can be done to mitigate the impact of mismatches between supply and demand?

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²⁰ A history of the Scottish people: The Scottish educational system 1840-1940, WW Knox (www.scran.ac.uk).

Accurate modelling of predicted teacher numbers

One of the main difficulties with the current method of deciding student numbers is the time delay between determining the number of places on teacher education courses and the point at which the fully qualified teacher is seeking his or her first post. Numbers are determined around 10 months before the student enters the course. The one-year full-time postgraduate diploma course is followed by a one-year probation period and it is therefore, at a minimum, just under three years from the decision on student numbers to the point where those teachers are seeking employment. For the undergraduate courses the time lag can be as long as six years. Moves to more concurrent degrees could provide greater flexibility in the system.

An alternative approach might be to cease modelling of teacher numbers, and simply allow market forces to drive teacher education places. However, this would be likely to increase the variability in numbers and might in the long run lead to a lack of teachers. Any sustainable solution must look to provide reasonable stability in student numbers.

If, as seems likely, it remains necessary to control the number of initial teacher education places centrally, we must look for ways to further refine the model used by providing more current local intelligence of, for example, projected retirements. As indicated above, at present most of the information used to determine the number of new teachers required each year is generated from national statistics.

The accuracy of the workforce planning model should be improved through universities and local authorities providing their latest projections on an annual basis.

Increasing the transferability of a teaching qualification

Information gathered from university teacher education departments has shown that, as would be expected, the vast majority of students graduating with a teaching qualification seek employment within the education sector. Those entering initial teacher education do so with a clear goal in mind and have chosen to enter the induction year.

It should be remembered that in previous periods of high applicant-to-post ratios many people have left the teaching profession. Whilst it has not been possible to identify the destinations of these people, it must be assumed that the majority found employment elsewhere. Evidence from discussion with teachers at the start of their career has suggested that some of their contemporaries were moving abroad to find teaching posts.

It is clear from university prospectuses that, whilst students undertaking a general arts or humanities degree are encouraged to consider a wide range of careers, teacher education courses simply tell prospective students that there are plenty of opportunities to teach both in the UK and abroad.

A teaching qualification should be a guarantee of good communication skills, ability to think at a high academic level and ability to work well with others. As such, it should be valued more

widely. However, representatives of the business community have indicated that a teaching qualification is not necessarily seen as an asset in a prospective employee in other employment sectors. This contrasts with the situation in Finland, for example, where individuals with teaching qualifications are seen as attractive to business and industry.

Because workforce planning cannot be an exact science, steps should be taken to increase flexibility in the availability of teachers and to manage fluctuations. To achieve this, students undertaking a teaching qualification should be given greater information about prospective employment in teaching, particularly at those points where alternative degree options might still be open to them. The marketability of transferable skills in education degrees beyond the education sector should be highlighted both to students and to employers. (See also recommendation 11 about the nature of teaching degrees).

Increasing diversity and ensuring high quality applicants

Periods of high levels of teacher unemployment can be followed by periods when it is difficult to fill teaching posts. It is therefore important to ensure that as many as possible of those with teaching qualifications remain connected to the profession, and retain an option to return.

In order to maintain a wider pool of potential teachers, individuals who have met either the Standard for Full Registration or Standard for Initial Teacher Education but have sought employment elsewhere should be encouraged to retain a reduced level of GTCS membership which gives them access to employment information and continuing professional development. Where an individual seeks to return to teaching, local authorities should provide them with relevant training to support their return to the classroom.

It may also be helpful in times of teacher shortage and to increase diversity to have more flexible access to initial teacher education. Current developments in part-time provision in a number of universities already provide an important point of growth. The Open University currently has only a small presence in teacher education in Scotland. However its courses, more generally, are highly regarded²¹ and there is potential for it to play a greater role in Scotland in the future. Its flexible structure would allow students to be taken onto the course at different points in the year, potentially shortening the time between identification of need and entry of the teacher into the classroom. Further, it would allow students to use prior experience in teaching to shorten the length of their period of study. Distance learning approaches of this nature can also address access issues, encouraging a wider range of people to consider teaching as a profession.

²¹ Open University Institutional Audit, QAA, March 2004

An increase in entry routes such as employment-based routes, part-time and home-study initial teacher education courses would enable more 'career changers' or people with young families to join the profession, and would allow people who live at a distance from a university to study, and gain school experience, in the area where they would seek to teach.

'Teach First', which grew out of 'Teach for America', has an increasingly strong position in England. Teach First focuses on areas of deprivation. It attracts highly-qualified graduates who might not in other circumstances have considered teaching as a profession. The OFSTED report, 'Rising to the Challenge: a review of the Teach First ITT 2008 programme'²², said that '*a commitment to excellence is a significant feature of the programme, with over half of trainees demonstrating outstanding teaching capabilities and 83% being good or better*'. Although there is not the same pressure to recruit more teachers in Scotland and many highly-qualified graduates are already attracted into teaching, routes of this nature could complement more established ways into the profession. To achieve this in Scotland, Teach First would need to work with a Scottish university to develop the academic component of the course to the same standard as other routes.

Further high quality part-time provision, capitalising on the growing potential of ICT, should be developed, including the kind of model provided by the Open University in Scotland. The suitability for Scottish education of a Teach First/Teach Now model of placing students predominantly in a school for their initial teacher education should be investigated.

Selecting the right people to be teachers

Good academic qualifications are a necessary but not in themselves sufficient condition for being a good teacher. As noted by the National Council on Teacher Quality, 2004 and Goe, 2007²³, some research does suggest that a teacher's academic qualifications have an impact on pupil achievement (see the Literature review). The McKinsey report (2007) also noted from their analysis of the Programme for International Student Achievement (PISA) that with respect to primary teachers there was a relationship between system performance and selective entry requirements for initial teacher education (see the Literature review). Three local authorities in their responses to the Review's call for evidence expressed concern around selection criteria for initial teacher education and proposed that higher entry requirements should be sought.

In addition to ensuring appropriate academic qualifications for entry to teacher education, there is a need to be more effective in identifying and selecting candidates with the potential to be future high quality teachers. We need to be clear about the qualities and capacities which are associated with high quality teachers and develop procedures to select for those qualities.

²² Rising to the challenge: a review of the Teach First ITT 2008 programme, OFSTED

²³ National Council on Teacher Quality, 2004 and Goe, 2007

The process of selection begins with the candidates' applications through the Universities and Colleges Admissions Service (UCAS). Through this process many applicants apply to several universities and may be considered and interviewed by several within a short space of time. Individual institutions expend considerable time in the selection process, as do staff from schools who are also involved. Each institution develops and carries out its own procedures. Evidence from current and past students who were considered by more than one institution indicates that the processes are not consistent and show considerable variability. There is a need to address the substantial duplication of effort, the lack of consistency and the low evidence base of the effectiveness of the procedures.

Evidence presented to the Review suggested that a small, but none-the-less significant, number of initial teacher education students lack some of the fundamental attributes to become good teachers, including limited interpersonal skills and basic weaknesses in literacy and numeracy. Although the evidence was largely impressionistic and applied only to a minority of students, the concern was persistent and widespread and needs to be addressed. There can be no doubt that prospective teachers should model high standards of literacy and numeracy for their pupils. Current requirements relating to Scottish Qualifications Authority qualifications in English and mathematics do not seem to provide a sufficient guarantee of the levels of competence which are required for teaching.

Equally, prospective teachers should have the kind of personal qualities which allow them to relate well to young people and show characteristics of the attributes which they must develop as extended professionals. The selection process should focus more directly on these attributes, partly through using a wider set of assessment techniques in an assessment centre and partly through the testing of literacy and numeracy skills in relation to a threshold of competence for teaching.

The selection for entry to initial teacher education programmes should be made more rigorous, drawing on existing best practice and using a wider set of selection criteria. The possible establishment of a national assessment centre should be explored. The role of future employers should be significantly strengthened within this revised process.

Candidates for teaching should undertake diagnostic assessments of their competence in both literacy and numeracy. The threshold established for entry should allow for weaknesses to be addressed by the student during the course. A more demanding level should be set as a prerequisite for competence to teach.

Workforce planning must also ensure that within the population of teachers there are individuals capable of filling all roles within the Scottish education system. The improved selection process described in this report should help to ensure that all those entering the profession have the capability to play a full part in the distributive leadership which characterises Scotland's best schools.

Chapter 4: Building twenty-first century teachers and leaders: the early phase

The period covering initial teacher education, induction and the early years of employment lays the foundations of professional values, knowledge and expertise of those who will be our teachers and educational leaders. Currently the stages in the early phase of a teacher's learning operate largely independently. This chapter examines this early phase and argues that, in order to improve coherence of these stages of teacher education and maximise their impact on the learning of students and teachers, it should operate as a single, planned early phase in career-long professional development.

Teacher education should be seen as and should operate as a continuum, spanning a career and requiring much better alignment across and much closer working amongst schools, authorities, universities and national organisations.

Background

Since 1984, initial teacher education qualifications in Scotland have been delivered through degree level studies. Initially these were provided in the colleges of education which, following the Sutherland Report²⁴, subsequently merged with universities across Scotland.

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'On academic grounds, I believe that the proposals that I have put forward ...point, inevitably, towards the provision of teacher education within a broader intellectual context than can be provided by a monotechnic. ...There are also strong arguments that the student experience in Scotland is likely to be enhanced through being educated in a broader HE context and, indeed, that the staff experience will be strengthened through contact with, or integration into, the research environment of a university.'

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Initial teacher education in Scotland is currently provided by the Universities of Aberdeen, Dundee, Edinburgh, Glasgow, Stirling, Strathclyde, Highlands and Islands and the West of Scotland, with the Open University in Scotland making a small amount of specialist provision. All initial teacher education programmes require to be approved by Scottish Ministers under Regulation 4 of the Teachers (Education, Training and Recommendation for Registration) (Scotland) Regulations 1993. The Standard for Initial Teacher Education provides the key statement of purpose for initial teacher education, and the GTCS 'Guidelines for Initial Teacher Education Courses in Scotland' (2006) state this overall aim of initial teacher education:

'The overall aim of programmes of initial teacher education is to prepare student teachers to become competent, thoughtful, reflective and innovative practitioners, who are committed to providing high quality teaching and learning for all pupils. Programmes must ensure that student teachers meet the requirements of the Standard for Initial Teacher Education. The means by which such professionals will be developed is through programmes whose design match in with the Quality Assurance Agency for Higher Education's requirements and the Standard for Initial Teacher Education in Scotland.'

Initial teacher education in Scotland currently centres in large measure around the four-year undergraduate route leading to the BEd degree and the one-year PGDE. In addition, the University of Stirling provides long-established concurrent BA and BSc programmes, and other universities have been actively developing new models including combinations such as an MA with Education (Aberdeen) and an MSc with a teaching qualification (Strathclyde). The rationale for such combined degrees is that they provide flexibility and ensure that teachers, particularly primary teachers, have a broad education as a good basis for their future roles. Initial teacher education programmes are subject to regular review and reaccreditation by the GTCS. The GTCS also determines the eligibility for registration of those who gain qualifications outwith Scotland.

TABLE 4.1 NUMBERS OF STUDENT TEACHERS IN SCOTLAND FOLLOWING DIFFERENT PROGRAMMES

	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11 (planned)
Primary PGDE	335	745	592	706	1023	1482	1599	1517	1743	1388	400
Primary BEd	991	1116	935	982	1340	1798	1763	1294	1085	966	800
Secondary PDGE	991	1116	935	982	1340	1798	1763	1294	1085	966	800
Secondary BEd	175	201	175	175	183	191	186	180	174	173	200
Total	2209	2807	2475	2618	3314	4251	4334	3775	3970	3653	2100

The Teacher Induction Scheme was introduced in 2002 to offer all new teachers qualifying from Scottish universities a paid year-long placement in a mainstream school, giving them support to achieve the Standard for Full Registration. The scheme is managed and administered by the GTCS on behalf of the Scottish Government. It provides each new probationer teacher with

school-based mentoring and support, as well as a programme of CPD led by the local authority. Probationary teachers have a maximum class commitment of 0.7 full-time-equivalent (FTE). This allows dedicated time for their professional development, including observing and working with experienced teachers.

The scheme represented a radical change in approaches to managing and supporting new teachers in Scotland. Prior to the introduction of the scheme in 2002, new teachers were 'provisionally registered' for the equivalent of two years full time, with schools completing interim reports and a final report which recommended whether or not full registration should be granted. Levels of support for new teachers varied hugely under the previous system, and some teachers completed their probation through short-term appointments in a range of different schools. Short-term supply contracts often lasted for just one or two days, with no support or preparation time. Apart from those who gained permanent or long-term temporary work, probationers were often being exposed to a disparate range of experiences in different schools and different local authorities. The 2000 McCrone Report witheringly described this way of gaining full registration as 'little short of scandalous'.

The Scottish teacher induction scheme is admired by many countries around the world, and the entitlement to a guaranteed year of full-time teaching in one school for all graduates from initial teacher education in Scotland was described as 'world-class' by the OECD in 2007. The success of the induction year placement for new teachers relies upon the quality of the support and challenge they receive from their mentors. Mentors are experienced teachers who are released from other duties for 0.1FTE. The selection and training of mentors is critical and will be discussed later in this section.

Probationary teachers who choose not to accept a place on the induction year can embark on the flexible route to achieving the Standard for Full Registration. The flexible route involves probationers working towards meeting the Standard over a period of up to 270 days of teaching service and engaging in a CPD programme relevant to the subject(s) in which they qualified. This flexible route may take place in any combination of publicly-funded schools across Scotland.

Strengths of current provision in initial teacher education and induction

Evidence provided to the Review, the academic literature and additional research highlight notable strengths in current practice in initial teacher education and early career learning.

University-based provision for initial teacher education

Initial teacher education in Scotland has a long, strong tradition of providing high quality teachers for Scottish schools. Many respondents to our survey cited university-based provision and an emphasis on research-informed practice as important strengths of initial teacher education in Scotland. They emphasised the value of a strong intellectual and academic dimension to initial teacher education and the positive contribution of research to inquiry-based practice.

Whilst all initial teacher education in Scotland is now provided within universities, in other countries, including England and the USA, struggles around the 'positioning' of initial teacher education have been particularly visible during the past ten years as part of a continuing debate about the content and process of teacher education.

Competitive entry to the profession

It is a strength that entry to the profession in Scotland is highly competitive and that application rates to initial teacher education programmes have continued to be strong, with an applicant to offer ratio of around eight to one. McKinsey (2007) notes that successful education systems tend to have high competition for places in teacher education. Highly selective entry continues to allow selection of well-qualified students in Scotland.

Diversification of routes beginning to emerge

There is evidence of encouraging developments including the emergence of more online and 'blended' types of learning to enable prospective entrants to study part-time and at a distance. Other models include universities, colleges and local authorities working together to improve the supply of new teachers for more remote communities. New approaches to concurrent degree programmes have the potential to offer graduates opportunities for wider and deeper study. Combining a primary teaching qualification with degree level subject content, such as a modern European language, can strengthen knowledge and skills both for teaching and, if necessary, for other forms of employment.

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Reflective, inquiring approaches taken by many new teachers

The ability of probationer teachers to reflect on and evaluate their ongoing development, using the Standard for Full Registration, is also a strength. Many local authorities require teachers to undertake and share action-based research projects within their first year, to use and further develop their skills in inquiry. The most successful newly-qualified teachers continue with a reflective, inquiring approach to their role in the classroom and their professional development. They can apply these higher order skills, developed through university programmes, to identify and address the needs of each individual learner in their care.

The impact of new teachers in schools

Much of the evidence gathered in the course of the Review affirms the many positive features and characteristics that new teachers often bring to schools. They are often optimistic, generate discussion about new ideas and approaches, and are positive in their attitude to educational change and finding solutions to problems or difficulties. Many teachers who are taking part in the induction scheme contribute a great deal to the wider life of the school. They are enhancing their professional development through participating in working groups and taking responsibility for aspects of school life.

The entitlement to a guaranteed year-long placement

There is recognition nationally and internationally that the entitlement to a guaranteed placement for one year in one school is a major strength of the induction scheme. All graduates from Scottish universities who choose to take part benefit from a well-structured, year-long placement during which time they have the opportunity to reach the Standard for Full Registration and become a fully qualified teacher. The scheme is geographically equitable across Scotland and aims to ensure a continuous professional experience within a supported environment for a year. As one professional association stated:

‘The guaranteed induction year is one of the strengths of the current system in Scotland. Teachers on the induction year have a chance to put into practice what they have learned and to build on their existing skills. There is time built in to allow them to reflect on their experiences. Having students and probationers in schools forces those schools to consider their practices’.

Self-regulation

The GTCS Guidelines for Initial Teacher Education are used to inform the accreditation of all initial teacher education programmes. This engages the profession itself in the scrutiny of initial teacher education programmes. Accreditation processes are characterised by cooperation and peer review. These processes are now relatively non-bureaucratic and rely to a significant extent on universities’ own quality assurance procedures, as well as ensuring a match with the professional standards (Menter, 2008)²⁵.

²⁵ Teacher Education Institutions. In Bryce, T. and Humes, W. (Eds.) Scottish Education (3rd Edn.) Edinburgh, University Press. Menter (2008)

Maximising relevance and impact in the early phase of a teacher's education

In spite of these strengths, the evidence provided to the Review demonstrates that the current components of the early phase of a teacher's professional learning cannot, as currently configured, address well enough or consistently enough the challenging purpose outlined at the start of this chapter.

Overall, the evidence gathered by the Review indicates that recently-qualified teachers, probationers and students are generally satisfied with their experience in initial teacher education and induction. The range of programmes which they had followed had naturally led to a very diverse range of experiences, but there was also variability in the depth and quality of their experiences and relatively little common ground between them. New teachers commonly raised two particular concerns: many felt that there were some significant specific gaps in their skills and knowledge which sometimes left them feeling under-prepared for their induction year; and there was a lack of continuity within and beyond their programme of initial teacher education.

The evidence indicates the following areas where change would be beneficial:

- coherence and progression;
- variability in quality;
- preparing for becoming a teacher, including addressing gaps;
- gaining more from placements;
- capitalising more fully on expertise;
- beginning to develop extended professionalism, including preparation for distributive leadership roles and partnership working.

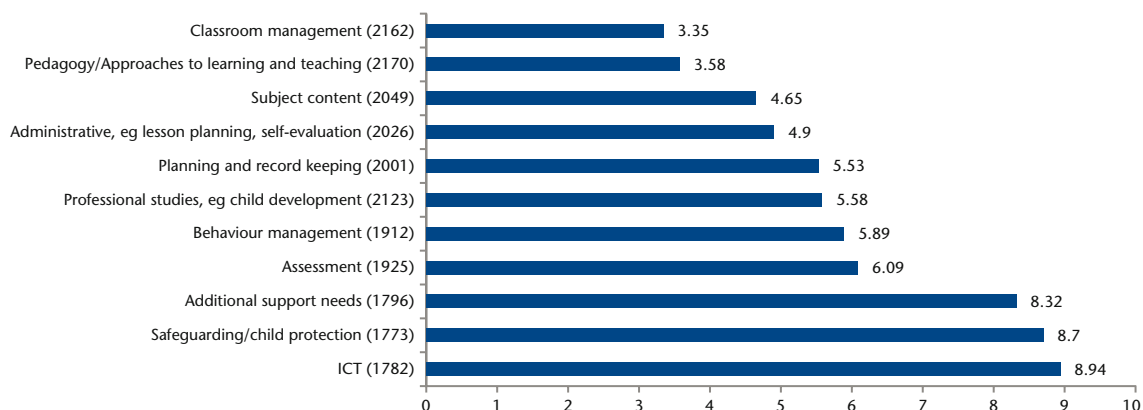
Initial teacher education – what should it contain?

Any expectation that initial teacher education will cover all that a new teacher needs to know and do is clearly unrealistic. In discussions about coverage in both one- and four-year programmes, university staff frequently referred to the impossibility of including in an initial teacher education programme all that would ever be required of teachers. They indicated that they had regularly tried to respond to a multitude of additional external demands and expectations and that there was a risk that the depth of study could suffer when there is significant pressure to increase breadth of study. This problem is particularly acute in the case of the one-year primary PGDE. In 2007, the OECD²⁶ summarised the international evidence on this matter, concluding that: *'initial education cannot provide teachers with the knowledge and skills necessary for a life-time of teaching. The education and professional development of every teacher needs to be seen as a lifelong task, and be structured and resourced accordingly'*.

Chart 4.1 sets out teachers' perceptions of those aspects of their initial teacher education which they found most helpful in preparation for their first post.

