

# Teacher learning communities and educational change in Scotland: the Highland experience

Mark Priestley<sup>\*a</sup>, Kate Miller<sup>a</sup>, Louise Barrett<sup>b</sup> and Carolyn Wallace<sup>c</sup>

<sup>a</sup>*The Stirling Institute of Education, UK;* <sup>b</sup>*University of the West of Scotland, UK;* <sup>c</sup>*Auburn University, USA*

\*Corresponding author. The Stirling Institute of Education, University of Stirling, Stirling FK9 4LA, UK. Email: m.r.priestley@stir.ac.uk

## Abstract

This article discusses the issue of the sustainability of educational change, in the light of findings from research undertaken in tandem with a development project initiated by a Scottish Education Authority, The Highland Council. The project aimed to promote self and peer assessment practices, as well as other participative pedagogies associated with Scotland's new *Curriculum for Excellence*, in secondary schools. The article reviews some of the key themes that have emerged from recent literature on educational change, before drawing on the project data to address two key issues: the factors that have helped to promote and sustain changes within the schools; and the barriers to innovation experienced in these schools. We conclude the article by identifying a range of considerations that should be taken into account by those seeking to innovate, and we suggest that, while the Highland model for change has enjoyed a degree of success in inculcating change, more needs to be done to address systemic issues, such as the pervasive influence of a narrow attainment agenda in shaping classroom practice.

Key words: curriculum change; formative assessment; teacher networks

# **Teacher learning communities and educational change in**

## **Scotland: the Highland experience**

*Innovation after innovation has been introduced into school after school, but the overwhelming number of them disappear without a fingerprint. (Cuban 1988, p. 86)*

### **Introduction**

This paper addresses the issue of sustainable curriculum change in secondary schools. As has been widely noted in the literature, this is a highly problematic area. A central problem of educational change – the ubiquity of educational innovation (initiatives to bring about change) and the correspondingly weak rate of return in terms of actual changes in the social practices that comprise teaching and learning in schools – raises important questions. For example, why is externally initiated innovation so often unsuccessful in changing schools? What are the barriers that inhibit the successful take up of such innovation in schools? What factors might promote sustainable changes to the practices of schooling?

The paper addresses such questions, reporting upon a particular initiative designed to bring about and sustain change. The context is provided by a set of policies initiated by a Scottish Education Authority, The Highland Council<sup>1</sup>, to promote the development of formative assessment practices (especially peer and self assessment) and to facilitate the introduction of a new national curriculum development, Scotland's *Curriculum for Excellence* (CfE - e.g. Scottish Executive, 2004, 2006; Scottish Government, 2008),

which provides a unified curricular framework from ages 3-18. The research draws upon a number of case studies – teachers taking part in the Highland development project – and data generated from teacher network meetings and focus group sessions. In the paper, we first review some of the relevant educational change literature, before providing an overview of the Highland Council's development programme and the research project. Finally we analyse key themes that have emerged from the research and make suggestions that may inform similar programmes for educational change.

In undertaking this analysis, we do not seek to make judgements about the value of the innovation (or policies) in question; rather we acknowledge that there are espoused aims to implement policy, and our focus therefore rests on the extent to which teachers engage with the policies, and the factors that might facilitate or inhibit the take up of them in particular settings. Nor do we make any judgements about the coherence of policy; indeed we would emphasise that policy should not be seen as monolithic in any sense, and that teachers often face difficult contradictions in their work as a result of conflicting policy imperatives (Giacquinta, 1998; Reeves, 2008). Thus we are viewing and analysing the activity that occurs in schools in response to the espousal of new government policies and the promulgation of programmes by the council that are designed to promote the policies in question. In the light of such conditions, we also acknowledge the inevitability of teacher mediation of policy (Osborn *et al.*, 1997) – the iterative refraction (Supovitz, 2008) that occurs as policy is translated as it migrates from setting to setting – as well as its corollary that traditional methods of curriculum evaluation, based upon notions of fidelity of implementation, should be treated with caution.

## **Educational Change – some key themes**

### *The nature of educational change*

There is an extensive body of empirical and theoretical literature relating to educational change. Many writers (e.g. Lieberman & Miller, 1999; Sarason, 1990; Smyth *et al.*, 1998) have focused on the problem identified in the first paragraph, which we refer to here as the paradox of innovation without change. The first part of this paradox lies in what has been characterised as a policy epidemic (Levin, 1998); an 'unstable ... but apparently unstoppable flood of closely related reform ideas' (Ball, 2008, p. 39). It is a common view that, in recent years, we have witnessed an intensification in the pace and volume of reform efforts, directed from the centre by government bodies. According to Ball (2001, p. 265), 'we have experienced processes of educational reform which have had profound implications for almost all aspects of the professional lives and work of educators'. This tsunami-like onset of innovation has been characterised as a widespread and global phenomenon (e.g. Altrichter, 2000; Helsby & McCullough, 1997; Whitty, *et al.*, 1998). A parallel view in much of the literature is that patterns of schooling are persistent in the face of such efforts. For instance, Spillane (1999, p. 143) describes teaching as a 'technology which appears especially resilient to change'. Swann and Brown (1997) suggest that centrally driven curriculum innovation is notable for its high rate of failure, adding that the fault often lies in a failure to take into account teachers' current practice.

This dichotomy of policy and practice is helpful up to a point, in enabling us to understand the difficulties faced by governmental bodies seeking to

implement policy; however, it is also misleading in certain ways. For a start, change does occur in schools, albeit often slow and incremental (Tyack & Cuban, 1995), trivial and superficial (Elmore, 2004), unsustained (Levin & Fullan, 2008) and with a 'high incidence of unintended consequences' (Gleeson & Knights, 2008). Such change is often not consistent with the aims of the architects of the reform in question, nor does it necessarily represent improvement. Often such changes result from the efforts of practitioners to engage reflexively with simultaneous but competing policy agendas and situational logics that create impossible tensions for them (as noted above), making change difficult (for example in the absence of adequate time or resources), or too risky given the potential professional consequences of failure (Miller *et al.*, 2008; Reeves, 2008). For instance, Howes *et al.* (2005, p. 135) suggest that increasing surveillance has rendered experimentation risky, reducing engagement with reform, and encouraging 'purely instrumental motives for learning and teaching', whilst Biesta (2004) suggests that accountability regimes have eroded responsibility and autonomy amongst those working in education.

Moreover, some types of intended change occur readily in schools. Cuban's (1988) distinction between first and second order changes is helpful. The former are superficial changes to improve efficiency, which are routinely implemented, however it is much more difficult to make second order changes, in effect changing the 'core' of teaching (Elmore, 2004) or the 'grammar of schooling' (Tyack & Cuban, 1995). These writers refer to the axiomatic and universally familiar conceptions and practices of schooling,

such as commonplace notions of knowledge construction and teacher-student roles, and prevailing classroom pedagogies.

A key issue here is that engagement with policies that advocate reform can be superficial (e.g. Eisner, 1996; Wubbels & Poppleton, 1999). Engagement (or its lack of) may be a matter of motivation or will (Spillane, 1999); quite simply, teachers may prefer the security of familiar routines and practices or fail to see the supposed relevance of proposed reforms. In such cases, the tendency to tweak reforms to fit such routines and practices is commonplace and well documented (e.g. Eisner, 1992; Elmore, 2004). Dunn Shiffman *et al.*, 2008) identify two factors that appear to be significant in determining the extent to which engagement occurs: the relevance of a policy, especially whether it addresses a perceived problem; and evidence of its effectiveness, for example in terms of student attainment. The extent and quality of engagement may also be a matter of competence or capacity, including dimensions such as time and resourcing (Elmore, 2004).

The result of poor engagement by teachers may be a trivialisation of the reforms, with concomitant changes in language and superficial structural modifications. Elmore (2004, p. 39) suggests that these issues often emanate from a lack of 'connection between the big ideas and the fine grain of practice' which is, in his view, 'a fundamental precondition for any change in practice'. Elmore's conclusions are supported by empirical evidence from previous change initiatives in Scotland. For example, research into the *Assessment is for Learning* (AifL) policy<sup>2</sup> (e.g. Priestley & Sime, 2005) highlights the tendency for pedagogic strategies to be adopted rather superficially by many

teachers to tick the policy boxes whilst the big underpinning ideas are not fully understood – a situation described by Fullan (1993) as false clarity without change. Scotland's 5-14 Curriculum (SOED, 1992a, b), which was introduced after a lengthy period of consultation, offers a further example of a lack of practitioner engagement with a major national curriculum initiative. Harlen and Malcolm (1994), in an early analysis of 5-14 in primary schools, found that teachers tended not to have read the guidelines. Swann and Brown (1997), writing following implementation, suggested that this top-down reform was met in terms of paperwork, but teachers largely continued with existing pedagogical practice. They found that there was little evidence of internalisation of the ideas promulgated by the new curriculum.

Eisner (1992; 1996) suggests a number of stability factors that explain the apparent lack of change in schooling. These include strongly internalised images of teachers' roles and attachment to familiar routines. Other factors include: the professional isolation of teachers (who often work behind closed doors); poor quality in-service training, often run by people who are removed from the real world of teaching, and who fail to appreciate the complexities of the teaching context; conservative attitudes on the part of parents and students; the distance between policymakers and practitioners; and unhelpful top-down notions of change that position teachers as technicians carrying out someone else's policy.