²⁶ Improving the quality of teacher education, OECD, 2007

CHART 4.1: MOST USEFUL ASPECTS OF COURSE, IN TERMS OF AREAS OF LEARNING, IN PREPARATION FOR FIRST POST (WHERE A SCORE OF '1' DENOTES MOST USEFUL AND A SCORE OF '12' DENOTES LEAST USEFUL)



Source: Q16; Base = all respondents answering each. (Base numbers for individual response options are included in the chart above)

The responses relate to initial teacher education in general and do not suggest any major difference of perception between the one-year and four-year programmes. They indicate, in particular, that teachers would wish to be better equipped in the areas of assessment, additional support needs, safeguarding and ICT. In response to the survey and in discussions, many respondents felt that they needed greater focus on subject knowledge. Achieving the necessary breadth and depth of knowledge is a particular challenge for primary education students, given the span of conceptual understanding within and across the eight curriculum areas they are responsible for teaching. Primary teachers often referred to the need for better preparation for the teaching of reading, at all stages in the primary school. A further frequent concern was lack of confidence and skills in assessment, including understanding standards and expectations and being able to engage with Scottish Qualifications Authority assessment processes. Many new teachers also expressed a lack of confidence in dealing with some of the most challenging aspects of the professional role of the teacher. These include positive behaviour management and ways of supporting learning including for pupils with significant additional support needs. Overall there is a wide variation in the extent to which existing provision fully equips students to address the areas of greatest challenge for Scottish education.

There are clearly important decisions to be made about what should be included in initial teacher education and what should be addressed later. A particular aspect is how far the traditional programmes can fully serve the purposes of preparing a new teacher for the wide range of demands around knowledge, pedagogy and professional studies. The Standard for Initial Teacher Education provides a very helpful reference point for this analysis.

Some aspects of learning are so central to being a teacher that they should be considered as core elements for every student. Beyond this it is desirable to have diversity within the broad expectations of the Standard, for example to enable specialism, to provide scope for research in depth in selected areas, and to take account of individual interests, prior learning and needs. There can then be a means of planning, for each teacher, how he or she will further develop knowledge, skills and attributes though the induction period to the Standard for Full Registration and beyond.

To guide this process, it will be helpful both to identify core elements and to illustrate expected levels of competence across the Standard for Initial Teacher Education.

All new teachers in Scotland should be aware of the key challenges we collectively face, such as improving standards of literacy and numeracy and doing more to overcome the effects of disadvantage and deprivation on educational outcomes, and contribute personally to addressing these. In addition to developing their subject and pedagogical knowledge and skills, therefore, all new teachers should be confident in their ability to:

- address underachievement, including the potential effects of social disadvantage;
- teach the essential skills of literacy and numeracy;
- address additional support needs (particularly dyslexia and autistic spectrum disorders);
- assess effectively in the context of the deep learning required by Curriculum for Excellence; and
- know how to manage challenging behaviour.

It is neither necessary nor feasible for a teacher to be a subject expert in all areas of the primary curriculum, but we do need to ensure that all teachers have sufficient understanding to stretch and progress children's learning and to diagnose and remedy any conceptual or other learning problems which may undermine their progress. Weaknesses in the performance of children, particularly in primary education, can stem in part from low levels of confidence amongst teachers about their own knowledge of what they are teaching. This represents one of the greatest points of exposure of the primary teacher and is particularly the case in literacy, mathematics, science and modern foreign languages. There are parallel challenges for secondary teachers in understanding how the academic knowledge gained through their undergraduate study relates to children's learning within the broad general education and senior phase of Curriculum for Excellence.

The professional component in programmes of initial teacher education should address more directly areas where teachers experience greatest difficulty and where we know that Scottish education needs to improve. That will require a radical reappraisal of present courses and of the guidelines provided by GTCS.

Increased emphasis should be given to ensuring that primary students have sufficient understanding of the areas they are expected to teach. Supporting online resources should be developed which address the fundamentals of each area to be taught together with implications for pedagogy.

Some initial teacher education programmes address the problem of what can be covered by promoting strategies which encourage students to identify what they need for immediate teaching purposes only as and when they need it. Such an approach does not sit well with our expectations of the complexity of the teacher's role in designing appropriate approaches to teaching and learning, based on deep understanding. There is also a view of the teacher as a generic facilitator of learning, and this can undervalue the need for a teacher to have a sound understanding of what is being taught.

To ensure that all students can benefit fully and quickly from the programme of initial teacher education, it would also be helpful to define clear baselines for prior knowledge and skills for those embarking on these programmes. Prospective students could reasonably be expected to develop and deepen their curriculum knowledge at least to those points. Improving their knowledge of a few areas of the curriculum, such as aspects of mathematics, science and modern languages, are priorities for many prospective primary teachers. Degree subject content studied by prospective secondary teachers can be very different to the content of the curriculum they will be required to teach, and again students should be expected to undertake necessary study to make this transition.

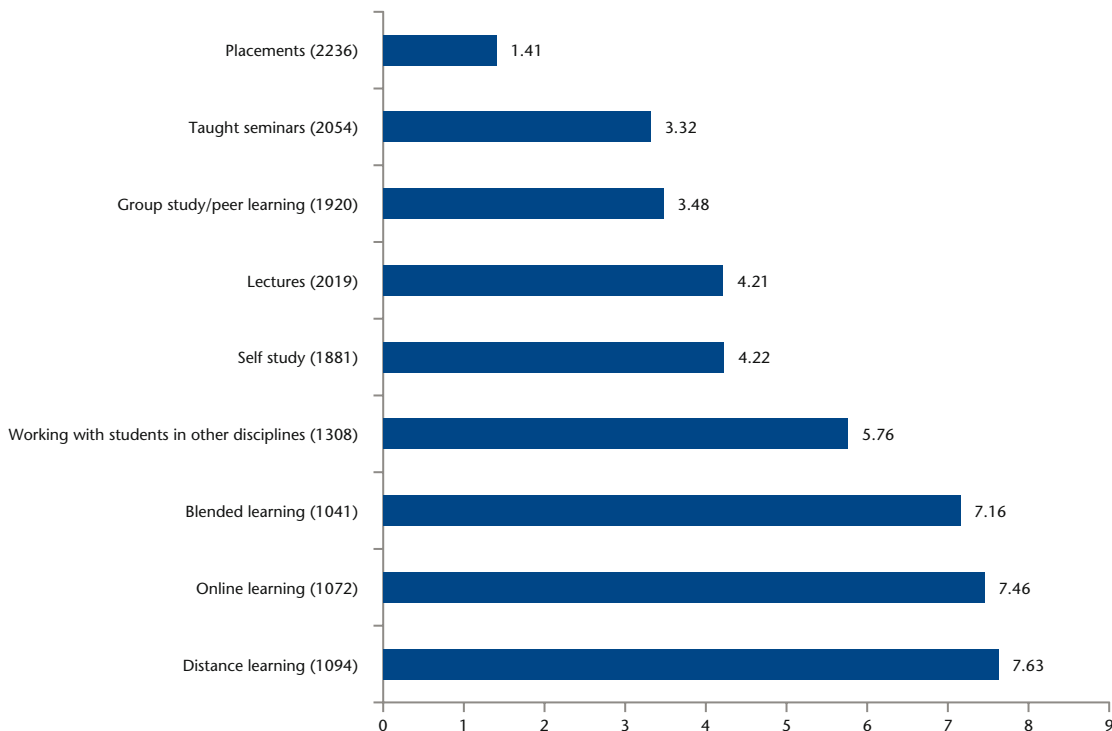
We have indicated above that all new teachers should be able to demonstrate nationally-agreed levels of competence in literacy and numeracy before being awarded the Standard for Full Registration. For some, this will require a measure of self-study during their period of initial teacher education tailored to their own development needs, to achieve these levels of competence.

Clear expectations about necessary prior learning for teacher education courses should be developed together with diagnostic assessments and online resources to allow students to reach that baseline in advance of formally embarking on a course. This mechanism could also be used to support existing teachers.

Improving approaches to learning in initial teacher education programmes

The student teacher experience needs to offer a wide variety of approaches to learning, across both the school and university environments. The chart below shows which modes of learning within initial teacher education programmes respondents to our survey found most useful in terms of preparation for teaching.

CHART 4.2: MOST USEFUL ASPECTS OF COURSE, IN TERMS OF MODES OF LEARNING, IN PREPARATION FOR TEACHING (WHERE A SCORE OF '1' DENOTES MOST USEFUL AND A SCORE OF '10' DENOTES LEAST USEFUL)



Source: Q17; Base = all respondents ($n = 2,381$). (Base numbers for individual response options are included in the chart above)

This evidence suggests that students perceived placements, taught seminars and working with peers as most useful. Lectures which are delivered to large groups and therefore cannot take account of individual needs were not always seen as helpful. Online and distance learning were perceived to be least useful, perhaps due to the lack of development of high quality resources or difficulties of access to these resources. For example, some students that engaged with the Review did not have access to Glow. Opportunities to work with students in other disciplines remains limited despite placing teacher education within universities.

A few initial teacher education programmes have attempted both to build from individual strengths and prior knowledge at point of entry to initial teacher education and to develop each new teacher's full range of knowledge through various means such as flexible learning materials. For example, in one university, primary education students undertake a helpful diagnostic assessment of their numeracy skills and can then access support materials to boost specific aspects, based on the results.

Several universities, including the Open University, have been developing online resources to meet such needs, and further collaborative work should be undertaken to develop and share materials and approaches.

Overall, there is considerable scope to expect students to undertake more customised self-study, including using high quality distance and online learning approaches.

At present, students tend to have broadly the same set of inputs, irrespective of what they bring to the course. There should continue to be considerable scope for variation in what students learn beyond the identified core.

Undergraduate provision in initial teacher education

The test which is often applied to a newly-qualified teacher is his or her ability to 'hit the ground running'. Evidence from headteachers and others indicates that BEd graduates often initially have a better practical understanding of the requirements of the job as beginning teachers. However, although many PGDE qualified probationers have a steeper learning curve at the start of the induction year, they often have a strong capacity to learn and develop and the difference in practical teaching skills between the two routes becomes increasingly difficult to distinguish over time. The capacity, attitude and level of application of each individual new teacher become more significant factors.

Of greatest long-term importance, however, is the extent to which degree programmes go beyond initial preparation for the classroom and begin to build the capacities, knowledge and attitudes which are required for the extended professional. The BEd degree is generally seen as a good preparation for the classroom and has many supporters and applicants to its programmes. However, its specificity of purpose can lead to an over-emphasis on technical and craft skills at the expense of broader and more academically challenging areas of study.

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One of the major, but as yet not fully realised, benefits of placing initial teacher education within universities, as envisaged by the Sutherland report, was that students on teaching programmes should benefit from belonging to the wider community of academic inquiry across the university. This broader academic experience would also enable them to work with students within other professions, including those with the closest links with education.

Degrees which concurrently combine significant academic study outwith education with rigorous professional development for teaching offer a more relevant way forward than the traditional BEd programmes. These broader degrees enable students and staff to engage more widely with the university as a whole, helping to realise the original aspirations of the Sutherland Report. They enable students, including those aiming for primary teaching, to engage in-depth academic study in a discipline other than education – for primary teachers perhaps providing the basis for specialist interests during their career. Such degrees would increase staffing flexibility between sectors. They might also offer a range of possible pathways into related professions such as social work and could also carry higher currency for students who do not find employment in teaching.

In line with emerging developments across Scotland's universities, the traditional BEd degree should be phased out and replaced with degrees which combine in-depth academic study in areas beyond education with professional studies and development. These new degrees should involve staff and departments beyond those in schools of education.

Length of initial teacher education programmes

Respondents to our survey expressed a clear view, which was supported by current and recent students, that the one-year, post-degree programme does not offer a sufficient length of time for the best quality preparation for teaching. This problem of reconciling demand with available time is at its most acute in the primary PGDE. Many suggested extending the programme, with some indicating that an 18-month or two-year programme would be more appropriate, to *meet the demands of the classroom. 'Given the complexity of the demands placed upon teachers, the range of knowledge and skills that they are required to master, and the need for them to have sufficient practical experience in real classrooms as a part of their initial education, it is not surprising that initial Teacher Education courses are demanding' (OECD, 2007).*

Greater clarity about entry expectations, as indicated above, allied to support to bridge identified gaps between a student's current knowledge and those expectations would reduce some of the pressure on course teaching time and provide a more solid base upon which to build.

The approach which we are advocating in this chapter – of conceiving of initial teacher education and induction as a single early phase – has the potential to yield more usable time for study. The early phase of teacher education could be seen as a five-year experience for undergraduates and as a two-year experience for postgraduates. Removing artificial boundaries

between initial teacher education, induction and subsequent CPD allows the development of new, differently-sequenced and paced approaches to the development of teachers' attributes, knowledge and skills. Agreeing the purposes of each phase would help to identify both the unique and complementary roles that each phase can play. The longer time horizons would, for example, allow more opportunities for students to apply what they have learned, to evaluate theories in practice, and begin to build up a range of specialist knowledge.

Within this phase, much better use could be made of the total time available. This could include the possibility of gaining academic recognition at Masters level, building on the positive start some universities have made to this within their current programmes.

We should also explore how more study time might be created for learning in this early phase through more creative use of time outwith university terms. Possibilities would include using traditional vacation periods, extending the PGDE beyond the current September to June (10-month) pattern, using the long break between the current two phases for further study, and using the time prior to taking up a place on an initial teacher education course to build skills and knowledge in identified areas, as we argued earlier in this chapter. Whilst there will be implications for resources, such enhancements to programmes would be more likely to be attractive to prospective applicants than substantially-extended programmes. They would also provide a firmer base for subsequent learning and practice.

Improving school placement within initial teacher education

The balance between time spent on placement and time spent in university remains contentious. Many respondents, particularly students and newly-qualified teachers strongly indicated that they perceived that the most valuable part of initial teacher education programmes was the placement experience. Despite 50% of the postgraduate degree programme being given over to placement and a minimum of 30 weeks over four years on the undergraduate route, 60% of graduates from the one-year programme and 51% of graduates from the undergraduate routes said that this was insufficient and argued that more time should be given to placement, as shown in the table below.

TABLE 4.2: VIEWS ON PLACEMENT TIME (%)

	PGDE	BEd
Too long	1	2
Just right	28	27
Too short	60	51
Neutral	12	20

Source: Q19 & Q20; Base = all respondents (n = 2,381)

Apart from the minimum stated length of placement days in the GTCS guidelines, there is no single model across Scotland and the universities have developed different patterns and concepts of placement to complement their campus-based provision. If, as we recommend, initial teacher education and induction are planned and operated as one continuous experience, the rhythm, flow and duration of placements could be adjusted to provide the best synergies between learning in the different settings.

The majority of those who submitted evidence to the Review recognised that theory and practice are too often perceived as separate entities despite the vigorous efforts of the university tutors and many teachers to make links. It is useful to refer to how another profession has addressed the need for all aspects of professionalism to be developed through practice. In *Tomorrow's Doctors-Outcomes and Standards for Undergraduate Medical Education* (General Medical Council 2009), this notion is placed clearly at the heart of professionalism:

'It is not enough for a clinician to act as a practitioner in their own discipline. They must act as partners to their colleagues, accepting shared accountability for the service provide to patients. They are also expected to offer leadership, and to work with others to change systems when it is necessary for the benefit of patients'.

'The roles of Doctor as a scientist and scholar, as a practitioner and as a professional should not be considered in isolation from each other. Doctors need to link them routinely in clinical practice'²⁷.

In initial teacher education, exploration of theory is most often considered to reside within the on-campus delivery, with 'practice' residing within placements. A number of respondents to the Review described their initial teacher education programme as being of two largely separate parts: the campus-based part and the school-based part, with only limited connection between them in purpose and approach. Many identified the need to address variability in quality and consistency of the student experience, variability and commitment to partnership arrangements and a lack of clarity of responsibilities and ownership of initial teacher education and its students. Ways need to be found to ensure that school experiences are, and are seen to be, integral to the totality of initial teacher education. To assist this, experienced teachers can work with students to tailor the support they give.

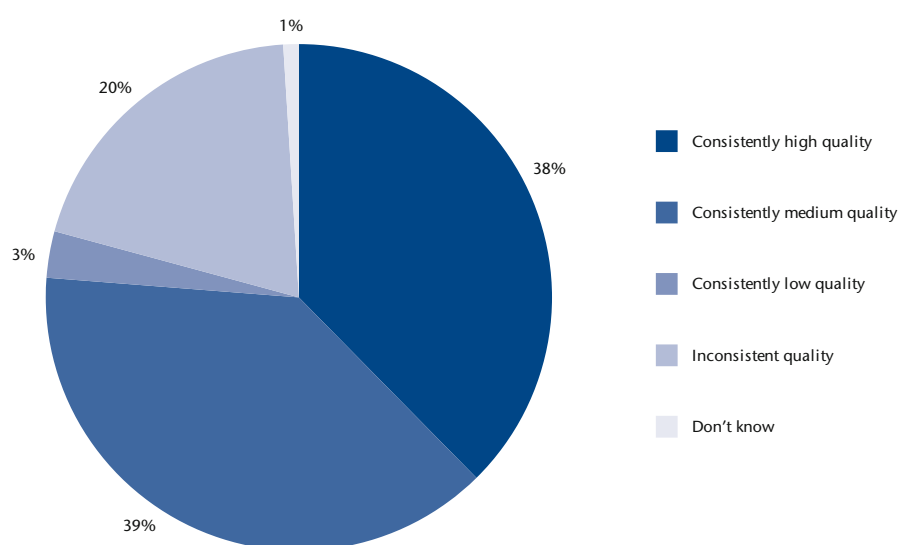
Rather than seeing the components as offering different things, and being at either end of a spectrum, they should be seen as interlinked, with the connections being the means of developing educational theory through practice.

Exploration of theory through practice should be central to all placement experiences – emphasising effective professional practice, reflection, critical analysis and evidence-based decision making.

²⁷ Tomorrow's Doctors. General Medical Council 2009

Many students and newly qualified teachers attested to the value of their placement experiences and praised the work of teachers and schools in supporting them. Teachers, particularly primary teachers who qualified in the last 10 years, are generally more positive about the quality of placement and support given to them. Unfortunately 23% were not positive and reported variable or very poor experiences. With placement playing a pivotal and substantial role in all initial teacher education programmes, concerns about poor quality placement experiences need to be addressed. The consistency in quality of placements experienced by teachers who responded to our survey is noted in the chart below.

CHART 4.3: CONSISTENCY OF QUALITY OF PLACEMENT EXPERIENCES IN PREPARATION FOR TEACHING



Source: Q23; Base = all respondents (n = 2,381)

Seventy-eight per cent of respondents to our online survey indicated that the support they received from the school during placements was 'very effective' or 'effective'. Fifty-on per cent said that the support from their university was 'very effective' or 'effective', but 20% said support from the university was 'very ineffective' or 'ineffective'.

We need to find ways of encouraging and assuring a more consistently high quality of placements within initial teacher education.

The GTCS accredits initial teacher education programmes, and arrangements for placements are normally described within programme documentation. However, the quality parameters which are described for placements do not always result in high quality experiences for student teachers. High quality placements which ensure a rigorous and professional experience should be a significant component of all initial teacher education programmes and student teachers should be able to expect more consistency in quality.

The quality and of the placement experience is inextricably linked to other aspects of quality in the school, such as the nature of the leadership, the overall quality of learning and teaching and

the culture of professional learning and collaboration: all of these aspects should be strong in schools which are providing placements. Because of the pivotal nature of the placements to professional development, it is essential that placements meet appropriate benchmarks of quality. These criteria could also be used as a basis for a school's self evaluation of its provision for students.

Tools are available for gathering data on the quality of students' experiences during their placements. 'Practicum', a tool which was developed to support the organisation of student placements, can also be used to provide local authorities, schools, and universities with fine-grained data relating to the quality of student experience on placements. This is based on online questionnaires which students can complete as part of their evaluation of the placement experience. In discussion with local authorities it was clear that only a few use the data to evaluate placements. In the best practice they use this data to intervene and provide additional support or take action to address variations in quality.

School-based placements should be in schools which meet quality standards. They should provide an effective professional learning environment and the capacity to mentor and assess student teachers.

Students' views on the quality of placements should be used to inform decisions about the suitability of schools for placement and help to ensure a consistently high quality experience.

Given the importance of the quality of teaching for learning outcomes, all aspects of teacher education, including placements, mentoring of new and experienced teachers and approaches to CPD should be a more integral part of quality improvement processes at school, local authority and national level.

As part of current developments, school inspection should take greater account of the importance of teacher education in a successful school. This includes all aspects of career-long teacher education, acknowledging the key role this plays in improving educational standards. The GTCS and HMIE currently review aspects of provision within initial teacher education. This should be extended to include points of direct impact, such as the quality of learning that student teachers experience at university and within schools, the quality of partnerships which underpin this and the arrangements for continuing professional development.

Stronger quality assurance of the effectiveness of partnerships should be applied by GTCS through their accreditation procedures and HM Inspectors in their inspections of teacher education and of schools. School inspections should include, where relevant, evaluations of the quality of the mentoring and assessment arrangements for students and newly-qualified teachers as well as of continuing professional development.

Covering the various components of teacher education, including the provision of placements, in a school or local authority's approaches to self evaluation and quality assurance offers an opportunity to improve the quality of the student experience as well as to enhance ownership of initial teacher education by staff in schools.