The research evidence suggests that the challenge in successfully enacting a reform is to move beyond the statements of intent typically represented by curriculum documents, to genuine, meaningful, deep-seated

and long-lasting change in curriculum provision, pedagogy, the role of the teacher, and the place of the learner. To achieve this, a long term strategy of change management is needed; the research literature provides us with clear messages about the ingredients that might contribute to a successful change strategy. These appear to consist of a mixture of top down and bottom up approaches to the management of change, involving coherent policy, good leadership and the situated expertise of practitioners. The ensuing sections of the paper summarise these under a number of broad headings.

### *Impetus*

Impetus can come from various sources. There is little doubt that constructive and coherent policy, supported by good resourcing, is an essential ingredient of change. Hayward *et al.* (2004) noted the importance of Scotland's AifL formative assessment project, which provided guidance for schools without being over-prescriptive. Imants (2002) pointed to the potential of the dissonance provided by external innovation to disturb existing entrenched practices. House and McQuillan (1998) emphasised the importance of links with outside organisations (for example researchers and development officers) in providing such impetus and dissonance. This was a successful feature of AifL (Hayward *et al.*, 2004). Networking is important, providing a source of new ideas (Miller, 1998). Outsiders help in this process as they bring a fresh perspective. Howes *et al* (2005, p. 140) describe how 'teacher learning in such contexts was stimulated by the generation and social interruption of data'; in other words becoming the critical incident that stimulates reflection on practice, potentially changing such practice. The

*American Coalition of Essential Schools* is a good example of a network that does this (Allen & Glickman, 1998).

### *Leadership*

Many writers have stressed the important role of leadership in promoting and sustaining change. Sarason (1990) emphasises the importance of strong leaders. Allen and Glickman (1998) and McLaughlin (1998) point to the role of the head teacher, and similarly Ball (1987) highlights the importance of leaders' commitment to change. Hayward *et al.* (2004) illustrated the difficulties that are caused when strong leadership and support are not present. So what constitutes an effective leader? Much of the literature describes a collegial figure rather than an authoritarian leader. For instance House and McQuillan (1998) suggest vision, an ability to secure funds, commitment and an ability to bring people together (enablement) as hallmarks of a good leader. They suggest that a good leader provides political permission and official sanction for change. Facilitative leadership (trust, democratic structures, autonomy, innovation, risk taking) contributes to teachers' sense of efficacy and involvement (Blase, 1998). Local authority support for initiatives is also important (e.g. training of teachers and managers, and protection from outside pressures that militate against change). However, there is a balance to be achieved here too; according to Fink and Stoll (1998) bureaucratic school districts are less effective at promoting change. This is a conclusion supported by Sarason (1990).

Distributed leadership has been suggested to be powerful lever in developing innovation. Blase (1998) highlights the importance of teachers'

political participation in the decision-making process, a conclusion supported by Smyth *et al.* (1998) and Cowley and Williamson (1998). Priestley and Sime (2005), in their evaluation of a primary school's AifL project, found that the roles of two teachers, who led the assessment working party, had given considerable impetus to the project and helped the staff to own the initiative. Linked to this is teacher autonomy. Many successful reforms have succeeded because they engendered professional trust, and a genuine shift in power to those at the chalk face. Miles (1998), talking about a series of research projects in America, states:

We needed to reject the statement that the user is simply engaged in obedient execution of the instructions on a canned product. Rather the person in a school is working in a constructivist, sense-making mode to bring coherence to a new idea/practice, during the process of recasting it and connecting it to the immediate working context. (p. 49)

He calls for the creation of national/large scale projects that are locally grounded, and which draw upon the local expertise of teachers. Others agree. House and McQuillan (1998) believe that teacher autonomy is crucial to change, and that mandating makes much change impossible as it limits experimentation and creativity. Allen and Glickman (1998), drawing on their work with the League of Professional Schools, firmly believe that teachers must be at the heart of change.

### *Collaboration and dialogue*

Of course teacher autonomy is useless, even unhelpful, if teachers continue to work in isolation, unsupported by ideas and resources. In such cases

existing, safe practice is likely to be adhered to, and often uncritically. Collaboration is important, creating space and time for generative dialogue and peer observation of teaching (Howes *et al.*, 2005; Priestley & Sime, 2005). Siskin (1994) stresses the effectiveness of what she calls 'bonded' departments (with a high degree of collaboration and shared decision-making) in facing challenges in secondary schools. She also highlights the need to extend networks within school. Howes *et al.* (2005) suggest that in many schools (especially large secondary schools) there is a need to weaken such institutional boundaries. Dialogue strengthens local professional communities, and allows change to take account of the prior experiences and achievements of teachers (Ruddock, 1991); when these communities don't exist change is often superficial.