A school which is recognised as offering a model of good practice in promoting professional learning could become a 'hub teaching school', working collaboratively with a university or other agency and with neighbouring schools, exchanging knowledge and evidence of effectiveness of practice. This notion is developed in later in the report. McLaughlin and Black-Hawkins²⁸ argue that: *'If the creation and dissemination of knowledge beyond the individual teacher is to be an aim and is to happen, then shifts in the structures, roles and relationships of both universities and schools are demanded'*.

Assessment of students on placement

Many concerns were expressed to the Review about the assessment of students on placement. The most common complaint was from schools claiming that they had rated a student as unsatisfactory but felt that they had been 'overruled' by university processes. Existing procedures also risk undue weight being given to 'crit lessons' and the need for students to devote disproportionate amounts of time to preparing written evidence of their work in school for assessment purposes. In discussion with the Review Team, students and recently qualified teachers described what, in their view, were time-intensive and often repetitive tasks required as part of placement assessment procedures. In some cases, they indicated that such assessment requirements drove their priorities and reduced the time in which they could collaborate with peers and other teachers or engage in improvement through self-evaluation.

For the future, it will be important to develop assessment approaches which lead to improved student teacher learning. Assessment should address those attributes of a good teacher which are displayed across the length of a placement. Experienced teachers already formally assess new teachers within the induction scheme and could take prime responsibility for assessing students on placement. Appropriate guidance on and moderation of standards, quality assurance and appeals processes need to be built in to ensure transparency, equality and fairness for all.

Joint appointments between local authorities and universities can play a key role in the moderation of standards across schools. Such posts could also help to bring research and development work closer to the point of impact in schools. When creating such posts, there is scope to build on the role of 'student placement coordinator' which was funded within each local authority as a result of the 2005 review. Rather than focusing on administrative functions relating to managing placements, the future role could be about quality improvement of initial teacher education and partnership working across career-long teacher education.

²⁸ A Schools-University Research Partnership: understandings, models and complexities. Journal of In-Service Education, 30(2). McLaughlin and Black-Hawkins (2004)

Suitably trained school staff should have the prime role in the assessment of students whilst on placement. New models of joint staffing should be developed to enhance the quality and impact of the placement experience.

Initial teacher education provides the foundation for the quality of the future teaching workforce and this should be a priority for all teachers and employers. Involvement in this kind of activity should be recognised as a contribution to the teacher's own CPD and to the CPD of the member of university staff. Evidence from existing local authority and university partnerships of this nature indicate that the acceptance of a shared responsibility is central to success.

Developing the broader role of the twenty-first century professional within initial teacher education

Programme placements are designed using the GTCS guidance and the sequences of experiences are built to give increasing responsibility for class teaching. The most common model of placement emphasises the need to be able to take sole responsibility for a class or classes. However, there is much more to the teacher's role than class teaching: as we have discussed, the concept of the teacher and teaching is changing and students need to experience the wider role of the teacher when on placement, including working with parents and partners from other services for children.

Scotland has a tradition of separate schooling for different age groups which is mirrored by the age ranges in which new teachers become qualified. In practice, there is decreasing demarcation in the teaching of specific age ranges. Some interesting and challenging developments involving cross-sectoral partnerships are taking place around the senior phase of Curriculum for Excellence within secondary schools, for example. In order to implement Curriculum for Excellence successfully, schools and individual teachers need to work with partners when designing learning experiences. As well as within curriculum areas, this includes the 'responsibilities of all' such as health and wellbeing. Programme placements should aim to provide opportunities for students to participate in these sorts of developing partnerships.

To ensure that the model of placement reflects the broader and evolving roles of teachers, it should include more substantial experience for all prospective teachers in relating to parents and working with other professionals.

Improving the continuum of teacher education into induction and beyond

Some probationer teachers reported that the content of the induction programme at local authority level did not build on their prior learning effectively. Whilst some of what has been learned in initial teacher education content does need to be revisited, some was simply

repeated. The involvement of the university partners in induction is negligible. During their probation, only 4% of respondents to our online questionnaire had the opportunity to retain links to their university. Forty-five per cent would have chosen to do so if the opportunity had been offered. Research by Carter and Francis (2001)²⁹ on workplace learning in New South Wales, Australia, suggests that effective learning for beginning teachers is linked to induction supported by partnership with a university. If we conceptualise and design a two-year graduate programme, which includes the PGDE and the induction scheme, involving university-based and local authority-based teacher educators throughout, progression in the development of skills and competences for new teachers should improve significantly.

More joint appointments between local authorities and universities would be a further way of breaking down the structural barriers and bringing all staff involved in teacher education closer together. Current experiments, for example as led by Glasgow University and partners, where university teacher educators are based within a locality, may help to ensure better progression from initial teacher education into induction and beyond. This would also help to address the desire of many new teachers to have continuing contact with university staff during their early career development. University staff could enrich the quality and focus of the action-based research that many probationers complete during their induction year, as part of the local authority programme. Opportunities for these projects to be accredited could increase with greater involvement of university staff. This might encourage new teachers to continue to develop credits at Masters degree level, based on the introduction to this level of study within many initial teacher education programmes.

In order to improve continuity and coherence for new teachers, university-based teacher educators should have a role in the development and delivery of induction schemes.

Improving partnerships for teacher learning throughout the early phase

Improving partnership working was one of the key recommendations of the 2005 review³⁰ but progress since then has been limited and improvements have not always been sustained. The current situation in Scotland remains very varied and this variability entrenches a continuing division of ownership and responsibilities. There appears to be no lack of goodwill towards improved partnership working but, although cooperation has improved, effective collaboration remains relatively rare.

A major implication of the proposed single early phase of teacher education is that local authority and university staff will need to work closely together in a range of practical ways throughout the period, not only at the point of transition from initial teacher education to induction. Strong partnerships will be essential if students are to experience coherence and progression in their education throughout the early phase and beyond.

²⁹ Mentoring and Beginning Teachers' Workplace Learning, *Asia-Pacific Journal of Teacher Education*, Carter, M. and Francis, R. (2001)

³⁰ Review of initial teacher education, Scottish Executive, 2005

There are existing examples of effective school-university partnerships from which we can learn. The Scottish Government's 'Schools of Ambition' programme, for example, included good examples where university and school staff worked together closely to lead and evaluate potentially radical change in participating secondary schools. Individual universities have also worked hard to improve partnership working and there are a number of examples of effective practice. Strong partnerships are based on shared ownership of programmes and students, clarity of expectations and responsibilities, trust, respect and equal status.

New and strengthened models of partnership among universities, local authorities, schools and individual teachers need to be developed. These partnerships should be based on jointly agreed principles and involve shared responsibility for key areas of teacher education.

Role of experienced teachers within initial teacher education

As part of fuller partnership, teachers in schools should be more closely involved in designing placements. School and university programme staff need to be able to develop shared views of theory through practice and shared understandings of the purposes of each component of the programme. This has worked well within the Australian experience of partnership which, in *Models of Partnership in Initial Teacher Education*³¹, is described as follows:

'The trend towards the reconceptualisation of school-experience and the relationship with schools arises from the recognition that student teachers' learning is not always facilitated by the more traditional models of supervision. New models require supervisors to take the role more of facilitator than of critic and involve the redefinition of roles and responsibilities to include increased reflection, collaboration and partnership.'

This type of approach would enable student teachers to benefit from mentoring and coaching from the outset of their teacher education. As discussed earlier, teachers need to work with students and university staff to tailor the structure, content and focus of the placement to meet each individual student's needs. This might include deepening subject content knowledge in priority areas, or an aspect of pedagogy, or work with particular groups of learners. Progress can then be recorded within the student's online profile, which can later be used to evaluate the breadth of their career-long development.

We now consider the current induction component and how it might evolve within a more coherent early phase of initial teacher education.

³¹ Occasional Publication No. 3 – Sept 2005 GTCS Research, Brisard, Menter and Smith

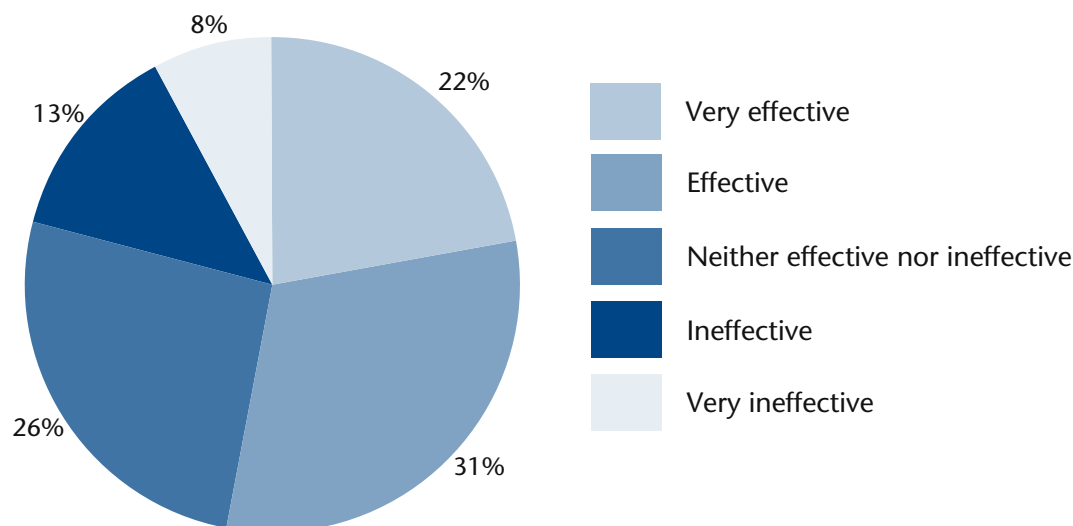
Improving professional learning for new teachers

Howe (2006)³² reviewed induction programmes in Australia, Britain, Canada, France, Germany, Japan, New Zealand and the United States and concluded that the best approaches were based on:

- individualised induction plans and funding for mentor training;
- development of partner schools for more extended periods of induction – mixed between universities and schools in the first year followed by more intensive school-based elements in second year;
- reduction in responsibilities in addition to reduction in teaching workload – time for reflection;
- development of an organisational culture in which there is collaborative exchange involving a range of professionals aimed at supporting newly qualified teachers; and
- separation of the support and assessment functions of induction.

Scotland meets most of these criteria very well. At present, however, the quality and content of the induction scheme varies across the country. At its best it is genuinely ‘world-class’ but that is by no means universally true. Overall, probationer teachers felt positive about their induction year experience. However, nearly half of the probationers who responded to our online survey did not agree that CPD undertaken during the induction year was effective or highly effective in supporting them to achieve the Standard for Full Registration. The results are summarised in the chart below.

CHART 4.4: EFFECTIVENESS OF PROFESSIONAL DEVELOPMENT UNDERTAKEN DURING PROBATION/ INDUCTION IN HELPING REACH STANDARD FOR FULL REGISTRATION



Source Q24; Base = all respondents (n = 2,381)

³² Exemplary Teacher Induction: An international review, *Educational Philosophy and Theory*, 38(3), Howe, E. R. (2006)

Induction experiences should build progressively from initial teacher education into the early professional years with the key components being developed in partnership by local authorities, the GTCS and the universities. There should be maximum opportunities within the induction scheme for new teachers to tailor and personalise the content to meet their own professional learning needs. It is critical to instil a desire to own, lead and be responsible for CPD, rather than having it 'done to you', from the outset of a teacher's career.

In some local authorities the central programme is generic and probationers from all sectors take part in the same CPD sessions. Probationer teachers reported that the quality of some sessions was low, particularly when local authority officers spent considerable time explaining corporate policies. Some new teachers felt that corporate policies could have been part of a professional reading programme, with short discussions to clarify any procedural issues. In other examples, time was used well and much of the programme was led by experienced teachers from across the authority, covering a range of areas of professional development prioritised by the probationer teachers themselves. Most in the primary sector felt that the probationer year and other CPD organised by authorities did not sufficiently develop their knowledge and understanding in subjects across the curriculum. As a result, they were not confident in teaching all aspects of the curriculum. Probationer teachers from the secondary sector appreciated when they had a mentor from the same subject in school. Most would also welcome more subject-specific CPD.

Given the importance of the induction scheme, it needs to be subject to stronger quality assurance and ongoing improvement. We need to be sure that the equity afforded to new teachers in terms of a guaranteed placement is matched in terms of the quality of the experience and ongoing teacher education they engage in, no matter where they are in the country. Mechanisms for approving initial teacher education programmes, led the GTCS, will now need to include ways in which induction is being built into the overall experience, as partners work together to reconceptualise the early phase of teacher education.

Improving personalisation and progression for new teachers

Initial teacher education profiles are compiled between the university and the qualifying student and are intended to form a basis for discussion on development needs in the next stage. They are often used as a basis of discussion between the newly-qualified teacher and their mentor. Those who have had this opportunity to build their own next steps and tailor the focus for the start of their induction year were very positive about the impact this had on improving the transition from university. However, a significant proportion of newly-qualified teachers reported that their development paths were disjointed between initial teacher education and the induction scheme, contributed to by a lack of reference to their university initial teacher education profile. New teachers also perceived great merit in being able to have their initial teacher education profiles, initial professional development action plan, PRD and CPD materials and information as a flexible online portfolio which could be used interactively. At present, not all of those involved in mentoring and supporting new teachers seem to be fully aware of the profiles and paperwork that graduates have for the start of their induction period.

Improvements to these transition points are likely to be achieved if initial teacher education and induction are planned as one experience.

What has become clear is the need for a more personalised, coherent, progressive journey of professional learning for all graduates who are embarking on a career in teaching.

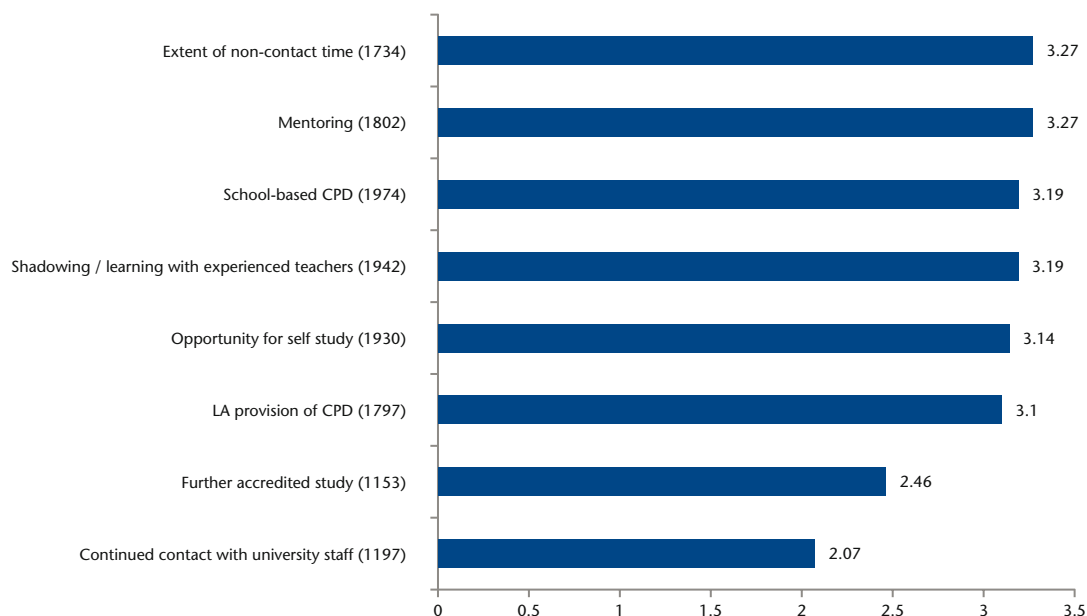
The ‘world-class’ entitlement to the induction year placement has not always been matched by world-class content within the programme.

To support more effective management of personal and professional development a new system of online profiling should be developed. This should integrate progress, targets and next steps from the outset of initial teacher education, through induction and into continuous professional development.

The quality of mentoring and support

The quality and impact of mentoring for each new teacher is central to the success of the teacher induction scheme. Mentoring and the extent of non-contact time were the two features that probationer teachers who engaged in the Review were most satisfied with, as shown in the chart below.

CHART 4.5: SATISFACTION DURING PROBATION/INDUCTION WITH ASPECTS OF PROFESSIONAL DEVELOPMENT (WHERE A SCORE OF ‘5’ DENOTES VERY SATISFIED AND A SCORE OF ‘1’ DENOTES VERY DISSATISFIED)



With an average score of 3.27, this evidence suggests that levels of satisfaction with the quality of mentoring could be improved further. Selection of mentors, initial and ongoing training, and monitoring the impact of the role are critical factors for improving the overall quality and consistency of mentoring.

There can be a tension between the mentoring and the assessment function that many mentors also carry out. This can affect the extent to which new teachers genuinely engage in coaching and mentoring conversations where they reveal weaknesses because of the consequences for the formal assessments their mentor undertakes. Some probationers also commented that they did not want to challenge or disagree with their mentor, even when they disagreed with their teaching approaches, for fear of any repercussions. A few new teachers reported that a priority for them in successfully completing their induction year was maintaining a positive relationship with their mentor.

Original guidance on the teacher induction scheme did suggest two key school-based roles: the mentor who would complete the formal aspects of the scheme with the new teacher; and the supporter who would provide pastoral care and support to the new teacher, offering an open space for new teachers to seek advice and share successes and concerns. The supporter was often a teacher who was working within the same department or stage of the school. Our evidence suggests that in Scotland the two roles have merged into one for many probationer teachers. The separation of the assessment function from the mentoring role is one of the many successful elements of mentoring within the Santa Cruz New Teacher Programme³³.

A three-year evaluation of the *Early Professional Development (EPD) Pilot Scheme* in England (Moor et al, 2005)³⁴ reported that mentoring at an early career stage had a positive impact on mentees' teaching practice, career development, and commitment to the teaching profession. The EPD evaluation reported '*strong evidence that the early professional development of teachers had led to them becoming more effective members of their school communities*'. This study is one of the few UK studies to assert a link with pupil gains. Reporting survey findings from year 3 of the evaluation, Moor et al maintain that '*more than three-quarters of teachers and mentors indicated that EPD had considerably enhanced pupils' learning*'. If we are to achieve the extended professionalism we seek, all teachers need mentoring skills to develop each other and support and challenge improvements to practice. The importance of mentoring as part of CPD will be explored further in the next chapter.

Research also highlights the importance of effective selection and preparation of school-based mentors. Effective mentors ensure an appropriate degree of challenge, possess subject expertise, and support mentees' critical interrogation of practice (Smith and Ingersoll, 2004³⁵; Harrison et al, 2006³⁶; Hobson et al, 2007³⁷). The benefits and impact of taking on the role of being a mentor, particularly for mid-career teachers, are clear from our evidence and the research. Where mentors are trained and fully supported, they gain many valuable skills and refresh a range of their own competences. Research by Hobson et al notes that some teachers are 're-energised' and 're-engaged' with the profession through the adoption of a mentoring role in school. Based on evidence from the Santa Cruz programme evaluation, Moir and Bloom

³³ New Teacher Center, University of California, USA. www.newteachercenter.org

³⁴ Professional development for teachers early in their careers: An evaluation of the early professional development pilot scheme, Nottingham: Department for Education and Skills. Moor, H., et al (2005)

³⁵ What are the effects of induction and mentoring on beginning teacher turnover? *American Educational Research Journal*, 41(3), Smith, T. and Ingersoll, R. (2004)

³⁶ Mentoring beginning teachers in secondary schools: an analysis of practice, *Teaching and Teacher Education*, 22, Harrison, J., Dymoke, S. and Pell, T. (2006)

³⁷ Newly qualified teachers' experiences of their first year of teaching: Findings from phase III of the becoming a teacher project. Nottingham: Department for Children, Schools and Families. Hobson, A. J., et al (2007)

(2003)³⁸ maintain that, *'mentoring offers veteran teachers professional replenishment, contributes to the retention of the region's best teachers, and produces teacher leaders with the skills and passion to make lifelong teacher development central to school culture'*.

A few local authorities have seconded staff to act as mentors for clusters of schools. Although these authorities had found this a helpful approach in ensuring consistency in mentoring arrangements, they reported difficulties in sustaining such secondments in the current financial climate. Many of these approaches, which have been formed based on lessons learned from the Santa Cruz model, are highly effective. The model in Santa Cruz provides mentor support from experienced teachers who are released full time from teaching duties (for a period of two to three years) to mentor newly qualified teachers in their first year of professional practice. Systematic mentor training is provided for initial preparation and continues through weekly mentor forums and professional development planning. A rigorous selection process is undertaken involving school leaders, district administrators and unions. Support for new teachers generally includes approximately two hours mentoring each week and specifically arranged seminar groups focusing on various topics such as pedagogy and assessment and working with school data.

Across the local authorities in Scotland, there are some useful training programmes for mentors which include coaching skills. In some instances, for example, authorities have produced handbooks for mentors and organised refresh training. They have also set up helpful mentor support groups.

Local authorities and national bodies should develop approaches to quality assure and improve mentoring.

Mentors should be selected carefully and undertake training based on a recognition of the skills and capacities required for this role.

The roles and responsibilities of different individuals within the teacher induction scheme need to be updated and clarified. Given the potential tension in the assessment and support functions of mentors, all new teachers in Scotland should have access to a mentor and a supporter.