### *Professional development*

A systematic approach to professional inquiry, linked with effective continuing professional development (CPD) has been shown in much of the research literature to be effective in inculcating sustainable change. Reeves and Boreham (2006), in their study of organisational learning in a Scottish Education Authority, articulate clearly how this can take place. Collaboration, dialogue, autonomous decision-making and professional reflection are part of the model for change. Lieberman and Miller (1999, p. 62) describe how strong professional communities are built when principals and staff enhance their resources by reinforcing a climate of support and respect for teachers' work and by pursuing a continuous cycle of innovation, feedback and

redesign in curriculum, instruction and assessment'. According to House and McQuillan (1998),

[teachers'] beliefs and attitudes about teaching are deeply affected when they experience and reflect upon their own growth: that is, when they come to understand the impact of an innovation through their own lived experience. In turn, teachers lend a critical degree of meaning and viability to an innovation through their own efforts to make sense of it. (p. 206)

It is worth noting that some researchers (e.g. Miles, 1998) advocate specific training in the management of change. The role of research also needs to be taken into account here. Hammersley (2002) advocates a cognitive resources approach to using research findings, whereby practitioners are aware of findings and use them reflectively to inform practice.

### **Innovation and change in The Highland Council**

Since 2002, schools in Scotland have been faced with a series of curricular and pedagogical innovations that arguably present new and radical visions of schooling. The new *Curriculum for Excellence* has been heralded by its architects as 'one of the most ambitious programmes of educational change ever undertaken in Scotland' (Scottish Government, 2008, p. 8). It is said to build upon earlier programmes of reform, notably AifL (see, for example, Hallam *et al.*, 2004; Hutchinson & Hayward, 2005), which have sought to shift the emphasis in classrooms away from inputs by teachers towards the development of autonomous, self-directed learners. In common with AifL, the new curriculum is claimed to be distinctive in that it explicitly moves away from central prescription of curriculum, towards a model that relies upon

professional capacity to adapt curriculum guidance to meet the needs of local school communities. The Highland Council has been proactive since 2002 in formulating processes for the enactment of these national policies. Highland policy includes the following initiatives:

- An ongoing programme of teacher CPD since 2003 to foster the development of formative assessment. This has involved substantial input from academics and other external trainers. Early CPD tended to focus on strategies for formative assessment (in line with the approach taken by the KOMFAP project in England – see Black *et al.*, 2002), although the programme subsequently expanded to encompass additional topics, for example work on the management of change, and the development of thinking skills.
- There was also an explicit move away from the ‘tips for teachers’ approach inherent in the earlier sessions, with the development of a coordinated model and a set of underpinning principles – *participation, dialogue, engagement* and *learning* (see Figure 1 below). According to the Council, this is a ‘distinctive model of effective learning in the context of Curriculum for Excellence in which the principles and practices of formative assessment are used to help students take greater responsibility for their own learning’ (Highland Council 2008: 2); independent thinking and engagement are to be thus achieved through ‘active classroom participation through dialogue’ (ibid: 3).

**Figure 1 here**

- In parallel to this programme of CPD and the development of the model, a Future Learning and Teaching (FLaT) project<sup>3</sup> was established in 2006. This brought together several clusters of schools to explore ways of developing formative assessment (especially peer and self assessment), guided by the Highland model (see Hayward & Boyd, 2009 for an evaluation of this project).
- Further to the work conducted within the FLaT project, 5 Associated Schools Groups (ASGs) – subject specific teacher networks – were established in 2006-7, bringing together secondary school teachers in the following subjects: English; Mathematics; Modern Foreign Languages; Science; and the Social Subjects (Geography, History, Modern Studies). Each group was coordinated by a subject leader, a practising teacher in the subject in question. These groups produced case studies detailing innovation in formative assessment. During 2007-8, they were to provide the context for our research. At this latter stage, each group was supported by a university researcher, and guided by a clear, but open-ended remit to develop peer and self assessment strategies for the classroom, through the medium of action research projects.

## **Research design**

The research was structured around the following research questions:

1. How does the project facilitate and sustain curriculum change?
2. What are the relationships between teachers' identities, beliefs, and philosophies and the ways they enact curriculum change?

3. What changes in pedagogy and provision have emerged from the project?
4. What factors may be important in sustaining change?

This paper is mainly concerned with addressing the first and fourth questions. It touches upon the types of changes undertaken, if these are relevant to the issue of the sustainability of innovation within the project. Teacher beliefs and the nature of changes to pedagogy are discussed in this paper as and when they impact on the promotion and sustainability of change; however, the second and third research questions are not explicitly addressed here, being the focus of another paper (Wallace & Priestley, forthcoming).