Tailoring the package of support, including non-contact time

The induction scheme offers newly qualified teachers a maximum of 0.7 FTE class commitment, with the balance of time being used for professional development and to access support from experienced teachers. This is in contrast to the later stages of teaching placements within initial teacher education courses, where GTCS guidelines and course documentation favours an almost full-time teaching commitment to prepare students for the demands of the job. The rhythm and flow of teaching experience within the later stages of initial teacher education and the

³⁸ Fostering Leadership through Mentoring. Educational Leadership, 60(8), Moir, E. and Bloom, G. (2003)

induction year contrasts considerably under the current arrangements. The majority of newly-qualified teachers who engaged with the Review were very positive about the opportunity to undertake the induction scheme and the entitlement to support from school staff and the local authority. Many asserted that they would have welcomed moving to a full timetable at a negotiated point. This view was confirmed by many headteachers and local authority probation managers, some of whom saw the 0.7 timetable in the latter parts of the scheme as counterproductive in trying to prepare for the demands of a full-time post.

In November 2010, the Scottish Government and COSLA proposed that the review of the Teachers' Agreement of 2001 should consider increasing probationer class contact time to 0.9FTE. However, the conclusions of this Review would point to the need to make much more effective use of existing non-contact time. There is a need for more flexibility in deciding what is appropriate class contact time in the later stages of the induction year, matched to the needs of each individual probationer. Even the most capable new teacher is still at the beginning of the journey of professional development. The evidence and research suggests that investing time for professional development, reflection and learning with experienced teachers within the induction year is a critical factor in its success. While the need for savings is recognised, that should not be at the expense of building much-needed quality in our future teaching force.

The overall level of non-contact time in the induction scheme should build more directly and progressively from initial teacher education. The use made of the time should allow greater flexibility and personalisation.

Induction and early career professional development

While the induction scheme has been important to the early professional development of teachers during their first year of employment, research indicates that there is a notable absence of continuing support thereafter (Kennedy et al, 2008³⁹; Wilson et al, 2006⁴⁰; Fraser et al, 2007⁴¹). Beyond the induction year, research suggests that Scottish teachers themselves do not always see CPD as a positive opportunity even in the 'post-McCrone' context, although many welcomed the idea of an 'entitlement' of 35 hours per year (Draper and Sharp, 2006⁴²). Scotland is far from being alone in this particular aspect, as recent work in England (Hobson and Ashby, 2010⁴³) has shown. In Northern Ireland, attempts have been made to improve this aspect of continuity by illustrating professional standards within different phases of teacher education, including early career development.

³⁹ Early professional development in Scotland: Teachers in years 2-6. Learning and Teaching Scotland. Kennedy, A., McKay, J., Clinton, C., Fraser, C., McKinney, S. and Welsh, M. (2008)

⁴⁰ Developing teachers: A review of early professional learning. Glasgow University, SCRE Centre. Wilson, V., Hall, J., Davidson, J. and Lewin, J. (2006)

⁴¹ Teachers' continuing professional development (CPD): contested concepts, understandings and models. Journal of In-Service Education, 33(2). Fraser, C., Kennedy, A., Reid, L. and McKinney, S. (2007)

⁴² Induction: Fostering Career Development at all stages. Edinburgh: Dunedin. Draper, J. and O'Brien, J. (2006)

⁴³ 'Scaffolding or reality aftershock: second year teachers' experiences of post-induction support', University of Nottingham. Hobson, A. and Ashby, P. (2010)

There can be a serious lack of continuity and progression in teacher education experienced by many teachers moving into their second year. There is often little continuity in supporting them to take forward the targets which they had set at the end of their probationer year, particularly where they did not have full-time employment. In the few instances where newly-qualified teachers had secured a post in the same school, these targets were of more relevance. In the case of one authority, those interviewed as part of the Review were experiencing continuity in their professional development and described the experience as being in a 'mentoring school' where all staff were supportive. The transition to the second year of teaching works well when teachers are placed in the schools in which they had their induction year, although this is not always possible. However, most of the teachers in their second year who engaged with the Review were unclear about potential CPD pathways and career progression. Continuing use of professional standards was heavily dependent on which school and which authority they worked in.

Early career teachers should continue to benefit from mentoring beyond induction. Additional support should be provided by senior managers within schools and local authorities to ensure appropriate progression as part of the CPD and Profession Review and Development (PRD) process.

Improving learning for probationer teachers on the flexible route

Provision needs to be improved for those teachers who opt out of the induction scheme and embark on the flexible route to achieving the Standard for Full Registration. The evidence suggests that graduates opt out of the scheme for a number of reasons, including:

- personal or family commitments;
- being unable to commit to working full-time; and
- choosing to complete probation in somewhere other than a Scottish state school, for example an independent school.

In addition, graduates who complete their initial teaching qualification outwith Scotland have to complete the flexible route.

Some of those teachers on the flexible route may still be experiencing the almost 'scandalous' provision which formed the basis of the previous probationary term, as described by the McCrone Inquiry. They may complete a set of short-term assignments with no support or continuity. Local authorities who accept flexible route probationers onto their supply teaching registers or into longer term posts need to do more to support them: flexible route probationers should experience as many features as possible of the induction scheme.

The flexible route to achieving the Standard for Full Registration should include access to CPD and structured support. This needs to be led and coordinated by local authorities who choose to employ flexible route probationers.

Evidence-based improvement

Currently there are no arrangements to assess effectiveness and impact within each aspect of the teacher education process. Although measures of effectiveness are difficult to identify and disentangle from various other factors, high quality teacher education has to have a strong evidence base.

A leading example of such an approach is the Teachers for a New Era (TNE) development in the USA, funded by Carnegie Corporation. Kirby *et al* (2006)⁴⁴ found *'that the distinctive contribution of TNE lies in its commitment to insist on formal evidence that a training program is effective in producing teachers who can improve student learning'*. The same approach was subsequently adopted in the Scottish Teachers for a New Era (STNE). This development of evidence-based practice in teacher education has subsequently influenced developments elsewhere. It is critical that a wide range of evidence about the quality and impact of teacher education is gathered and used to create a culture of continuous improvement. GTCS accreditation arrangements of initial teacher education programmes need to include follow-through where necessary, to evaluate impact.

Leaders who manage the early phase of teacher education need to engage in a wider range of self-evaluation to ensure greater equity and consistency in the quality of experience and education that beginning teachers receive. For example, within initial teacher education, one of the main forms of self-evaluation and improvement centres around student surveys and questionnaires. A greater range of evidence is required to ensure improvement, such as observing the point of impact of the initial teacher education programme; the quality of teaching and learning that students experience. Direct, first-hand observation of learning in action is essential to assessing the impact of improvements and changes to programmes, as found by Furlong *et al* (2000)⁴⁵: *'it is one thing for course leaders to design new courses in response to particular policy texts; how those new courses are actually experienced by students could well be a different matter'*.

Local authority and school leaders have an important role in the systematic improvement, through self-evaluation, of all aspects of teacher education, recognising this as a central component of school improvement because of its direct role in improving outcomes for individual children. More data is required about the quality of key aspects of teacher education, such as school placements, mentoring within the induction scheme and the impact of CPD. Leaders need to gather this data and use it to intervene and take direct action to ensure continuous improvement.

Providers of initial teacher education programmes should develop, in partnership with employers, means of gauging the effectiveness and impact of their programmes in the short and medium terms.

⁴⁴ Kirby *et al* (2006) Kirby, S., McCombs, J., Barney, H. and Naftel, S. (2006) Reforming teacher education: Something old, something new. Santa Monica, CA: RAND Corporation. Available from: http://www.rand.org/pubs/monographs/2006/RAND_MG506.pdf

⁴⁵ Teacher Education in Transition: re-forming professionalism? Furlong *et al*, Open University Press, 2000

University-based teacher educators

To ensure high quality in all aspects of teacher education, attention needs to be paid to the professional development of all staff involved. Responses to our survey highlighted a perception that the profile of staffing in universities, and their knowledge and skills, is changing to reflect evolving needs and missions. However, the agenda set by this report is very challenging.

Those most closely involved in initial teacher education programmes and who assess the professional components of the programme are normally required to be registered with the GTCS. This will form a key mechanism in the future for ensuring that all those involved in teacher education have appropriate access to, and benefit from, professional development opportunities.

Through any reaccreditation arrangements, the GTCS should ensure that those involved in the front line of teacher education in universities and schools are fully ready for that task. University-based teacher educators should have a responsibility to undertake an agreed programme of CPD each year.

The development of university teacher educators is not only about connectedness to the work of schools. It is equally important that they are a full part of an actively inquiring teacher education community through maintaining research-informed teaching in pre- and in-service courses for teachers, and contributing to the building of capacity in the broad field of education research. Insufficient attention has been given to the professional learning of teacher educators and the contribution they can make to curriculum change, whether they are school-based or university-based. There is some disparity between the promotion of research-informed teaching on the one hand, and concerns about the capacity of teacher educators to engage in and with high quality applied and practice-based research. Murray (2008)⁴⁶ maintains that teacher educators remain an '*under-researched and poorly understood occupational group*'. There is considerable potential for university-based teacher educators to contribute more fully across the full continuum of teacher education in Scotland.

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⁴⁶ Teacher educators' induction into Higher Education: work-based learning in the micro-communities of teacher education. *European Journal of Teacher Education* 31(2). Murray, 2008

Flexible staffing

Universities and local authorities have already been working in various ways to develop new models of staffing which seek to share expertise and responsibilities for student support and assessment. More widespread use of joint staffing models shared between universities, local authorities and schools could greatly enhance partnership, improve consistency of experience and substantially enrich CPD. This can include enquiry-based improvement and greater impact of university research on classroom practice. We need to bring teachers and university staff closer together to focus on improving children's learning. The prototype models being developed by Glasgow and Aberdeen universities form a base for future significant development. These experiments need to be evaluated to determine different ways of enabling collaboration between schools, local authorities and universities across a range of teacher education.

Flexible staffing models for initial teacher education, induction and CPD should be developed by local authorities and the universities to allow movement of staff and dual appointments. As well as potentially improving coherence, this will help to achieve the aspiration of teaching being a research-informed profession.

Improving learning for leadership from the start of career-long teacher education

We have emphasised through this report the importance of identifying, nurturing and explicitly developing leadership skills, knowledge and attributes from the outset of a teacher's career. The two- or five-year early phase of teacher education provides a useful vehicle for addressing this important area of every teacher's professional development directly.

Students on initial teacher education programmes and probationer teachers varied significantly in their awareness of the role of leadership in education. Many early career teachers who engaged with the Review had very little awareness of leadership expectations and pathways, although local authority induction programmes often provide opportunities to learn about school and system-level leadership. There are significant opportunities within the early phase of teacher education to extend understanding of the facets of leadership in education.

There are also, perhaps more importantly, opportunities to experience leadership roles and to develop professionally from them. As part of the induction programme, new teachers in some local authorities join school improvement working groups and contribute actively to the life of the school as a community, for example by working with community learning partners or leading an out-of-school activity, or by taking the lead on a team which is undertaking an aspect of curriculum development.

In planning the range of activities which an individual will undertake during the proposed early stage of a teacher's education, it will be important to include opportunities for students and probationer teachers to undertake distributive leadership roles and reflect on the learning and development which result from them. The proposed on-line profile of teacher education would provide a way of recognising the development of leadership attributes, skills and capacities which takes place through these activities, right from the outset of a teacher's career.

The reconceptualisation of early teacher education discussed in this chapter may enable the breakthrough in achieving the full benefits of true partnership, as stated by Menter *et al* (2005)⁴⁷: *'A successful approach to ITE partnerships is only possible if the anomalies prevailing at the various stages of early professional development (ITE, Induction and Full-Registration, early CPD) are simultaneously addressed. It is crucial that all stakeholders are involved and accept that each has a role'*.

In the next chapter we will continue to develop the notion of a continuum of teacher education throughout the career of each individual teacher. The importance of maintaining the momentum in each teacher's education was summed up in one local authority's response to our call for evidence:

'Teacher education feels disjointed with quite specific stages – the journey from ITE to experienced professional loses energy and focus after the probation stage'.

⁴⁷ Models of Partnership in Initial Teacher Education. Occasional Publication No. 3 – Sept 2005 GTCS Research. Brisard, Menter and Smith

Chapter 5: Career-long learning for teachers and for leadership

This chapter examines the approach taken in Scotland to professional learning beyond the initial phase of teacher education. It traces the main developments in CPD over the last decade, identifies some key strengths and outlines ways in which it can build from the early phase of teacher education and its relevance and impact can be improved. The previous national review of initial teacher education (2005) did not include CPD.

Background

The Teachers' Agreement of 2001 included a requirement for teachers to continue to develop and improve their skills throughout their careers. The agreement has a number of clauses relating to CPD.

- Teachers shall have an ongoing commitment to maintain their professional expertise through an agreed programme of continuing professional development.
- An additional contractual 35 hours of CPD per annum will be introduced as a maximum for all teachers, which shall consist of an appropriate balance of personal professional development, attendance at nationally accredited courses, small scale school based activities or other CPD activity. This balance will be based on an assessment of individual need taking account of school, local and national priorities and shall be carried out at an appropriate time and place.
- Every teacher will have an annual CPD plan agreed with her/his immediate manager and every teacher will be required to maintain an individual CPD record.
- It is the employer's responsibility to ensure a wide range of CPD development opportunities and the teacher's responsibility to undertake a programme of agreed CPD which should be capable of being discharged within contractual working time.
- Local authorities will, as part of the continuing development of CPD, undertake to review their provision within the arrangements for the development of a national register of approved CPD providers: not all CPD will necessarily be accredited, but there should be maximum opportunity for accreditation.

Many of the duties of all teachers within 'Annex B' of the National Agreement are related to CPD. Teachers are required to:

- undertake appropriate and agreed continuing professional development;
- participate in issues related to school planning, raising achievement and individual review; and
- contribute towards good order and the wider needs of the school.

In addition, headteachers are required to promote the continuing professional development of all staff and to ensure that all staff have an annual review of their development needs.

As well as the additional 35 hours per annum, CPD and collegiate development activities are part of the 35-hour working week agreement. The time allocation to different duties are agreed annually at school level and include: additional time for preparation and correction, parents' meetings, staff meetings, preparation of reports and records, forward planning, formal assessment, professional review and development, curriculum development, additional supervised pupil activity, and continuous professional development. An extra 3,500 classroom assistant posts were introduced to reduce the administrative workload of teachers and enable them to focus on providing the highest quality of learning and teaching.

In addition to improved terms and conditions, teachers received significant salary increases as part of a drive to give them 'enhanced professional status'. The overall aim of the agreement was to create the professional conditions of service appropriate to a world-class education service.

The role of chartered teacher was first introduced as part of the 2001 agreement. Only one of two routes recommended by Professor McCrone was adopted. Teachers at the top of the main grade salary scale, who had maintained a record of CPD, could apply for prior learning to be accredited or undertake advanced professional studies at Masters Degree level to reach the Standard for Chartered Teacher. The award recognises professional skills and was intended to give outstanding professionals the opportunity to receive additional salary and status without following the promoted route. In the first few years of the programme, there was much confusion about the role and some headteachers were not aware that staff in their school were undertaking the qualification. In an attempt to clarify the role, the GTCS introduced a revised Standard for Chartered Teacher in 2008, which includes the need for chartered teachers to lead learning beyond their own classroom.

The Scottish Qualification for Headship (SQH) was introduced in 2000. The overall level of uptake has been significantly lower than the number of new headteachers required. A flexible work-based route was introduced in 2007 to encourage greater uptake and address issues of succession planning at headteacher level.

A national framework for CPD⁴⁸ was launched in 2003. It defines CPD as:

'The range of experiences that contribute to teacher development is very wide and should be recognised as anything that has been undertaken to progress, assist or enhance a teacher's professionalism. When planning CPD activities, teachers and their managers should consider the particular needs of the individual, whilst taking account of school, local and national priorities'.

The CPD framework is based around three professional standards:

- Standard for Full Registration
- Standard for Chartered Teacher
- Standard for Headship

⁴⁸ Continuing Professional Development: Teaching in Scotland SEED January 2003

In 2004, the Scottish Executive published guidance for professional review and development (PRD)⁴⁹. Within this document, a list of activities which would constitute CPD was published. This wide-ranging list includes professional reading and research, lesson observation and analysis, subject-based activities and attendance at in-service events.

An Audit Scotland report⁵⁰ on the Teachers' Agreement in 2006 highlighted areas requiring further review and refinement, including the need to address an initial failure to create benchmarks against which progress might be measured. The aspects identified included: impact on educational attainment; improvements in classroom practice; the quality of educational leadership; workload and skill-mix; workforce morale; and recruitment and retention within the profession.

HMIE's evaluation of the implementation of the Teachers' Agreement was published in 2007⁵¹. HMIE concluded that some aspects of the agreement had been implemented successfully. New career structures had broadened the opportunities for teachers in all sectors and at all levels to show collegiality, demonstrate leadership and take responsibility for improving the quality of learning. The report noted better approaches to CPD overall. However, the changes had yet to impact significantly on improving the learning of children and young people. The potential benefits of the new chartered teacher posts were not being fully realised. In 2009, a revised Standard for Chartered Teacher⁵² was introduced in an attempt to clarify their role and contribution to leading learning beyond their own classrooms. Levels of awareness of the revised Standard and the extent of its use vary across Scotland.

More recently, in *Improving Scottish Education* (HMIE, 2009), the need for all teachers to take responsibility and show full commitment to personal and professional development was stressed. Later that year, in *Learning together: improving teaching, improving learning* (HMIE, 2009), the need to monitor the impact of CPD on improvements to young people's progress and achievement was noted as a main area for improvement. Evidence suggests that CPD is often evaluated in terms of the quality of provision, rather than the impact on improving outcomes for learners.

In November 2010, the Scottish Government and the Convention of Scottish Local Authorities (COSLA) announced a review of the Teachers' Agreement, to commence in January 2011. The key challenge for this review will be to develop and improve teacher quality, whilst ensuring better value for money and greater impact from previous improvements to teacher terms and conditions of employment. Large-scale investment in teachers and teaching has not always been matched with clear expectations about outcomes and improvement.

⁴⁹ Guidelines on the procedure of professional review and development for teachers in Scotland SEED January 2004

⁵⁰ Interim Report A Teaching Profession for the 21st Century, Audit Scotland (2006)

⁵¹ Teaching Scotland's Children, HMIE (2007)

⁵² The revised Standard for Chartered Teacher, Scottish Government and GTC Scotland 2009

Existing strengths of continuing professional development

Much of the recent research suggests that CPD is most effective when it is 'site-based', fits with an existing school culture and ethos, addresses the needs of different groups of teachers, is peer-led, collaborative and sustained. Such forms of CPD offer a richer learning experience than usually offered in short courses (Kelly, 2006)⁵³. When considering the best international practice in professional learning communities, the McKinsey Corporation (2009)⁵⁴ identified that teachers work together in these communities to:

- research, try and share best practice;
- analyse and constantly aim for high, internationally benchmarked standards
- analyse student data and plan tailored instruction;
- map and articulate curriculum; and
- observe and coach each other.

The literature review, responses to our call for evidence and teacher questionnaire, as well as discussions with teachers, officials and academics across Scotland have indicated a number of strengths within our current approach to continuing professional development.

The extensive range of CPD activities undertaken in Scotland

The broad range of forms of CPD outlined by the Scottish Executive in 2004⁵⁵ are increasingly evident across Scotland. This range of forms of CPD was highlighted as a positive feature by many teachers who engaged with the Review. Chart 5.1 illustrates the proportions of teachers in our survey who had participated in different activities.

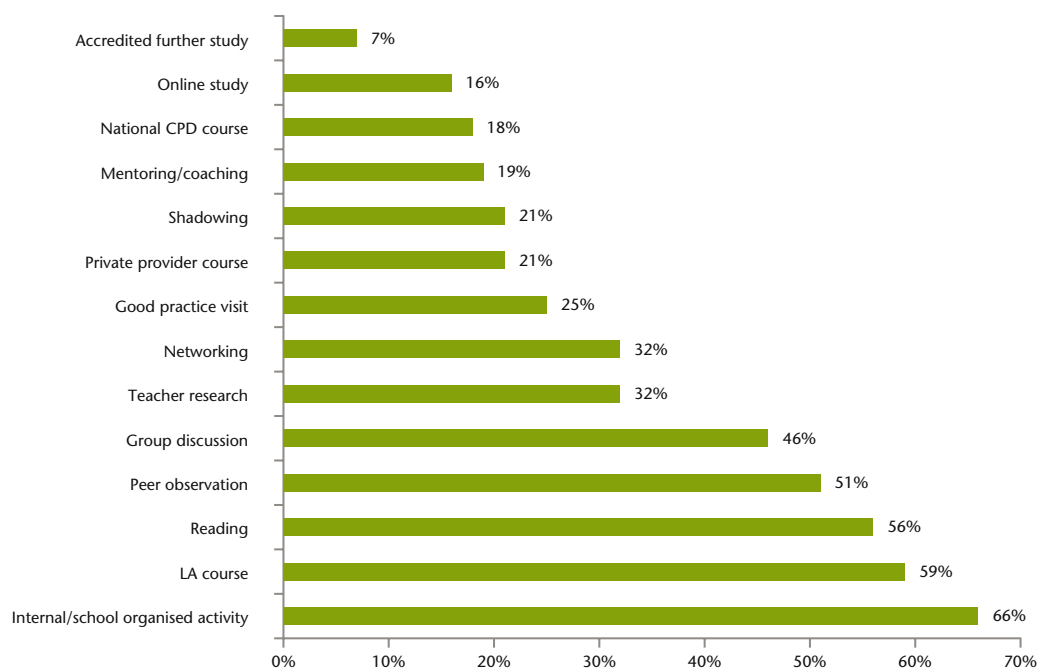
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⁵³ What is teacher learning? P. Kelly, Oxford Review of Education 32(4), 505-519, 2006

⁵⁴ Shaping the future: how good education systems can become great in the decade ahead, McKinsey & Company, 2009

⁵⁵ Guidelines on the procedure of professional review and development for teachers in Scotland SEED January 2004

CHART 5.1: RANGE OF CPD ACCESSED IN LAST ACADEMIC SESSION

A wide range of national and local organisations provide CPD for teachers. The LTS website contains a wealth of material, much of which is linked to Curriculum for Excellence. It also provides numerous central and regional events as well as organising the annual Scottish Learning Festival. It has developed Glow, a national school education intranet, to promote networking and exchanges of resources and information. HMIE, in addition to publishing reports on specific aspects of education, works with LTS in helping to identify areas of need and sources of good practice. The two organisations have also established an impressive digital resource, Journey to Excellence, which provides direct advice about school improvement and research as well as housing a bank of filmed clips of good practice in action. HMIE also uses its inspection of schools to build capacity as well as evaluating the quality of provision. A notable aspect of capacity building by HMIE has been the training and use of headteachers and teachers as associate assessors who join inspection teams for two or three inspections each year. These associate assessors often report that experience as *'the best CPD I have ever had'*.

Teacher and headteacher associations, in addition to providing advice and networking for members, also provide highly-valued and well-attended courses. The Educational Institute for Scotland (EIS), for example, has a network of learning representatives based in schools and has worked with universities in the development of courses. Other providers such as Tapestry also provide well-attended courses, events and more customised support for professional development and innovation, notably teacher learning communities.

Most CPD is provided by local authorities and includes central training as well as supporting school or community-based professional development. They are increasingly devolving more CPD to schools and encouraging them to work in networks, clusters or learning communities. The provision of centrally-delivered courses is decreasing.

The pattern of responses to our questionnaire (Chart 5.1), confirms this picture of considerable breadth of CPD provision and activity in Scotland. However, the figures for mentoring, shadowing, good practice visits and research leave much scope for improvement. Peer observation has grown significantly in recent years but is still under developed as an important element in professional learning.

A greater emphasis on professional networks

The extent of collegiate working has grown in recent years (HMIE, 2009)⁵⁶, increasingly centring round improving outcomes for learners. In particular, as schools and centres implement Curriculum for Excellence, they often cooperate with other schools and partners, extending and deepening the quality of outcomes. There are increasing examples of professional learning communities which support and challenge one another around agreed areas for improvement. Effective collegiate working often includes support staff and other partners. There is also some evidence that effective collegiate working has led to increased opportunities for teachers to be involved in decision-making and to lead aspects of school improvement.

The contractual base for CPD

The value and importance of CPD in relation to teacher quality has been recognised formally in Scotland through contracts of employment. Many countries are envious of this paid, contractual requirement and entitlement. In its response to our call for evidence, one professional association said: *'...it is good that teachers are contractually obliged to participate in a specified minimum number of hours of CPD activity each year'*.

Seventy-five per cent of teachers responding to our questionnaire said they were unable to undertake all their CPD and collegiate activities within the allocated time. However, it was never the intention of the McCrone Review that teachers should confine time spent on professional duties in a very precise way. There is clearly a tension between the enhanced professional role of teachers and the somewhat industrial approach of allocating a fixed number of hours for professional duties.

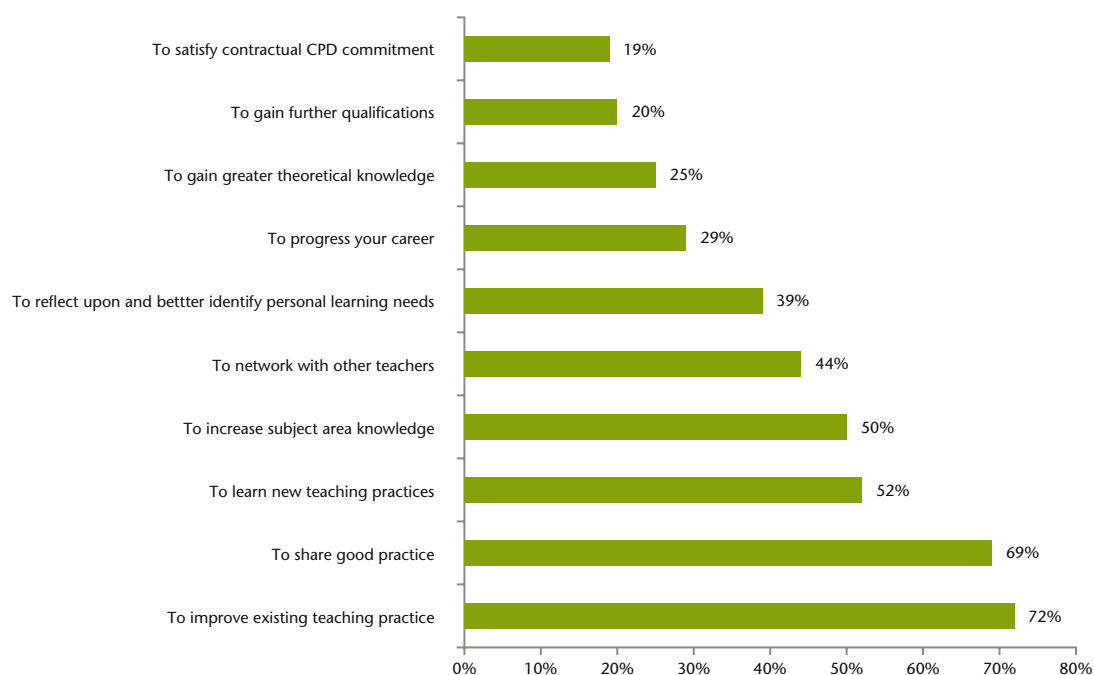
The Teachers' Agreement launched *'a new framework which promotes professionalism and which places teachers at the heart of teaching'*. A 'personalised' approach to professional development was envisaged through a negotiated CPD plan for every teacher addressing personal, institutional, local and national priorities and including postgraduate opportunities provided by universities.

There is evidence of increased commitment to CPD and more teachers taking on lead roles, for example in working groups to implement school improvement plans. Seventy-two per cent of teachers who responded to our questionnaire saw improving teaching practices as a priority for CPD, with 69% prioritising the sharing of good practice. The priority for CPD and collegiate time for 19% of teachers who responded was to satisfy their contractual requirement.

⁵⁶ Learning together: improving teaching, improving learning HMIE 2009

The chart below summarises priorities for CPD for those teachers who responded to our questionnaire.

CHART 5.2: CURRENT PRIORITIES FOR CPD



Maximising relevance and impact of career-long learning

Although existing strengths of CPD in Scotland are significant, evidence shows that the link to learning in the early phase of teacher education remains tenuous at best, it often does not address either individual or wider priorities well enough, and too much of current provision has failed to impact significantly on children's learning. For an individual teacher, who you are, which school and which local authority you are in, and the quality of leadership and management in both can greatly affect the extent to which you develop and improve. For young people, this means that the extent of their teachers' skills, understanding of educational theory and practice, and the relevance and freshness of their subject content knowledge, can vary considerably. Scotland is not alone in needing to improve the quality, relevance and impact of CPD. Across the world, there is concern about the impact of CPD and teacher quality on outcomes for young people.

Core elements of CPD for all teachers

As with the early stage of a teacher's education (Chapter 4), it is important to be explicit about the core knowledge, skills and competences that all teachers will continually refresh and improve as they move through their career and to be active in addressing them. Time and opportunities need to be built in for these core elements of teacher education as part of a culture and habit of professional learning. These should be set as part of planned progression in learning for each teacher which begins in initial teacher education and continues throughout

induction and continuing professional development. As with core aspects for initial teacher education, these can be determined through a periodic national assessment of current needs. Currently they could include the following.

- Child protection and safeguarding procedures
- Responsibilities of all practitioners: literacy, numeracy and health and wellbeing
- Development of children and young people, including important aspects such as the development of reading and writing skills
- Supporting learners, including the latest legislative and research-based advice on meeting the needs of all learners including those with additional support needs such as dyslexia or autism
- Government policies and frameworks affecting education, and the action needed to implement these successfully in the classroom
- Mentoring and coaching
- Inquiry-based improvement/reflective practice
- Subject-content knowledge
- Pedagogy
- Assessment theory and practice

Clarifying expectations and improving coherence

The Review heard a great deal of evidence about lack of focus in CPD and coherence and progression within it.

The GTCS Professional Standards provide the basis for coherent teacher education in Scotland. Clearer links between, and exemplification of, the Standards would help to signpost coherence and progression more explicitly. Many other countries are engaging in work of this nature. For example, Hong Kong, New Zealand and Australia have defined characteristics and competences of good teaching. These are useful for professional development and performance management, and provide a shared language for teachers to reflect and evaluate practice. The Standards themselves need to be refreshed and updated on a planned cycle.

The Professional Standards need to be revised to create a coherent overarching framework and enhanced with practical illustrations of the Standards. This overall framework should reflect a reconceptualised model of teacher professionalism.

As yet we do not have a culture where priority is given to attaining, maintaining and exceeding professional standards. As a result, many experienced teachers do not use the Standard for Full Registration (SFR) to evaluate their performance and identify development needs. Awareness and use of the SFR varies considerably across the country, and there is a perception amongst some experienced teachers that it is not relevant for them and mainly applicable to probationers and early career teachers.

A new 'Standard for Active Registration' should be developed to clarify expectations of how fully registered teachers are expected to continue to develop their skills and competences. This standard should be challenging and aspirational, fully embracing enhanced professionalism for teachers in Scotland.

This standard should include the range of skills and competences which reflect the growing expertise and maturity of an experienced teacher. It should help teachers to improve as well as prove their skills and competences. It could include, for example, pedagogy, up-to-date subject knowledge and the use of inquiry-based improvement. It could also help to promote distributive leadership by signalling the wider contributions which experienced teachers make to the school as a whole. It should enable all teachers to develop the kind of professional role envisaged in the McCrone Report.

Improving the culture and focus of CPD

The Review noted that effective CPD often combines specialist input with an ongoing programme of school-based support. Early insights from the additional support for Curriculum for Excellence led by HMIE and partners suggest that tailoring CPD closely to the needs of individual schools and teachers and using coaching and practical activities using real examples rather than 'input' is effective in increasing the confidence of teachers to implement the new curriculum. This combination of tailored CPD which meets individual needs in-house, is peer-led and sustained through professional dialogue, with some specialist input to provide an external perspective where appropriate, seems an effective and efficient way to continue to support teachers, particularly when they are engaged in the implementation of major changes in education.

Alignment between individual professional learning needs and school development is not always strong. The OECD report 'Teachers Matter' studied approaches to teacher quality in 25 countries and concluded that 'there are major concerns about the limited connections between teacher education, teachers' professional development, and school needs'. We need to ensure an appropriate balance and synthesis between individual teacher CPD and school and system level improvement. The majority of teachers in a study by Hustler *et al* (2003)⁵⁷ reported that school development needs took precedence over their individual learning needs. Larger generic staff development events need to be blended with individual, tailored support to maximise the impact of CPD.

Engagement in collaborative activities such as moderation and involvement in, for example, task teams or co-ordinator roles can play a very important part in extending professional skills, knowledge and attributes. Within all form of CPD, activities which bring together colleagues from different sectors and/or services to address matters of shared interest or concern have the double benefit of strengthening partnerships and providing richer professional development because of the wider range of perspectives and experiences they bring.

⁵⁷ Teachers' perceptions of continuing professional development, Hustler *et al* 2003, DfES Research Report No. 429, Nottingham, DfES

The balance of CPD activities should continue to shift from set-piece events to more local, team-based approaches which centre around self evaluation and professional collaboration, and achieve an appropriate blend of tailored individual development and school improvement.

Improving impact

Significant moves in recent years to evaluate CPD courses and events have focused largely on evaluating the quality of the process or event rather than on its intended or actual impact on children's learning. Only 29% of teachers who responded to our survey said they frequently try to monitor the impact of CPD, and only 22% said their schools did this frequently. Forty-nine per cent of teachers said they measured impact infrequently or never; the figure for their schools was 52%.

There are a few examples where schools have begun to monitor the impact of CPD and track this over time. For example, in one local authority newly qualified teachers use a tracking diary for CPD which links in with their initial teacher education targets. Monitoring, evaluating and researching CPD and all other phases of teacher education are challenging, given the number of variables which effect young people's progress in learning. Better research is needed but the key lies in teachers themselves looking for evidence of impact in their own work.

Teachers and schools should plan and evaluate CPD more directly on its intended impact on young people's progress and achievements.

A research-informed approach to continuous learning

The Sutherland Report (1997) set the aspiration of teaching becoming a research-led profession, partly through locating initial teacher education within Scotland's universities. Sutherland's vision has, at best, been only partially achieved. Cochran-Smith (2009)⁵⁸ argues that if we are to achieve the aspiration of teachers being leaders of educational improvement, they need to develop expertise in using research, inquiry and reflection as part of their daily skill set. Outstanding teachers often use research and data to identify areas for improvement and take direct action to address any underperformance.

If we are to learn from some high-performing systems around the world and foster a research-informed profession, more has to be done to facilitate knowledge exchange between schools and universities. There is significant potential for greater collaboration in supporting inquiry-based improvement and a more fluid exchange of learning between the sectors. University-based teacher educators need to have the skills, experience and quality of research which supports and challenges schools, and is seen as relevant and purposeful for improving practice. The kind of partnerships which we have advocated for initial teacher education should be developed to become hubs of learning for teachers at all stages in their careers.

⁵⁸ Inquiry as stance: practitioner research in the next generation, Cochran-Smith and Lytle, Teachers' College Press, USA, 2009

Chapter 4 outlined the potential benefits of joint appointments between local authorities and universities. As well as improving collaboration and partnership for new and early career teachers, such appointments could lead to research which is more focused on directly improving services at local level, as well as contributing to contemporary thinking on education at national and international level. The Sutherland Report envisaged university staff from different faculties as having a valuable role to play in refreshing and broadening ongoing teacher education.

Professional review and development (PRD)

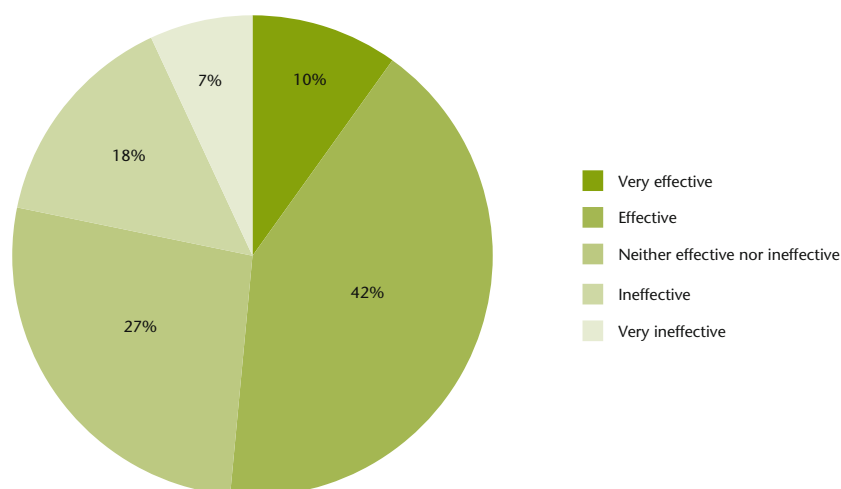
The framework for performance appraisal or annual reviews for teachers, most commonly known as ‘professional review and development’, CPD (SEED, 2003) makes it clear that:

‘All teachers should maintain a CPD Profile for the current year and, where appropriate, two previous years. The profile will comprise a CPD Plan, indicating the development objectives and the development activities agreed during the annual professional review and a CPD record, briefly detailing the professional development activities undertaken’.

Professional dialogue within PRD is most effective when it is both supportive and challenging and signals practical steps towards improved practice. It can help to stimulate and sustain the development of individual teachers as well as helping them to manage the demands of the dynamic contexts in which they work.

However, the quality and impact of PRD varies significantly across Scotland. Nearly half of teachers responding to our online survey did not agree that PRD was effective in identifying priorities for CPD. The results are shown in the chart below.

CHART 5.3: EFFECTIVENESS OF ARRANGEMENTS FOR PROFESSIONAL REVIEW IN IDENTIFYING PRIORITIES FOR CPD



Credible and effective PRD should guide the selection and focus of CPD. However, the conditions for making PRD effective are not universally in place. Teachers do not always have an

appropriate annual plan for CPD. Across local authorities and schools there is differing practice in the extent to which teachers and schools are required to account for their CPD, despite contractual requirements.

In Chapter 4 we outlined how teachers might progress from their induction into the next stage of their professional development with an online profile of their achievements and plans for development. Such an online profile could be extended for each teacher in Scotland to record the outcome of PRD and the focus for CPD, with expectations of action and the impact on teaching and learning. This would be in line with emerging practice in other professions in Scotland. Such a profile could be linked to the proposed Standard for Active Registration, and support professional reaccreditation.

As noted earlier, evidence from discussions with early career teachers suggests that many do not continue to use the professional standards beyond their probationary period and the expectation of using an online profile related to the relevant Standard would help to address this.

Overall, there is a lack of conviction about PRD processes across Scotland. A few have recognised the need to review and improve the processes for PRD and have begun to take this forward, working with the National CPD Team. Advice issued by the Scottish Executive, 'Guidance on the procedure for professional review and development for teachers in Scotland' (2004), states that PRD should be based on self-evaluation, with teachers encouraged to use professional standards as the main point of reference. A learning cycle was introduced and teachers were asked to consider the impact on learners and their own development as professionals. The requirements for a CPD plan and a CPD record were further exemplified in this important document, but its influence has as yet been limited.

At the outset of any CPD activity, the intended impact on young people, and the aspects of the relevant professional standard the teacher will improve as a result of the activity, should be clear. Subsequent PRD discussions should review progress with previous intentions. This process should be captured in a continuing online profile of professional development.

The role of the individual teacher CPD in achieving national priorities

Literature on the management of change often describes an 'implementation gap' between policy and classroom practice. As we have said in Chapter 4, teachers need to understand the issues which face Scottish education and to be able to see how they are contributing to national endeavours.

New national initiatives should include a teacher education strategy, based on what we know about managing effective change in education.

All teachers as teacher educators

Earlier in the report we have emphasised the importance of the role of teacher mentors for student teachers and probationers and the need for careful selection, support and professional development for mentors. Whether or not a teacher has direct responsibility for mentoring of student teachers and probationers at any particular time, every teacher will be engaged in professional dialogue with peers. Mentoring and coaching skills enable much more effective dialogue and learning to take place within groups of teachers and with stakeholders and partners.

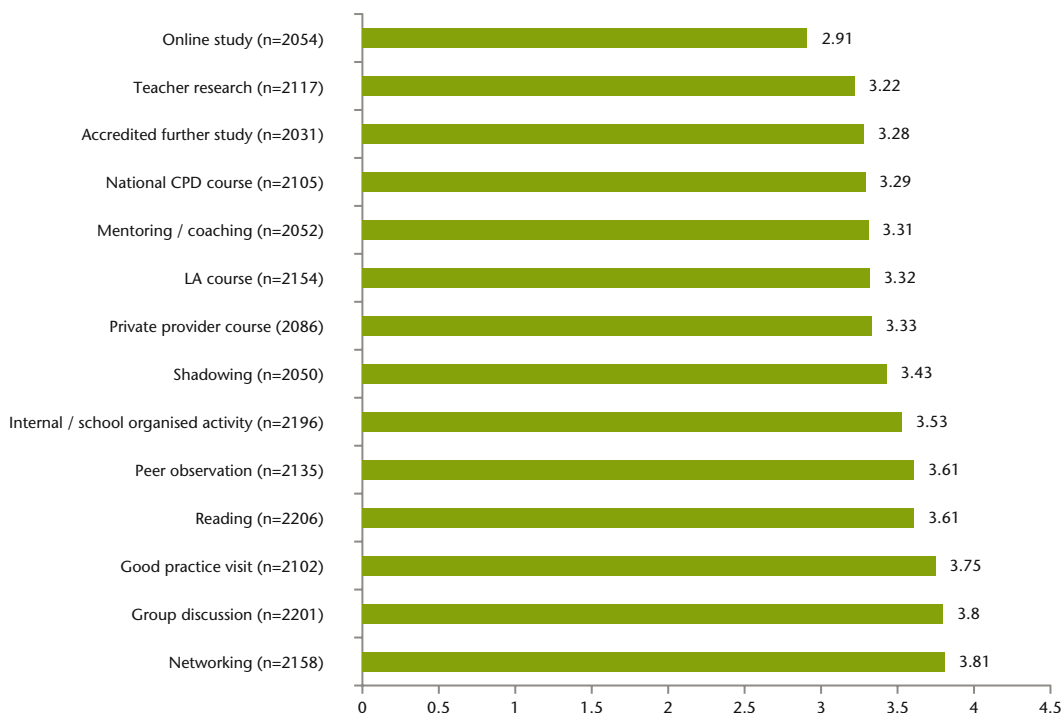
All teachers should see themselves as teacher educators and be trained in mentoring.