### *Data*

The research was undertaken during the 2007-8 school year, generating data from 3 sources as follows:

- Field notes from meetings of the five ASGs. Most meetings were attended by one or more of the research team
- Detailed notes of the proceedings of two focus group meetings representing volunteer teachers from the five ASGs. Many of the teachers attended both focus group sessions. Dialogue was stimulated using structured discussion activities, and notes and the outputs from activities were taken and used as research data.
- The primary data source was 5 detailed case studies, which were developed from a pool of volunteer teachers (one for each ASG). Data comprised transcripts from semi-structured interviews, notes from observations of teaching and documentation provided by the

participating teachers. The cases were selected to represent a variety of levels of experience. One common factor was enthusiasm for the Highland development project and for the formative assessment strategies being proposed. This focus on teachers who were positive about the innovation, articulating beliefs that were compatible with the proposed changes, would, we believed, provide better insights into the conditions that might underpin lasting classroom change, than would work with teachers who were more sceptical about the changes in question.

While the collaborative partnership with The Highland Council is a matter for public record, the researchers were concerned to protect individual participants. Thus, all references to participating teachers and schools use pseudonyms where applicable. As the backgrounds and prior dispositions of the teachers are significant in shaping their responses to curriculum innovation, a short biography of each is presented below.

### *Participants*

Helen is a teacher of English, with an additional management remit in pupil guidance. She teaches at a small school, drawing from both suburban and rural neighbourhoods. Prior to teaching she worked in tourism and retail management. She enjoyed building long-standing, rather than superficial, relationships with people, and this was reflected in her approach to teaching and moreover had prompted her involvement in the Highland project.

Drew is one of only two mathematics teacher at a small school, serving a geographically isolated town. At the time of the research, he was working towards a Master's qualification, linked to Chartered Teacher status<sup>4</sup>; his interest in formative assessment lay in the use of learning logs. Drew's motivation for being involved in the project stemmed from his desire to transform his own practice, as well as that of his colleagues, which he described as traditional, content-driven mathematics teaching. This teacher has an eclectic personal background and trajectory into teaching, having come to teaching relatively late in life after a varied biography of engineering graduate, hippy, bus driver, parent and boat builder.

Sophie teaches in a small/medium sized school which serves a small town in a rural part of Scotland. Prior to participating in the project, she had taught modern languages for seven years and, like Drew, was working on her Master's degree at the time of the study. She taught both French and German. She considered that her role was not just to teach students a language, but rather to develop them to their full potential as individuals in a holistic sense. A good deal of her teaching was dialogical, with an emphasis on developing self-assessment skills and metacognition in her students.

Vanessa is a science teacher, qualified to teach biology, chemistry, and physics. At the time of the study, she taught chemistry and biology at a rural secondary school. She had 15 years of teaching experience, including 12 years at an urban school in England, prior to moving to Scotland, and had already attained Chartered Teacher status. She was the only one of the case study teachers who chose CfE innovation, numeracy across the curriculum,

as the topic for her action research project, rather than AifL innovation, for example the self and peer assessment approaches that were the focus for other participants.

Fiona, the social subjects teacher, was the least experienced teacher amongst the participants, having only three years of teaching experience at the time of the study. This lack of experience was counter-balanced by her enthusiasm for the project, for collaborative working and by her openness to change in her own practice. Her main teaching subject was modern studies, although she also taught geography and history to junior classes in her school, which was a large secondary (by Highland standards). Fiona's unhappy experience of her own secondary schooling, throughout which she did not feel supported by her teachers, was significant in influencing her approaches to her teaching.

### *Data analysis*

The analysis consisted of interpretive coding of the interview data, supported by the use of the NVIVO qualitative software package. Analysis of data started with initial open coding. In the case of the volunteer teachers, this enabled us to construct five detailed case studies, which extrapolated key themes from the coding. Each provided a biographical description of each teacher and addressed the research questions explicitly. The case studies were subsequently subjected to a cross case analysis, to identify complementary and contradictory themes in the data. This is a deductive/inductive approach, what Charmaz (2000), calls constructivist grounded theory, premised on a relativist epistemology and interpretivist

understanding of subjects' meanings. As such it provides a set of 'flexible heuristic strategies rather than formulaic procedures' (Charmaz 2000, p. 510), where initial categories may be deductively obtained, but where subsequent theory generation is inductive and emerges from the research.

### **Five teachers' experiences of engaging with curriculum change**

We next draw upon the experiences of our case study teachers, exploring in the process how the Highland project facilitates and sustains curriculum change. Inevitably, such discussion also considers the barriers to innovation faced by these teachers.