This skill set should be developed and refreshed through initial teacher education, induction and CPD.

Improving online provision

Evidence from our teacher questionnaire indicates that the least effective forms of CPD, albeit by a relatively small margin, are perceived to be online provision and teacher research. The chart below summarises the results of the levels of perceived effectiveness of different forms of CPD.

CHART 5.4 EFFECTIVENESS OF TYPES OF CPD ACTIVITY IN ENHANCING PROFESSIONAL PRACTICE (WHERE A SCORE OF '1' DENOTES VERY INEFFECTIVE AND A SCORE OF '5' DENOTES VERY EFFECTIVE)



Efficient use of time, better access and the opportunity to maximise quality mean that online learning and engagement must be an increasingly important part of a blended approach to CPD for all teachers. As well as networks where teachers can exchange ideas and support each other, online CPD can carry materials which can be used for self-supported study. However, teachers report that frustration and technical issues are significant inhibitors of more online engagement. The frustration that teachers often report when accessing online CPD includes difficulty in finding what is needed, partly due to a multitude of local and national providers. Scotland's national intranet Glow is improving and we need to ensure the potential of this resource is fully realised, not least to enable teachers to meet through online communication.

Online CPD should be part of the blended, tailored approach to CPD for all teachers. Building on the positive start made by the National CPD Team to 'CPD find' a national 'one stop shop' should be developed for teachers to access online CPD opportunities.

Generic, subject-specific and sector-specific CPD

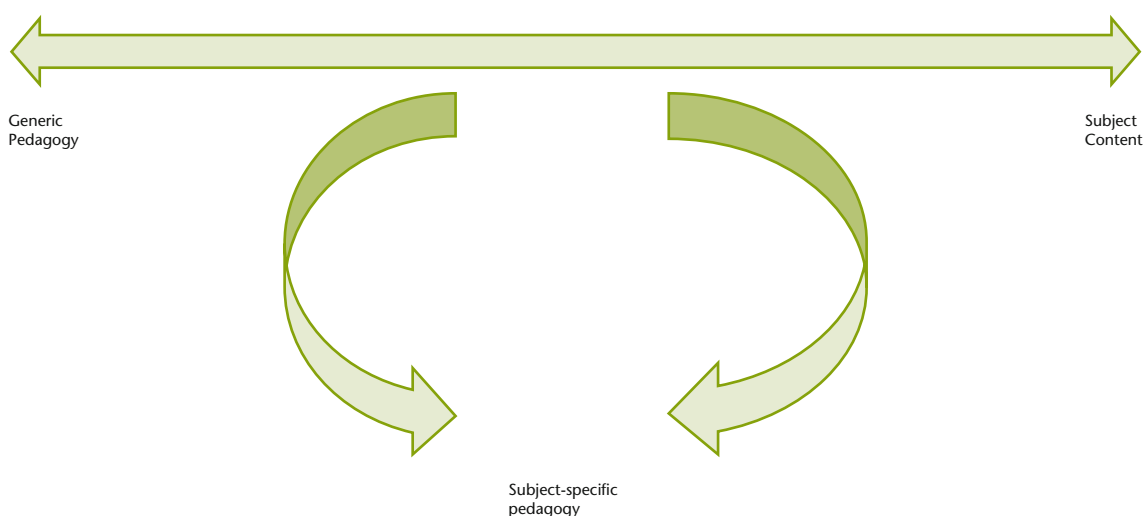
Much of the CPD on offer is generic in nature. However, 52% of secondary teachers who responded to our survey want more opportunities to develop and refresh subject knowledge and practice and 73% of teachers working in pre-school want increased sector-specific development opportunities. Use of online learning could help to increase the opportunities for teachers to deepen and refresh their subject or other specialist knowledge. Some teachers across Scotland are already engaging in this way through Glow groups and communities. The Teacher Development Agency (TDA) in England has established subject resource networks. Although these are targeted at providers of initial teacher education, the concept could be extended for all teachers through CPD.

We need to use data, and the outcomes of other national and international studies, to develop tailored forms of CPD which address specific subject-content issues. For example, we know from the Scottish Survey of Achievement (2008)⁵⁹ that many primary teachers feel least confident teaching ratio and algebraic processes within mathematics. The Scottish Schools Equipment Research Centre (SSERC) provides targeted CPD to improve subject knowledge of primary and secondary science teachers. Their experimental, practical CPD sessions enable teachers to refresh and deepen their own scientific knowledge and understanding, as well as develop materials, resources, and relevant teaching approaches.

Teachers should have access to relevant high quality CPD for their subject and other specialist responsibilities.

This is illustrated in the diagram opposite.

⁵⁹ Scottish Survey of Achievement, Mathematics and core skills, Scottish Government, 2009

DIAGRAM 5.1 CONNECTING THE RANGE OF CPD

As the diagram above indicates, CPD about pedagogy and subject-specific CPD are often seen as two very separate forms of provision. In order to continue to explore theory through practice throughout a teacher's career, it is important to relate generic aspects of pedagogy to specific subject content. This is often done well through peer support and challenge, with teachers mentoring and coaching each other.

National strategies need to be developed to prioritise and address areas within the curriculum where evidence, such as from national and international benchmarking or inspection, shows that there is a particular need to improve learning, teaching and attainment.

Examples might be the teaching of modern languages in primary schools, science, aspects of mathematics and Gaelic.

Accrediting a greater range of CPD

Internationally, there is a move towards teaching becoming a 'Masters-level profession'. The European Union's 'Bologna process' has been a powerful stimulus in this direction. Some research studies indicate that a teacher's academic calibre impacts on pupil achievement (Goe, 2007)⁶⁰. Based on an analysis of outcomes from the Programme for International Student Assessment (PISA) across 25 school systems, the McKinsey Report (2007) noted a positive association between high performing systems and the level of teachers' qualifications.

The evidence on teacher effects is complex and not sufficiently conclusive to suggest an immediate policy of requiring all teachers to be educated to Masters level. Nonetheless, 39% of teachers who responded to our survey said they would undertake more CPD if it was accredited and 'A Teaching Profession for the 21st Century' called for maximum opportunities for teacher

⁶⁰ The link between teacher quality and student outcomes: a research synthesis, Goe, L 2007, Washington, DC: National Comprehensive Centre on Teacher Quality

CPD to be accredited. Such a policy would also send a powerful signal about the standard which CPD should meet; too much current activity is of a relatively low level. As yet, insufficient progress has been made towards achieving this goal and there is a need to provide a clearer pathway for advanced study. The Review is therefore repeating and strengthening the McCrone call for a greater range of CPD to be formally accredited.

A greater range of CPD should be formally accredited. Masters level credits should be built into initial teacher education qualifications, induction year activities and CPD beyond the induction year, with each newly-qualified teacher having a 'Masters account' opened for them.

CPD for supply teachers

Supply teachers and teachers not currently working in education face particular difficulties in continuing to develop their knowledge, skills and competences in line with appropriate professional standards. In examples of good practice, local authorities ensure access for supply teachers to CPD opportunities that they provide. The National CPD Team has made a positive start to engaging with supply teachers through the online community *CPD StepIn*. This provision should be extended and supply teachers should be able to access the breadth of materials and support available through Glow. Local authorities and national bodies need to do more to raise awareness among supply teachers of the support available to them. Regular supply teachers should be subject to professional review and development and local authorities need to coordinate support and challenge for their regular supply teachers more effectively, to ensure quality learning experiences for young people.

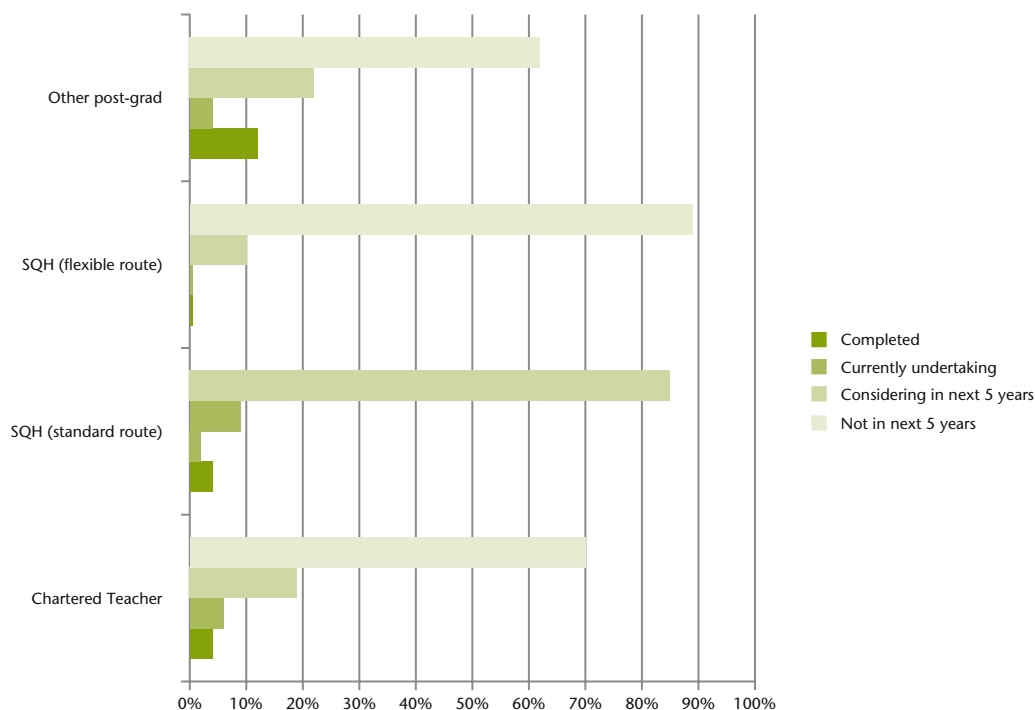
Accomplished teachers

There has been growing international interest in ways of recognising and rewarding what might be described as accomplished teachers. Around the world, this takes different forms including: nomination from senior managers for recognition; undertaking further accredited study; peer nomination based on observation of teaching skills; and examinations to test subject-content and pedagogic knowledge. In Scotland, the role of chartered teacher was originally conceived in the McCrone Report and was subsequently introduced in the Teachers' Agreement. Chartered teachers are explicitly not part of the management structure of a school.

There are very mixed views across the profession about the value of the role and the nature of the award, including the additional salary payment which it provides. Local authorities report difficulties in the management of budget allocations due to the open-ended nature of the process; the number of teachers who may seek the award in any given year is unknown. Currently, only around 2% of the profession, or 1,107 teachers in Scotland have become chartered teachers. However, a further 2,912 have partially completed modules on chartered teacher courses, gaining additional salary payments. Seventy per cent of teachers who responded to our questionnaire are not considering entering the programme within the next five years.

The chart below summarises responses to our survey covering those teachers who are currently undertaking, considering undertaking or not considering undertaking chartered teacher and other advanced professional study in the next five years.

CHART 5.5: WHETHER RESPONDENTS HAVE COMPLETED, ARE CURRENTLY UNDERTAKING, OR ARE CONSIDERING UNDERTAKING CPD PROGRAMMES LEADING TO VARIOUS AWARDS



This evidence, although not representative, suggests that the uptake of the chartered teacher role is unlikely to increase significantly in the next five years.

Overall, there is not enough evidence that the chartered teacher programme has as yet achieved what it set out to do. The programme does not always attract and reward our highest-performing class teachers and the nature of the programme does not ensure that participants are better teachers as a result of gaining the award.

The Scottish Negotiating Committee for Teachers (SNCT) *Code of Practice for the role of Chartered Teacher* attempts to clarify expectations, including the use of the Standard for Chartered Teachers within PRD. It also helpfully sets out various responsibilities for chartered teachers and those who manage and lead them at school level. However, there is likely to be an emerging issue as more teachers reach an equivalent Masters level outside the chartered teacher programme. The result could be increasingly divisive and unfair. If the programme continues, therefore, there is a need to rethink the nature of this role. More focus on the impact of 'chartered teaching' rather than the status of the 'chartered teacher', might help us to consider more precisely the purpose and contributions of the role.

A recent international symposium on accomplished teaching and resultant national seminar (September 2010) hosted by the GTCS in partnership with the Scottish Government and University of Glasgow debated the future of chartered teachers in Scotland. The issues of recognition, impact and evidence were discussed. The group recognised that the SNCT *Code of Practice* needs to be more fully embedded. Ultimately, our aspiration should be for all teachers to reach the highest possible professional standards. The proposed new 'Standard for Active Registration' would clarify expectations for all experienced teachers in Scotland, learning from the chartered teacher programme.

In November 2010, The Scottish Government and COSLA decided to freeze entry to the chartered teacher programme. In the current financial climate, continued investment in chartered teachers must be linked to an expectation that they will, personally and working with colleagues, have a significant and distinct beneficial impact on young people's learning. In any reconsideration of the role, the analysis from this Review would suggest that:

The award of Chartered Teacher status should be based on a range of evidence, including improved teaching skills and significant impact on improving the learning of the young people and colleagues with whom they work. The award should be reviewed as part of PRD and professional reaccreditation. Local authorities should have greater control over the number of teachers who apply for the award.

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Leadership

The importance of leadership for successful learning and the need to develop leadership qualities and skills from the outset of a career have been strong themes throughout this report. Scottish education needs to develop leadership attributes in all staff as well as identifying and supporting systematically its future headteachers. The review has argued that the kind of extended professionalism advocated for all teachers will provide a much stronger pool of potential leaders. This section looks more directly at how that talent can be developed. International experience suggests that good education systems identify effective leaders for today; high-performing systems grow and develop tomorrow's leaders in a planned and progressive way.

CPD for Educational Leaders (Scottish Executive, 2003⁶¹) defined levels of leadership in order to create pathways for leadership development in Scottish schools. This document has been used well by local authorities and other organisations in the development of leadership programmes. Almost all of Scotland's local authorities offer leadership programmes for teachers. The target audience for these programmes varies, including those seeking an introduction to leadership, aspiring principal teachers, deputies and headteachers. Very few local authorities offer leadership development programmes which provide a clear pathway to senior management posts in schools. A few local authorities are taking forward future leaders programmes through a coaching approach which includes pedagogy. CPD frameworks developed in these authorities are intended to provide a structured progression to enable staff to grow as leaders and managers and often feature group coaching and rigorous self-evaluation. Deployment to development posts and 'acting' roles within and beyond an individual school can provide challenging and rich professional development for leadership and should be proactively included within broader plans for professional development.

A clear, progressive educational leadership pathway should be developed, which embodies the responsibility of all leaders to build the professional capacity of staff and ensure a positive impact on young people's learning. Account should be taken of the relationship between theory and practical preparation, including deployment to developmental roles.

Ninety-six per cent of teachers responding to our questionnaire who have completed the Scottish Qualification for Headship (standard route) found it to be very effective or effective in preparing them for their first headteacher post. Less data is available on the flexible route to achieving the Standard. Currently, only 68 teachers in Scotland have successfully completed the flexible route. Numbers of teachers embarking on the Scottish Qualification for Headship have declined in recent years, with a few local authorities withdrawing from the standard route.

We should continue the standard and flexible routes to achieving the Standard for Headship, building these into a more coherent overall leadership pathway, using the helpful levels of leadership defined in 'CPD for Educational Leaders' as a starting point. Research suggests that

⁶¹ CDD for Educational Leaders, Scottish Executive, 2003

leadership preparation programmes are better aligned to support school and curriculum reform where there is a clear focus on both the technical and adaptive dimensions of change (Fullan, 2009⁶²).

The impact of the routes to achieving the Standard for Headship should be evaluated to inform further development of flexible routes.

Very few local authorities offer programmes of CPD aimed at experienced headteachers. When studying high-performing education systems around the world, McKinsey (2010)⁶³ found that: *'Apart from classroom teaching, nothing influences improvements in school standards more than the quality of headteachers. Wherever they are in the world, good headteachers share many common attributes and approach the role in similar ways. They spend more time coaching and developing their teaching staff, and interacting with students and pupils. They help each other and establish networks and clusters, which they then use for learning and development, and providing support to weaker schools'*.

In Scotland, experienced headteachers have only limited access to high quality CPD beyond that offered by their professional associations. Woods *et al* (2009)⁶⁴ note that headteachers in post for two years or less prioritised CPD that addressed the technical challenges of the job. Experienced headteachers value professional development focused on building leadership capacity at all levels. Based on interviews with experienced headteachers, Stroud (2006) identified a demand for personalised programmes of coaching and mentoring involving heads in shaping their own professional development.

A greater range of CPD opportunities should be provided for experienced headteachers, from the middle years of headship onwards. The new national leadership pathway should not stop at headship, but should include ways in which experienced headteachers can continue to develop and refresh their skills and competences.

Many of our most experienced, high performing headteachers have the potential to contribute to system leadership in Scotland. In the current climate of reducing national infrastructure and ensuring maximum resources are available for the front-line of education, we should develop a pool of national leaders of education.

A scheme for national leaders of education should be developed to enable experienced, high-performing headteachers to contribute to system-level leadership of education in Scotland.

⁶² Leadership Development: The Larger Context, Fullan 2009 Educational Leadership, 67(2), 45-48

⁶³ Capturing the leadership premium, McKinsey & Company, 2010

⁶⁴ Tears, laughter, camaraderie: professional development for headteachers, Woods *et al* 2009, School Leadership and Management, 29(3), 253-275

National leaders of education would continue in their current posts but contribute significantly to beyond their own school. This could include contributing to national deliberations, working more closely with policy makers, civil servants and national agencies, and advising on draft government policies and implementation strategies, not least in relation to teacher education.

Overall, we need to continue to raise levels of support for educational leaders in Scotland. Provision at present is not well coordinated, with a range of disparate sources of leadership support across a range of national and local providers. Given the need to nurture the leadership skills and talents of all teachers, in a culture of distributive leadership, better coordination of resources, support and development would be more efficient and would promote higher quality.

A virtual college of school leadership should be developed to improve leadership capacity at all levels within Scottish education.

This facility would provide a dedicated focal point for leadership development in Scotland. When developing this approach, lessons can be learned from the success of current developments in CPD, including the virtual staff college which supports the Association of Directors of Education Scotland (ADES).

Chapter 6: Conclusions and recommendations

Scottish education has many strengths, not least the quality of its teachers and the wide variety of people in the many other services which serve the needs of our young people. Scottish education also faces a number of long-standing and difficult issues which remain to be resolved. The need for radical moves to raise standards, tackle underachievement, strengthen literacy and numeracy skills and create more challenging and interesting learning has been highlighted in successive national and international reports. Scotland has therefore embarked on a very radical and ambitious reform programme, Curriculum for Excellence, designed to ensure that it has the kind of well-educated and highly-skilled population which will flourish in an increasingly fast-changing, complex and challenging national and global environment.

For school education, the foundations of that reform programme lay in the *Teaching Profession for the Twenty-First Century* agreement reached in 2001. That agreement was intended to create the conditions and expectations for a revitalised and re-energised teaching profession and in turn to lead to better learning and higher standards of achievement for our young people. That task remains as 'work in progress'.

Strategic priorities

Drawing on an extensive and compelling range of evidence, national and international, it is clear that the two most important factors which promote excellent education are the quality of the teaching profession and of its leadership. This Review addresses both of these factors through the lens of career-long teacher education.

Recommendation 1

Education policy in Scotland should give the highest priority to further strengthening the quality of its teachers and of its educational leadership.

Teacher education policy

Teaching has never been the kind of straightforward task which an external observer might perceive it to be. It is both complex and challenging and the twenty-first century demands which teachers already face on a daily basis require the highest standards of professional competence and commitment. It may be tempting and superficially efficient to address the needs of teachers through external prescription, pre-packaged materials and specific training. However, long-term and sustained improvement which has a real impact on the quality of children's learning will be better achieved through determined efforts to build the capacity of teachers themselves to take responsibility for their own professional development, building their pedagogical expertise, engaging with the need for change, undertaking well-thought through development and always evaluating impact in relation to improvement in the quality of children's learning. That is the message from successful education systems across the world and that is the explicit philosophy upon which Curriculum for Excellence is based. Its ultimate success will depend partly on the extent to which teachers receive the kind of external support and encouragement which they need to build their professional capacity and, crucially, on how far the teaching profession itself rises to the challenge. That raises important issues about career-long teacher education and poses challenging questions for teacher educators in national organisations, universities, local authorities and schools. We need twenty-first century professionals for twenty-first century learning.