#### *How did the project promote and sustain change?*

The ASGs were described by one teacher (Helen) as communities for taking forward change. Such communities provided a space for meeting colleagues, sharing ideas, generating ideas through discussion and making and sustaining connections; in particular, they opened up ways for teachers to engage with like-minded teachers and develop new ideas and practices collaboratively, which they then took back to their classrooms and wider school communities. Thus, they may be seen as a source of the 'social interruption' described by Howes *et al.* (2005, p. 140), and mentioned earlier in this paper.

The style of leadership was also considered to be important in terms of how each community developed, and how change was facilitated and sustained through the workings of these groups. At least three of the Highland ASGs were effectively led by subject leaders, and as a consequence

there was significant engagement in these cases with the project aims and strategies. However, in one case, the Social Subjects ASG, strong organised leadership was less evident, and Fiona, the Modern Studies teacher, suggested that this was a source of frustration for participating teachers, and ultimately a reason for disengagement from the project for some.

For at least one of the teachers (Vanessa), it was the dovetailing of her personal beliefs regarding the value of AifL with those of the wider group that provided the key to facilitate and sustain change, reflecting Dunn Schiffman's (2008) insight that the relevance of policy to teachers is a key determinant of its success. Where she was able to connect with other like-minded teachers, and where there was a shared focus in terms of a particular type of change, membership of the group was found to be particularly helpful. Vanessa had done a significant amount of work with a project on literacy in science at her former school, which had resulted in successful teaching and she was now keen to carry out something similar with numeracy. This personal goal of Vanessa's was also advocated by other teachers within the science ASG, who also wanted to work on numeracy in science in accordance with the new CfE learning outcomes and experiences. In response to a question about how the ASG helped her to formulate her ideas about developing numeracy in science, Vanessa stated:

.. where we sat down and talked about whether we were going to look at literacy or numeracy, and talked about strategies and plans, and how we could do that, that was really useful. My plan hasn't stayed the same at all ...  
I never felt that it was very useful because, all I had was some wishy-washy

ideas in my head, and it made them more concrete, and that was really good.

(Interview with Vanessa, 2008)

Thus, the project fostered change in Vanessa's setting, by offering a fillip in terms of a collaborative legitimation for her aspirations and collegially constructed cognitive resources for taking these aspirations forward.

The mathematics teacher, Drew used the Highland Project as a way of talking and thinking about his own professional development in relation to the policy initiatives of CfE and AiFL. He was already on a trajectory towards chartered teacher status and looking for ways of linking his own existing ideas about teaching and learning to the organizational context of his department and his school, and to wider policy initiatives. He wanted to improve his job satisfaction from a purely personal perspective, and saw a good deal of congruence between his personal aspirations and recent policies. For him, the dissonance lay in an incongruence between his views and those of colleagues in his school. He therefore found participation in the ASG to be rewarding, as it gave him access to other teachers, many of who shared his values towards education to a greater or lesser degree. He found membership of the ASG to be useful for his own personal teaching practice, both as a source of ideas and as moral support for his work within school. Through these channels he seemed to have grown more confident in his use of AiFL techniques.

The ASGs were also identified as being useful in providing a space for reflection on practice, action research and sense making. For instance, the English teacher Helen described how the project has required her to think

about how the ideas expressed in CfE policy documentation, such as giving students responsibility for their own learning, actually translate into classroom practice and, as she hopes, enhance the students' classroom experiences. This particular teacher also found the project useful for providing a collaborative space to look at a range of research and reflect on it in relation to her own students.

So it is really that, being involved in that sort of project where in a wider sense there is a context for it. You're not just doing this in your classroom, but you've got a wider context of people trying out similar things. Hopefully, there will be some useful feedback as well about what's effective, what's working, and people's perceptions of it too. (Interview with Helen, 2008)

Nevertheless, Helen also commented on some of the limitations of the approach in this respect. She maintained that while useful professional dialogue has taken place at face-to-face meetings, she believed that the English community of enquiry would have been strengthened by greater use of email and the virtual learning environment (VLE), established to facilitate networking outwith the ASG meetings. Helen suggests that teachers may feel they do not have time to engage with online discussion or they may simply be unaccustomed to using a web-based medium for professional dialogue. This conclusion is supported by the fact that some of the teachers in the Modern Languages ASG made use of email as a way of communicating in between meetings, despite being unwilling to engage with the VLE; it seems as if a barrier here lay in the work involved in mastering an unfamiliar ICT interface.

We have suggested above that the links with the ASGs provide benefits for the participating teachers in terms of stimulating thinking about learning and teaching, as a source of cognitive ideas and as a boost to confidence. Another benefit appears to lie in the status of the participating teachers within their own schools. For instance, Helen believes that her involvement in the ASG has enhanced her identity within the school. She states that because she has been involved in the ASG, including during the previous 2006-7 session, she is seen as someone who gets involved; people therefore think of her name when they are planning projects and come to her for advice. According to Helen, her head teacher regards her involvement as beneficial for the school, and this makes Helen conscious that her project is not simply a personal undertaking, but should be disseminated more widely across the school.

In general, the teachers all suggested that their involvement in the project had changed their approaches to teaching, although it must be borne in mind that the project should be seen as nudging these teachers in directions towards which they already had sympathies, or providing legitimisation for pre-existing dispositions, rather than in terms of a complete 'Road to Damascus' conversion.

I've been teaching at this school for 3-4 years, and I've done peer assessment, but I've never - and I've given feedback from peer results - but I have never got the kids to analyze other kids work, this is the first time I've done that ... So, if it wasn't for this project, I probably wouldn't be doing it either. (Interview with Sophie, 2008)

The importance of underlying beliefs must be stressed. Sophie, who stated, 'I'm obviously inspired by AifL', provides a telling example of this. Her beliefs about the power of self/peer assessment for language learning were reflected in an observed lesson, where she led a class analysis of reading mistakes. After prompting year four pupils to answer reading questions in French with practice materials from the national exam, she demonstrated the thinking behind how such answers would be marked by a teacher. Pupils were then paired and marked each other's papers in a peer assessment exercise. Following this exercise, the pupils, still working in pairs, analysed the reasons for their mistakes using a guide that Sophie had prepared. Finally, she ended the class with an additional assessment of whether the pupils found the lesson useful and why. During other observed lessons, Sophie similarly engaged pupils in assessing their own French writing (field notes from two site visits, January 2008). The consistency of Sophie's beliefs, as reflected in both interview and classroom observation, suggest that her AifL practices will be long lasting.

In summary, the participating teachers found the project and the ASG space useful in a number of ways, including the availability of space for dialogue, opportunities for networking and sharing ideas, and the facilitation of reflection, especially for sense-making when working out how to translate policy into practice.

### *Barriers to change*

Lest we paint a picture that is too positive, it is worthwhile reflecting upon some aspects of the project that were seen as more problematic. At least one

teacher, Drew, believed that he was swimming against the tide in his department and within his subject area, Mathematics, in general. He described attitudes as being 'stuck' and very resistant to change. He clearly stated his view that there needs to be change in the way curriculum is enacted in schools. In order to maintain and develop the types of reflective learning approaches encouraged by the project, he would need support within his department and school. The different natures of departments and schools and their respective cultures were cited as being important by a number of these teachers, both as enabling change through their collaborative approaches or hindering change through becoming 'stuck' in particular ways of doing things. Thus, for example, while Fiona spoke of the facilitative nature of her department, where there is a culture of professional dialogue, she suggested that in other schools, the environment is less conducive to innovation:

... we've got a very strong department – social subjects department – and that makes a huge difference. Everybody knows what they are doing, and that makes a big difference in that sense. But in my [former] school none of the teachers knew what the other teachers were doing, they didn't talk, and negative stuff, you never got to see them when you needed to see them which I didn't like. But here, everyone is fairly open and pupils can speak to them anytime, and there is a good relation between staff as well. That makes a difference. (Interview with Fiona, 2008)

Another of the teachers cited different barriers to the promotion of change within his department.

I am motivated to improve my practice because I feel myself stuck in a department that is very much stuck ...[we] have been so successful in what we have previously been asked to do, which was convey content and then achieve exam success, that there is no incentive to change. (Interview with Drew, 2008)

Moreover, Drew expressed a view that changes in school practices and cultures in turn demand changes in the expectations that emanate from the structures and cultures of the wider policymaking community, and from wider expectations on the behalf of parents, employers, and universities, and other external agents.

Well, are the other factors in the equation going to change? Are the exams going to change? Are the parents going to have different expectations? Are the employers going to have different expectations? Are the universities going to...these are the people who help shape the way the education system is at the moment. And if you put them all together, it's like a megalith. (Interview with Drew, 2008)

His view was that change needs to extend beyond schools to encompass the whole of assessment and curriculum within the Scottish education system. In a focus group, a number of teachers further expanded upon some of these (and other) external obstacles to sustaining change. They suggested that the learning outcomes of the new curriculum are not articulated in a cross-curricular way – this was seen as an obstacle to the way in which the curriculum could be enacted in a cross-curricular fashion, as the way that subjects have been set up in their own disciplines and departments might militate against the sharing of outcomes and learning activities. Her Majesty's

Inspectorate of Education (HMIE) and the assessment quango, Scottish Qualifications Authority (SQA), were also identified as threats to teachers' aspirations to change practice, although the nature of this threat was not made explicit by the teachers in the focus groups. However, the teachers did clearly articulate a tension between the attainment-based culture of Scottish secondary schooling and a 'new' culture that values the quality of teaching and learning. The exam system and overloaded content-based curriculum were identified as major features of this culture; arguably the new Scottish Curriculum for Excellence will address these issues.