Recommendation 2

Education policy should support the creation of a reinvigorated approach to 21st century teacher professionalism. Teacher education should, as an integral part of that endeavour, address the need to build the capacity of teachers, irrespective of career stage, to have high levels of pedagogical expertise, including deep knowledge of what they are teaching; to be self-evaluative; to be able to work in partnership with other professionals; and to engage directly with well-researched innovation.

Continuum of teacher education

Teacher education is currently compartmentalised into separate components: universities look after the initial stage before the baton is handed to schools, authorities and national organisations or associations for induction and continuing professional development; and research tends to sit even further outside that set of loose relationships. Attempts to forge partnerships have had at best varying success. Shaping and supporting the kind of 21st century teacher which Scotland needs will require much stronger interconnections and collaboration than has been the case to date. We need much better alignment of values and purposes with a clear understanding of where and when the most effective contributions can be made if we are to achieve coherent and progressive development of professional expertise throughout a career.

Recommendation 3

Teacher education should be seen as and should operate as a continuum, spanning a career and requiring much better alignment across and much closer working amongst schools, authorities, universities and national organisations.

Selection of students

The foundations of a high quality teaching profession lie initially in the people recruited to become teachers. Scotland is fortunate in that it has generally enjoyed a good supply of well-qualified individuals wishing to join the profession. Approaches to selection for teacher education courses vary across universities but primacy is given to academic qualifications, usually complemented by assessment of values and social skills. In general, those arrangements have allowed the strongest candidates to be selected but there was a persistent view in evidence presented to the Review that a small but significant number of those selected lacked fundamental attributes needed to become a good teacher. Poor interpersonal skills and basic weaknesses in literacy and numeracy were often cited as issues to be addressed. Admitting students to courses within which they are unlikely to succeed is neither a good use of increasingly scarce resources nor fair to the student. We need, therefore, to improve and make more efficient the process of selection for initial teacher education courses.

Recommendation 4

Selection for entry to initial teacher education programmes should be made more rigorous, drawing on existing best practice and using a wider set of selection criteria. The possible establishment of a national assessment centre should be explored. The role of future employers should be significantly strengthened within any revised process.

Recommendation 5

Candidates for teaching should undertake diagnostic assessments of their competence in both literacy and numeracy. The threshold established for entry should allow for weaknesses to be addressed by the student during the course. A more demanding level should be set as a prerequisite for competence to teach.

Managing student numbers

Predicting teacher numbers is at best an art rather than a science. While the numbers of children are broadly known many years ahead, decisions about the curriculum, class sizes, promotion structures and posts in addition to class teaching are subject to political and economic pressures which can render the original assumptions redundant. The uncertainty is further compounded by the different levels at which decisions on such matters can be taken. Improving intelligence about local policies and trends and reducing lead times between decisions about numbers entering dedicated teaching courses and subsequent entry to employment should mitigate the effects of this uncertainty. Given continuing changeability, it is important that prospective students are able to take informed decisions about the likelihood of employment and that qualifications for teaching have currency and credibility in employment markets beyond education. Similarly, the path to return to teaching for qualified teachers who have taken employment in other fields should be eased.

Recommendation 6

The accuracy of the workforce planning model should be improved through universities and local authorities providing their latest projections on an annual basis.

Recommendation 7

Because workforce planning cannot be an exact science, steps should be taken to increase flexibility in the availability of teachers and manage fluctuations. To achieve this, students undertaking a teaching qualification should be given greater information about prospective employment in teaching, particularly at those points where alternative degree options might still be open to them. The marketability of transferable skills in education degrees beyond the education sector should be highlighted both to students and to employers. (See also recommendation 11 about the nature of teaching degrees).

Recommendation 8

In order to maintain a wider pool of potential teachers, individuals who have met either the Standard for Full Registration or Standard for Initial Teacher Education but have sought employment elsewhere should be encouraged to retain a reduced level of GTCS membership which gives them access to employment information and continuing professional development. Where an individual seeks to return to teaching, local authorities should provide them with relevant training to support their return to the classroom.

Entry routes

Across the world, mainly in response to teacher shortages, additional routes into teaching are emerging. Scotland at present has two main routes into teaching: an undergraduate vocational degree or a general degree followed by a postgraduate vocational qualification. While, in the immediate future, there is likely to be an oversupply of qualified teachers in Scotland, there remains a question about the extent of diversity in the workforce. While demand projections suggest no immediate pressure to multiply the number of routes significantly, there is a case for creating greater flexibility and wider access promoting greater diversity, through different combinations of high quality blended learning and part-time provision, building on the positive start made by a few universities and their partners.

Recommendation 9

Further high quality part-time provision, capitalising on the growing potential of ICT, should be developed, including the kind of model provided by the Open University in Scotland. The suitability for Scottish education of a Teach First/Teach Now model of placing students predominantly in a school for their initial teacher education should be investigated.

Initial phase of teacher education

There is much to celebrate in the way in which initial teacher education contributes to the early development of Scottish teachers. Despite significant and ongoing structural change over the last 20 years and increased expectations about what initial teacher education should include, students are generally well served by the university they attend. Universities across Scotland have created a number of interesting variations of their degree and postgraduate provision. We need to build on the best of these developments to address the needs of twenty-first century teachers.

An increasingly radical and aspirational educational agenda, economic uncertainty and inconsistent quality in current practice all point to the need to rethink the early formation of teachers. As with other stages in the teacher education continuum, we need a much more integrated partnership involving universities, authorities and schools within which professional development is a shared responsibility. Coherence between initial teacher education and induction needs to be improved by reconceptualising these into one experience: the early phase of teacher education. This will address issues of duplication, lack of continuity and progress of student and beginning teachers' learning. At present there is no formal link between these two phases.

The expectation that initial teacher education will cover all that the new teacher needs to know and do is unrealistic. Teacher education needs to be seen as something where foundations laid in the initial phase continue to be built thereafter. Expectations of how and when that deeper expertise will be acquired need to be explicit. The early phase of teacher education should

be seen as a five-year experience for undergraduates and as a two-year experience for postgraduates. Within this phase, much better use can be made of the total time available, including the possibility of gaining academic recognition at Masters level, building on the positive start some universities have made to this within their current programmes. This new model also creates greater flexibility to use the long break between the two components of the phase for further study. Local authority and university staff need to work together throughout the early phase of teacher education, rather than just at the point of transition from initial teacher education and induction at present.

Recommendation 10

Initial teacher education and induction should be planned as one overall experience. This will require strengthened partnership to underpin joint delivery. It should include the possibility of Masters credits, where appropriate.

Undergraduate provision

The BEd degree, introduced in 1983, has many supporters and is generally seen as a good preparation for the classroom. Although the desirability of a specifically vocational undergraduate route into teaching has been questioned, it is clear that there remains a significant demand from students for provision of this kind. Its problem lies in being seen as too narrowly vocational which can lead to an over emphasis on technical and craft skills at the expense of broader and more academically challenging areas of study. Concurrent degrees which combine significant academic study outwith education with rigorous professional development offer a more relevant way forward. These broader degrees would encourage students and staff to engage more widely with the university as a whole and undertake academic study which is not primarily aimed at school teaching, helping to realise the original aspirations of the Sutherland Report. Such degrees might also prove more marketable for students who do not find employment in teaching, as well as offering schools teachers with additional in-depth knowledge.

Recommendation 11

In line with emerging developments across Scotland's universities, the traditional BEd degree should be phased out and replaced with degrees which combine in-depth academic study in areas beyond education with professional studies and development. These new degrees should involve staff and departments beyond those in schools of education.

Core components of the early phase

There is a wide variation in the extent to which existing degrees equip students to address the areas of greatest challenge for Scottish education. Weaknesses in the performance of children in primary education can stem in part from low levels of confidence amongst primary teachers about their own knowledge of some aspects of what they are teaching. This represents one of the greatest points of exposure of the primary teacher and is particularly the case in literacy, mathematics, science and modern foreign languages. There can be a culture which undervalues the need to have a sound understanding of what is being taught and sees the teacher as a kind of facilitator. While it is neither necessary nor feasible for a teacher to be a subject expert in all areas of the primary curriculum, we do need to ensure that teachers have sufficient understanding to stretch and progress children's learning and to diagnose and remedy any conceptual or other learning problems which may undermine their progress. There must remain real doubt about how far the current approach fully satisfies children's right to be taught by someone who is fully in command of their subject matter. While the generalist teacher with responsibility for a group of children should remain at the heart of primary education, existing moves to develop specialisms within each school should be encouraged.

In addition to developing their subject and pedagogical knowledge and skills, all new (and existing) teachers should be confident in their ability to address underachievement, including the potential effects of social disadvantage; to teach the essential skills of literacy and numeracy; to address additional support needs (particularly dyslexia and autistic spectrum disorders); to assess effectively in the context of the deep learning required by Curriculum for Excellence; and to know how to manage challenging behaviour.

There is scope to ask students to undertake more customised self-study using high-quality distance learning approaches. At present, all students have broadly the same set of inputs, irrespective of what they bring to the course. Greater clarity about entry expectations allied to support to bridge gaps between a student's current knowledge and those expectations would reduce some of the pressure on course teaching time and provide a more solid base upon which to build.

One of the greatest difficulties facing teacher educators is meeting the ever wider demands on course time. This 'quart-into-pint-pot' problem is at its most acute in the postgraduate route into primary teaching. Solutions can be sought in identifying core components, and so reducing or rephrasing expectations of how much will be covered and when, increasing the available time, or expecting more of students themselves. The answer would seem to lie in a combination of all three.

Recommendation 12

Increased emphasis should be given to ensuring that primary students have sufficient understanding of the areas they are expected to teach. Supporting online resources should be developed which address the fundamentals of each area to be taught together with implications for pedagogy.

Recommendation 13

Clear expectations about necessary prior learning for teacher education courses should be developed together with diagnostic assessments and online resources to allow students to reach that baseline in advance of formally embarking on a course. This mechanism could also be used to support existing teachers.

Recommendation 14

The professional component in programmes of initial teacher education should address more directly areas where teachers experience greatest difficulty and where we know that Scottish education needs to improve. That will require a radical reappraisal of present courses and of the guidelines provided by GTCS.

School experience in the initial phase

School experience is a vital part of preparation for teaching. However, the proportion of time given to placements and what happens during placements remain contentious. For many, if not most students and teachers, placement provides the opportunity to develop and hone the skills required for the classroom. However, it should do much more than provide practice in classroom skills, vital though these are. Experience in a school provides the opportunity to use practice to explore theory and examine relevant research evidence. It should also establish those habits of reflection, self-evaluation and teamwork which are essential attributes of the twenty-first century professional.

The school experience should be seen not as complementary to what happens in the university but as integral to the total experience of teacher education. Students should, for example, be introduced to the wider responsibilities of a teacher, including working with parents and other professionals. That increased breadth will require a strong and mutual partnership between the school and the university, the teacher and the tutor. Within that strengthened partnership, schools should take prime responsibility for assessing the student as a developing professional as described in this report. That will have implications for the nature of partnership working and would be further enhanced by an extension of joint staffing. We need to ensure that aspirations

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for improving partnerships are translated into reality for all student teachers in Scotland. Radical changes to the dynamics between partners, and new ways of working, including establishing 'hub teaching schools' as a focal point for research, learning and teaching are suggested throughout this report.

The experience of students in schools, while generally positive, is also subject to wide variation. At present steps to quality assure and improve those placement experiences have been undermined by the pressure to secure sufficient places. However, given the vital importance of this element in teacher education, poor quality placements cannot be seen as acceptable.

Recommendation 15

New and strengthened models of partnership among universities, local authorities, schools and individual teachers need to be developed. These partnerships should be based on jointly agreed principles and involve shared responsibility for key areas of teacher education.

Recommendation 16

Exploration of theory through practice should be central to all placement experiences – emphasising effective professional practice, reflection, critical analysis and evidence-based decision making.

Recommendation 17

School-based placements should be in schools which meet quality standards. They should provide an effective professional learning environment and the capacity to mentor and assess student teachers.

Recommendation 18

Students' views on the quality of placements should be used to inform decisions about the suitability of schools for placement and help to ensure a consistently high quality experience.

Recommendation 19

Stronger quality assurance of the effectiveness of partnerships should be applied by GTCS through their accreditation procedures and HM Inspectors in their inspections of teacher education and of schools. School inspections should include, where relevant, evaluations of the quality of the mentoring and assessment arrangements for students and newly-qualified teachers as well as of continuing professional development.

Recommendation 20

Suitably trained school staff should have the prime role in the assessment of students whilst on placement. New models of joint staffing should be developed to enhance the quality and impact of the placement experience.

Recommendation 21

To ensure that the model of placement reflects the broader and evolving roles of teachers, it should include more substantial experience for all prospective teachers in relating to parents and working with other professionals.

Improving impact

There are unacceptably wide variations in the overall quality of students' university experience. In many cases expectations and standards seemed to be set by individual members of university or school staff. While academic freedom has to be respected that should not preclude common criteria and interpretations of those criteria being established. Clearer guidelines and stronger evaluation procedures are needed to create greater equity in the way students are guided and assessed. University-based teacher educators need to provide the highest quality of teaching and learning experiences for student teachers. Their role is demanding and complex; senior managers should ensure that research complements university staff's primary responsibility for teaching students. A greater range of evidence on the effectiveness of learning and teaching within initial teacher education programmes needs to be developed and used to drive further improvement.

Recommendation 22

Providers of initial teacher education programmes should develop, in partnership with employers, means of gauging the effectiveness and impact of their programmes in the short and medium terms.

Staffing issues

Supporting students to develop into highly professional teachers depends critically on the competence and credibility of those who work with them. Students are entitled to expect that they are being taught, mentored and assessed by highly competent and well-trained staff. However, there remains a degree of scepticism about the currency of some members of university staff's understanding of the realities of today's classrooms. Similarly, teachers who work with students rarely receive any training in mentoring or assessing students. Examples of good practice in both universities and authorities across Scotland should become more the norm and will be assisted by the kind of partnership working and joint staffing recommended in this Report.

Recommendation 23

Through any reaccreditation arrangements, the GTCS should ensure that those involved in the front line of teacher education in universities and schools are fully ready for that task. University-based teacher educators should have a responsibility to undertake an agreed programme of CPD each year.

Recommendation 24

Flexible staffing models for initial teacher education, induction and CPD should be developed by local authorities and the universities to allow movement of staff and dual appointments. As well as potentially improving coherence, this will help to achieve the aspiration of teaching being a research-informed profession.

Induction within the initial phase

The teacher induction scheme places Scotland at the forefront of education systems across the world in recognising and supporting this important period in a new teacher's career. The guaranteed paid year of teaching, protected time for professional development and provision of support through mentoring are all examples of best practice. There are, however, a number of ways in which the year could be used more productively as part of a more coherent and continuous approach to teacher education overall. The 'world-class' entitlements of the induction year are not always matched by 'world-class' content within the programme.

Induction should build seamlessly from initial teacher education and lead directly into further professional development relating to the early stages of a teaching career. At present, universities, local authorities and schools cooperate to manage transitions but, as described earlier, much more active collaboration is required if best use is to be made of available time. Most of the pieces are in place. The challenge is to use them to best effect. Many newly-qualified teachers feel that they would benefit from continued contact with university staff within their induction experience, as they refine and continue to develop their skills and professional competences. There should be maximum opportunities within the induction scheme for new teachers to tailor and personalise the content to meet their own professional learning needs. It is critical to instil a desire to own, lead and be responsible for CPD, rather than having it 'done to you', from the outset of a teacher's career.

Recommendation 25

In order to improve continuity and coherence for new teachers, university-based teacher educators should have a role in the development and delivery of induction schemes.

Recommendation 26

To support more effective management of personal and professional development a new system of online profiling should be developed. This should integrate progress, targets and next steps from the outset of initial teacher education, through induction and into continuous professional development.

Mentoring

Good mentoring is central to the success of the induction scheme and is highly valued by the new teachers involved. Approaches to the selection, training and monitoring of mentors vary widely and some lack necessary rigour and commitment. There are also tensions between the joint roles of supporter and assessor which mentors have increasingly been asked to play. We have strong examples of good practice, nationally and internationally, upon which to build a more consistently high standard of support for all new teachers.

Recommendation 27

Local authorities and national bodies should develop approaches to quality assure and improve mentoring.

Recommendation 28

Mentors should be selected carefully and undertake training based on a recognition of the skills and capacities required for this role.

Recommendation 29

The roles and responsibilities of different individuals within the teacher induction scheme need to be updated and clarified. Given the potential tension in the assessment and support functions of mentors, all new teachers in Scotland should have access to a mentor and a supporter.

Use of time

The protected time for professional development is an important and integral part of the scheme. It reflects an increasingly strong belief internationally in the importance of front-loading time for professional development as an investment in future quality. The explicit firmness of the entitlement also protects new teachers to some extent from pressure to meet short-term staffing pressures in a school. However, maintaining the same level of non-contact time for every new teacher over the full year is unduly inflexible.

Recommendation 30

The overall level of non-contact time in the induction scheme should build more directly and progressively from initial teacher education. The use made of the time should allow greater flexibility and personalisation.

Early-career teachers

Even after initial teacher education and induction, no teacher should consider themselves to be 'the finished article'. The needs of new teachers need to be carefully assessed, building from the profile developed in their earlier stages of their education.

Recommendation 31

Early career teachers should continue to benefit from mentoring beyond induction. Additional support should be provided by senior managers within schools and local authorities to ensure appropriate progression as part of the CPD and PRD process.

Flexible probation

Not all newly-qualified teachers enter the induction scheme. Those who follow the flexible route do not benefit from the kind of support provided on the scheme and are likely to have the kind of limited experience which was criticised in the McCrone Report. More needs to be done to ensure that this small but important group of new teachers have more opportunity to develop professionally.

Recommendation 32

The flexible route to achieving the standard for full registration should include access to CPD and structured support. This needs to be led and coordinated by local authorities who choose to employ flexible route probationers.

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Approaches to CPD

The foundations of effective continuous professional development (CPD) for Scottish teachers are strong. Their contractual entitlement and requirement to undertake paid continuous professional development is the envy of their counterparts internationally. There is also no lack of provision of courses and resources covering a wide range of topics. Cluster grouping and professional networking, face-to-face or using Glow and other online mechanisms, is growing. However, despite these many positive features, there remains a huge variation in the engagement of individual teachers in high quality personal and professional development. In terms of courses and conferences, there is increasingly strong evidence that set-piece one-off events, however good, have limited lasting impact. The most powerful professional development is often undertaken locally, in teams, and is designed to lead to a tangible outcome in a school or cluster of schools. Self evaluation, reflection and inquiry are in themselves potentially powerful tools for professional development. Similarly, individual teachers comparing and learning from each other's practice through approaches such as peer observation are likely to have immediate impact. An external stimulus is often needed to challenge assumptions, stimulate ideas and illustrate new teaching approaches. Such a stimulus needs to be high quality and relevant.

Recommendation 33

The balance of CPD activities should continue to shift from set-piece events to more local, team-based approaches which centre around self evaluation and professional collaboration, and achieve an appropriate blend of tailored individual development and school improvement.

Evaluation of CPD

It is rare for CPD activities to be defined and evaluated in relation to their intended impact on pupils. More attention to assessing the value added of CPD would improve its focus, increase the likelihood of impact and improve efficiency overall.

Recommendation 34

Teachers and schools should plan and evaluate CPD more directly on its intended impact on young people's progress and achievements.

Professional Standards

The standards for initial teacher education and for full registration together with those for chartered teachers and headship form the key reference points for the personal professional development of individual teachers. The increased coherence which this Review is advocating must therefore be reflected in those standards. Although developed separately, there are clear and deliberate linkages between them. The time is now ripe to review the set as whole in order to ensure that the individual standards form a coherent framework. In addition, and with

professional updating in view, there is a need to develop a further set of expectations relating to more experienced teachers. This standard should be explicit about the core knowledge, skills and competences that all teachers need to continually refresh and improve as they progress through their careers. It should be designed to help teachers to improve their skills and competences. As part of this process, all teachers should have an online profile which records the focus and use of their CPD, and the impact on young people and colleagues with whom they work.

Recommendation 35

The Professional Standards need to be revised to create a coherent overarching framework and enhanced with practical illustrations of the Standards. This overall framework should reflect a reconceptualised model of teacher professionalism.

Recommendation 36

A new 'Standard for Active Registration' should be developed to clarify expectations of how fully registered teachers are expected to continue to develop their skills and competences. This standard should be challenging and aspirational, fully embracing enhanced professionalism for teachers in Scotland.

Relevance and impact of CPD

A frequent complaint about CPD is that teachers do not see a sufficiently close relationship to their personal needs or to the developmental priorities of the school or more widely. Decisions about continuing professional development flow in large measure from the need to take forward national, local or school developments and policies. Each teacher has a professional review and development (PRD) meeting with a senior member of staff at least annually. However, evidence given to the Review suggests that, too often, the PRD process has limited credibility and fails to reconcile effectively the competing demands of external and personal learning needs.

Improved PRD is an essential part of managing continuing professional development more efficiently and effectively. Resources, both in time and money, are limited and links between personal development and national and local priorities are not always sufficiently clear. As a result potentially helpful support can be dismissed as irrelevant or unhelpful. More rigorous prioritising of external demands for CPD is needed. There is also a need to prioritise an individual's own CPD programme by relating it more directly to expected, and preferably tangible, outcomes for children's learning. The Standard for Active Registration proposed in recommendation 36 together with GTCS reaccreditation should provide a firmer basis for PRD discussions.

Recommendation 37

At the outset of any CPD activity, the intended impact on young people, and the aspects of the relevant professional standard the teacher will improve as a result of the activity, should be clear. Subsequent PRD discussions should review progress with previous intentions. This process should be captured in a continuing online profile of professional development.

Recommendation 38

New national initiatives should include a teacher education strategy, based on what we know about managing effective change in education.

Broadening the concept of a teacher educator

Mentoring is central to professional development at all stages in a teacher's career and all teachers should see themselves as mentors of not just of students and newly qualified teachers but more generally. The required skills should be developed and refreshed through initial teacher education, induction and CPD. These skills in mentoring are used to support the development of colleagues, as well as to help equip teachers with the skills to provide all young people with the high quality of personal support to which they are entitled as part of Curriculum for Excellence. When extending mentoring provision, priority should be given to continuing to mentor early career teachers, to ensure greater continuity of professional learning from the induction year.

Recommendation 39

All teachers should see themselves as teacher educators and be trained in mentoring.

Online CPD

Although not currently favoured by many teachers as their preferred mode of learning, there can be no doubt that much more extensive online provision will be central to future continuing professional development. Much useful material already exists, including resources provided by the Open University. Scepticism and resistance amongst many staff has to be met with very high quality resources and easy access. Scotland has made a useful start to creating more coordinated online support but further development is required if it is to be widely used and fully effective.

Recommendation 40

Online CPD should be part of the blended, tailored approach to CPD for all teachers.

Recommendation 41

Building on the positive start made by the National CPD Team to ‘CPD find’ a national ‘one stop shop’ should be developed for teachers to access online CPD opportunities.

Focus of CPD

Much of the CPD which has been offered in recent years has been generic in nature. Despite strong evidence about specific needs for deeper subject understanding and a desire for reinvigoration of subject expertise, subject-specific and sector-specific provision has been much less prominent. The strong uptake of high quality training given by bodies such as SSERC in science or SCILT in modern languages is indicative of a wider need. Immediate priorities might be the teaching of modern languages in primary schools, science, aspects of mathematics and Gaelic.

Recommendation 42

Teachers should have access to high quality CPD for their subject and other specialist responsibilities.

Recommendation 43

National strategies need to be developed to prioritise and address areas within the curriculum where evidence, such as from national and international benchmarking or inspection, shows that there is a particular need to improve learning, teaching and attainment.

Advanced qualifications

Award-bearing CPD is expensive and resource intensive but should nonetheless be part of an improved overall CPD strategy. Evidence about the relationship between, for example, Masters qualifications and the quality of educational outcomes is not sufficiently compelling to suggest that Scotland should move quickly to a ‘Masters-level profession’. However, evidence from the Review suggests that many teachers would value more opportunities to acquire such qualifications and their developmental implications should not be underestimated.

Recommendation 44

A greater range of CPD should be formally accredited. Masters level credits should be built into initial teacher education qualifications, induction year activities and CPD beyond the induction year, with each newly-qualified teacher having a ‘Masters account’ opened for them.

Accomplished teachers

The introduction of chartered teachers following the Teachers' Agreement has proved controversial. There is a strong body of opinion that these posts should be discontinued, not least because of their impact on education budgets in times of severe financial restraint. However, countries across the world are looking at ways of recognising and rewarding 'accomplished' teachers and the original concept in the McCrone Report of giving recognition to our 'best' teachers retains some resonance. The challenge is to ensure that chartered teachers are in reality our 'best' teachers and that they add significant value to children's learning either directly or through their work with colleagues. That implies better selection of candidates for chartered teacher programmes and clearer expectations of the ways in which they will add value. There is also a case for confirming that chartered teachers continue to meet the standard over time.

Recommendation 45

The award of Chartered Teacher status should be based on a range of evidence, including improved teaching skills and significant impact on improving the learning of the young people and colleagues with whom they work. The award should be reviewed as part of PRD and professional reaccreditation. Local authorities should have greater control over the number of teachers who apply for the award.

Leadership pathways

Leadership is central to educational quality and the success of much of what is recommended in this report will depend on the quality of educational leadership in Scotland. Much attention has been paid to leadership training in recent years, with an increasing focus on leadership for learning and distributive forms of leadership. This extensive range of different types of leadership training contains much interesting and innovative practice. However, no clear and consistent pathway can be identified nationally and there is no guarantee that appropriate training can be accessible locally for those aspiring to formal leadership positions. At the highest level, the Scottish Qualification for Headship remains important although the traditional route has been replaced by the flexible route to headship in some authorities.

Recommendation 46

A clear, progressive educational leadership pathway should be developed, and embodies the responsibility of all leaders to build the professional capacity of staff and ensure a positive impact on young people's learning. Account should be taken of the relationship between theory and practical preparation, including deployment to developmental roles.

Recommendation 47

The impact of the routes to achieving the Standard for Headship should be evaluated to inform further development of flexible routes.

Experienced headteachers

Many experienced headteachers rely heavily on professional associations and local events for their professional development. The future success of Scottish education will in large measure be dependent on the expertise and commitment of these headteachers. We need to do more both to develop them personally and to harness their insight in developing and taking forward local and national policy. Many local authorities consult and engage with their most experienced headteachers as leading officers of their authority. There is, however, no equivalent means of achieving such engagement at the national level. While preserving the benefits of diversity, including its local responsiveness, there is a need to capture the best of current practice and to stimulate its wider dissemination.

Recommendation 48

A greater range of CPD opportunities should be provided for experienced headteachers, from the middle years of headship onwards. The new national leadership pathway should not stop at headship, but should include ways in which experienced headteachers can continue to develop and refresh their skills and competences.

Recommendation 49

A scheme for national leaders of education should be developed to enable experienced, high-performing headteachers to contribute to system-level leadership of education in Scotland.

Recommendation 50

A virtual college of school leadership should be developed to improve leadership capacity at all levels within Scottish education.

The conclusions and recommendations of this Review have significant implications for how we organise support for 21st century education both locally and nationally. The need for better alignment, stronger partnerships, a clearer and more rigorous determination of priorities and much greater attention to impact have been recurrent themes throughout. Much of what may be required relates to culture and working relationships but there is also a need to achieve greater efficiency and impact at all levels in the system.

Chapter 7: Implications and next steps

The key themes and recommendations of this Report have significant implications for how career-long teacher education is conceived and organised as part of a strengthened culture of professional learning. There are implications for everyone, individuals and organisations alike, who has a responsibility for supporting the learning of our young people. We need better alignment, more agility and greater efficiency.

The reflective commentary below is intended as a starting point for professional dialogue and is not intended to be prescriptive nor exhaustive. Key themes referred to in different chapters have been drawn together in high level messages for the different groups.

For **Scotland's teachers** the Review's recommendations offer the prospect of more satisfying careers with the kind of enhanced professional role envisaged in the original McCrone Report. Teachers will be more research aware and engage directly in self evaluation. That means greater personal responsibility for professional learning and improved opportunities to pursue that learning. It means better use of scarce time by focusing more directly on relevance to and impact on young people's learning. It means more collegiate learning as part of teams supporting young people, mentoring colleagues and being open to fresh ways of working. And it means being a willing and active partner in building the next generation of teachers.

School leaders should maintain a strong focus on building the capacity of teachers, individually and collectively. Constructive professional review and development should be at the heart of building that capacity. They should reinforce a culture of evidence-based innovation, actively seeking productive partnerships. They should be leaders of learning, not just in relation to young people but for themselves, their staff and student teachers. They should seek ways to develop the school as a hub of learning.

Local authorities will have a key role in making the Review's recommendations happen. They need to target resources towards teacher quality, including building close partnerships with universities around selecting the best students, building continuity between initial teacher education and induction, looking for joint appointments and ensuring access to career-long education for all teachers, including advanced qualifications. Their quality improvement processes need to include all aspects of teacher education. Local Authorities should engage actively in an ongoing process of getting the right people in the right numbers into teaching and enabling them to develop professionally throughout their careers.

Scotland's universities are central to building the kind of twenty-first century profession which this Report believes to be necessary. In responding to the Report, each university will have to consider how its undergraduate and postgraduate courses can build coherently into the next stages in a teacher's career. How far are student teachers full members of the wider academic community? How strong are its partnerships with schools, local authorities and other providers of teacher education? How innovative can it be in providing pathways to more advanced study? How confident is it about the consistent quality of the experience of its students? What more can it do to engage more directly in knowledge creation and exchange, particularly in relation to the impact of research?

For the sector as a whole there are important questions about the balance between the number of universities involved in teacher education and the quality of the students' experience. Does the projected demand for places allow all of the current universities to remain involved in initial teacher education? Can the kind of centres of excellence which we need in Scottish education be created within the available resources? The **Scottish Funding Council** should explore these issues directly to help create centres of excellence in university teacher education in Scotland.

This Report provides real opportunities for the sector to make a much stronger contribution across teacher education as a whole. However, that strengthened position will require a willingness to evaluate and change current practice in response to the opportunities offered by the Review's recommendations.

GTCS is pivotal in supporting and assuring teacher quality. It is the guardian of twenty-first century professionalism. Through its accreditation of initial teacher education courses and its framework of standards it controls key levers for improvement. The Review sees an increased focus on the quality of students' experience in the accreditation of initial teacher education and the creation of a new Standard for Active Registration as being critical to future success. It should be open to extensions to the current limited number of routes into teaching without sacrificing in any way the rigour of initial teacher education.

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Learning and Teaching Scotland and HM Inspectorate of Education (shortly to be combined into the Scottish Education Quality Improvement Agency) both have important contributions to make to developments in teacher education. The new body would seem to be well placed, with the National CPD team, to support many of the Review's recommendations. In particular, it should lead on the establishment of a virtual leadership academy and the coordination and development of a more effective ICT infrastructure. Inspection should focus more directly on career-long teacher education, both as it is being used to build capacity in schools and in wider partnerships. School inspection should where relevant comment directly on how well student teachers are being supported. Reviews of initial teacher education by HM Inspectors need to focus more directly on the quality of students' learning experiences.

The ambitious and far-reaching agenda set by this Report will take some time to implement and many of the recommendations will require the active support of the **Scottish Government** if they are to take effect. In particular, the Scottish Government should establish a policy environment which gives high priority to teacher quality and leadership. It should encourage any revision to teachers' contracts to focus on creating the conditions for twenty-first century professionalism. It should ensure that developments apply best practice. Above all, it should stress the need to think and act radically if Scottish education is to continue to meet the learning needs of its young people.

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Appendix 1: Remit and approach

The remit for the review was:

To consider the best arrangements for the full continuum of teacher education in primary and secondary schools in Scotland. The Review should consider initial teacher education, induction and professional development and the interaction between them.

Specifically the Review was asked to address:

- What kinds of teachers do we want teacher education to develop? What model of professionalism should underpin our approach? How can teacher education support the flexibility in the profession that Curriculum for Excellence requires? We want to develop effective teachers who are confident leaders of learning and teaching and confident working in partnership with each other, parents and the whole range of professionals that support young people. How will teacher education support that?
- How do we organise the initial qualification, induction and professional development throughout their careers of teachers in a way that is coherent and effective?
- What model of teacher education is right moving forward? Does our current model of university based education supplemented by school placement still make sense? Does it need to be the only model? How should Scotland react to the international trend towards Masters level qualification? Could schools/local authorities themselves take a larger role in teacher education, perhaps in partnership with higher education?
- Teacher education in Scotland has struggled to cope with the fluctuation in intakes driven by workforce planning decisions. Are there arrangements that could be made that mitigate such pressures?
- How do we ensure teachers are educated in a manner that takes account of the geography of Scotland and the need to ensure effective supply of teachers in all parts of the country? How do we ensure continued/better access to teacher education to non-traditional prospective students? What qualities should drive selection of student teachers?

Methodology

Principles underpinning the Review

- Inclusivity – stakeholders to be fully engaged in and share ownership of the Review. Web-based discussion forums to be a part of that approach.
- Evidence based – the Review should look at evidence from home and abroad about what works in teacher education and development.
- Openness – nothing should be ruled out and nothing ruled in.
- Pace – the Review should report by the end of 2010.

The Review focused strongly throughout on the impact any proposed change might have on outcomes for pupils.

Process and Timing

The Review was led by Graham Donaldson, supported by a small team of seconded staff. He was based in Learning and Teaching Scotland during the Review.

The Review was supported by a Reference Group which was drawn from each of the main groups covered by its remit. The Reference Group met on five occasions over the period March to December 2010.

The Review began in February 2010 and reported to Scottish Ministers in December 2010.

Approach

The Review adopted an open approach to its remit. It examined evidence about effective approaches to teacher education from within Scotland, elsewhere in the UK and internationally. It sought and considered evidence from all interested parties. As it progressed, the Review promoted further open discussion about emerging issues. In addition to wider media discussion and supported discussions at local authority meetings and the Scottish Learning Festival, the Review website became an interactive forum, encouraging wider involvement in helping to shape the conclusions of the Review.

Literature Review

A literature review was commissioned to '*understand the contribution that teacher education can make to the quality and effectiveness of the educational experience and wider personal development of young people, drawing on effective practice in Scotland and elsewhere*'. The literature review had four objectives

- To provide a high-level overview of the current model of teacher education in Scotland, and to identify current strengths and areas for improvement.
- To identify other education systems (which are broadly comparable to Scotland) that have undergone a significant curricular change, have seen a recent rise in educational standards or are already high performing, and explore the contribution of teacher education to their overall strategy, drawing out learning appropriate to Scotland.
- To explore the relationships between forms of teacher education and the enhancement of professionalism, and between enhanced professionalism and pupil outcomes.
- To provide an overview of effective practice in evaluating the impact and effectiveness of teacher education.

The literature review can be found on the Review website – www.reviewofteachereducationin-scotland.org.uk

Call for Evidence

A formal call for evidence was issued on 16 April and closed on 14 June 2010. Throughout that time it was available on the Review website. The call for evidence sought respondents' views on initial teacher education, induction and continuing professional development, looking at both current practice and future need. Letters were sent to a wide range of stakeholders inviting them to respond to the call for evidence. The call for evidence received 99 submissions from organisations and individuals. Respondents were given the option for their submission to be made publicly available. Where the respondent was content, the submission can be found in on the Review website and in the Scottish Government library. The responses to the call for evidence that were received prior to 28 June were analysed by George Street Research. Any responses received after that date were analysed by the Review team. The report by George Street research can also be found on the Review website.

Teacher Survey

The teacher survey was launched on 16 April and closed on 14 June. The survey was developed with the assistance of the Scottish Government Analytical Services Unit (Education) using the Questback survey tool. It contained 56 questions, 53 of which were multiple choice and three of which allowed free text responses. The survey sought views from serving teachers and headteachers on their experiences of initial teacher education, induction/probation and continuing professional development. It could be accessed from the Review team website and was publicised through e-mails to directors of education and schools, through the LTS newsletter and the Scottish Government website. Although not fully representative, the teacher survey received 2381 responses. GTCs registration numbers and/or e-mail addresses were sought from respondents to prevent duplication of response. It is recognised that this may have resulted in a lower response rate.

Some respondents encountered technical difficulties in trying to complete the survey. These included the survey being blocked by the security software used in their school/local authority and the survey displaying incorrectly due to the web package on the computer. In addition some teachers contacted the Review to explain that due to the length of time since they had undertaken initial teacher education they did not feel qualified to respond to those sections of the questionnaire related to initial teacher education. Where respondents contacted the Review team to discuss these difficulties they were encouraged to provide comment by e-mail.

Stakeholder meetings

Between March and November 2010 the Review team met with a wide range of stakeholders including teacher education providers, representative bodies from education and the wider community, local authorities, teachers and head teachers, parents and pupils. Discussions with these stakeholders throughout all phases provided further evidence and views which informed and refined the recommendations of the Review.

Over the course of the Review, the Review team visited nine local authorities. The team visited two schools in each authority, speaking to teachers either in groups or individually, and in some cases to pupil councils. The team spoke to approximately 150 teachers and 30 pupil council representatives in primary and secondary schools.

Where the Review team did not visit a local authority, HMIE was asked to gather data from teachers on their experiences of induction and CPD and they submitted this as part of the evidence for the Review. The analysis is published on the Review website.

As well as meeting stakeholders with an interest in teacher education in Scotland, the Review team met with individuals and organisations with an interest in teacher education outside Scotland – in England, Wales, Northern Ireland, the Netherlands, Finland, Norway, Canada and Australia.

The full register of stakeholder engagement can be found on the Review website.

Engagement through technology

The Review used the Glow network to seek the views of teachers and pupils across Scotland and ran a 'Glowing Thursday' discussion. The Review also used the 'Engage for Education' website to reach out to people interested in education but without access to a Glow account. Twenty-four responses were received to its 'Teachers for Tomorrow' discussion by 24 November 2010.

The Review team, with the assistance of the Learning School, took part in a 'Learnover' where young people from eight countries around the world discussed what made a good teacher. The views of young people were also sought through an online survey run on behalf of the Review by Young Scot. This survey received 52 responses from participants aged between 11 and 18 years.

A question of the week was posed on the Review website, highlighting each aspect of the formal call for evidence. The blog feed on these questions was monitored and responses grouped into emerging themes to be pursued. Where respondents did not wish to publish their responses publicly they could e-mail the Review team directly.

Individual meetings

Throughout the period of the Review, Graham Donaldson had an extensive range of one-to-one meetings with individuals who provided valuable insights into different aspects of teacher education.

Analysis of responses

Responses to the call for evidence and the teacher questionnaire were collated and analysed by an independent research company. The results of their analysis can be accessed on the Review website.

Appendix 2: The concept of ‘hub teaching schools’

‘Hub teaching schools’ would give tangible expression to the kind of deeper and stronger partnerships between universities and schools advocated throughout the report. A hub school would have a direct link to a university and national bodies and would offer school-led support to teachers across the community or cluster. They would have met the quality standards for placements recommended in this report, and would be models of outstanding practice in school improvement and teacher education.

Hub teaching schools could make the following contributions to improving the impact of teacher education.

- Provide support for student teachers, leaders and other colleagues in schools by developing new models of partnership, with research and inquiry used to ensure sustained improvements to children’s learning. This would include contributions to the early phase of teacher education, continuing professional development and leadership development. Hub schools should nurture and develop leadership talent from the outset of a teacher’s career, and offer leadership development opportunities within the national pathway.
- Develop a strong and meaningful partnership with a university to support their work. As well as enabling high-quality educational research, the partnership could lead to accreditation of a wider range of career-long learning. Dynamic and innovative forms of teacher CPD could be developed, including collaboration between school and university staff to implement, evaluate and share ways of teaching and learning. These should look to the future and address the ‘wicked issues’ we face in a focused and practical way. Staff working together in this way will model the development of ‘theory through practice’.

Hub teaching schools would provide a context for placing joint appointments made between universities and local authorities. Placing teacher educators within hub schools would enable teachers and researchers to work more closely together, developing research which impacts positively on improving learning. There is potential within the hub teaching schools model to create a new dynamic and partnership between teachers, researchers and those working for local and national agencies.

Potential hub teaching schools would need to be identified based on a range of evidence. This is likely to include:

- a significant track record of successful collaborative relationships with partner schools, which impacts positively on improving learning. This would include the capacity within their staff team to lead learning and provide support and development for other schools;
- successful approaches to improvement through self-evaluation;
- a record of sustained improvement to young people’s achievement; and
- successful engagement with teacher education.

Evaluation of current approaches being developed by Glasgow and Aberdeen Universities could be used as the basis for developing the hub teaching school model in Scotland. Aspects of these experiments are based on a teaching hospital model, and also draw on the National CPD Team's work on 'learning rounds'.

Appendix 3: Members of the Review Team and the Reference Group

Review Team:

Graham Donaldson was assisted in the Review by:

Rebecca Winterstein – Secretary to the Review

Cathy Macaslan – Professional Advisor

Graeme Logan – Professional Advisor

Tracy McGee – PA to Graham Donaldson

Reference Group:

Kirsten Braden – Newly-qualified teacher, Gracemount Primary School

Val Corry – Headteacher, Balfron High School

Audrey Ford – Headteacher, Balbardie Primary School and Bathgate Nursery School

Ken Greer – Executive Director of Education, Fife Council

Lorna Jack – Chief Executive, Law Society of Scotland

Catriona Ann MacDonald – Chartered teacher, University of Aberdeen

Pamela Munn – University of Edinburgh

Teri Orenco – Teacher, All Saints RC Secondary School

Linda Schubert – Headteacher, Drummond Special School

Malcolm Wright – Chief Executive, NHS Education Scotland

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