Finally the nature of CPD was discussed within one of the focus groups, being widely considered to be fundamental to the development of the new initiatives. These teachers suggested that teachers need to be given more say over how the CPD is organized so that it is useful and relevant, and not simply something that is done to teachers as part of a deficit model of training. There was a general feeling that teachers need to be trusted more and given more control over their own professional development and over the way that their students are assessed. The views of these teachers should be seen as powerful messages to those who frame and enact policy in the Scottish education system.

## **Conclusion**

This concluding section of the paper seeks to extrapolate from the data the factors that were identified to be significant in the successful enactment of the Highland project, both through the medium of the ASGs and within the day to day environment of their schools. These link back strongly to the key

ingredients or themes identified in the first part of the paper, and we believe that our research both supports and extends some of these earlier insights. We start from the assumption here, reported by participating teachers, that the Highland project has been relatively successful at engaging a sizeable group of teachers with what, to them, are new ideas and strategies for learning and teaching. At the heart of this has been a genuinely active engagement by teachers in making sense of and enacting policy, providing in Elmore's (2004, p. 39) terms a 'connection between the big ideas and the fine grain of practice' and a making of policy relevant to those with the responsibility for its enactment at a classroom level. The data suggest various factors that may contribute to this sense of active engagement, thus aiding the success of a professional development/educational change initiative of this nature.

- *Ongoing opportunities for teachers to meet outside of school in a semi-formal manner with colleagues to discuss professional issues such as pedagogy are important.* The views expressed by the participants in our project suggest that a clear and coherent structure and agenda for these meetings, together with a clearly identifiable leader and clear channels of communication, are instrumental in their success. Such channels could include email circulation lists and web-based discussion forums (with repositories for resources), although these latter appear to be dependent on a critical mass of users for their ongoing success.
- *Time set aside in or outside of school for collaboration, dialogue and to disseminate ideas, supported by appropriate resources is necessary for teachers to make sense of, develop and translate policy in their own*

*working contexts*. This seemed to be a deficit factor for many of the participating teachers, for example Fiona reporting on the lack of permeation of the Highland model into her school. All of the teachers suggested that additional time and resources would significantly enhance their efforts in engaging with AifL and CfE.

- *There is a need for accessible research findings and other cognitive resources, including coherent policy documents.* In the case of this project, such resources were provided by the researchers attached to the ASGs, through authority-wide CPD, and via the case studies that emerged from the FLaT project and the previous phase of the ASGs. These resources highlighted the opportunities and challenges encountered by colleagues within the Highland region, and constituted a powerful means of encouraging other teachers to introduce changes to their practice.
- *Senior management support for experimentation and a culture of professional inquiry provides significant boost to teachers' ability to innovate.* Some of the teachers commented favourably on supportive and facilitative management that provided official permission (and encouragement) for experimentation with the Highland model, in accord with the literature noted earlier, which emphasises the important role of such management.
- *Publicity for successful innovation provides encouragement for other teachers.* The publication by the Highland Council of formative assessment case studies engendered enthusiasm for the new methods, providing both official sanction and a source of ideas. By highlighting the benefits of such approaches, such publicity does much to overcome

objections to innovation that are rooted in suspicion of change. We have already noted the suggestion (Dunn Shiffman *et al.*, 2008) that the success of an innovation is to some extent dependent upon its perceived effectiveness. This is supported by our data, for example, one teacher, Helen, remarking that developing her practice makes her teaching more interesting, not just for the students, but for her too. She suggested that emphasising this point could be a way of encouraging other teachers to become engaged in change.

- *Small changes can change the classroom climate which then may lead to bigger changes.* In many cases, the apparent success of small scale experimentation, underpinned by the 'big ideas' provided by the Highland model, provided further impetus to experiment and innovate. This finding is, of course, in line with earlier research (e.g. Imants, 2002).
- *The role of the Highland Education Officer<sup>5</sup> provided a major source of impetus.* This role, and especially the energetic and visionary approach adopted by the particular incumbent at the time of the research, played a significant part in generating and sharing knowledge about what people were trying in their schools, bringing people together to share ideas and experiences, providing a structure for professional development and acting as a source of legitimation for teachers' activities in school.

This research suggests that Highland Council has created a successful approach to educational change and teacher development through its initiation and support of the ASG groups, as well as through its promotion of teacher experimentation and feedback. In some ways, our findings do not shed significant new light on terrain that has been well travelled in previous

research, pointing clearly to many of the key ingredients that we developed at some length from the literature in the first part of the paper: themes relating to leadership, teacher autonomy and engagement, sources of impetus and support for innovation, and the importance of co-constructing meaning through dialogue.

Nevertheless, our research points to the importance of considering these ingredients, not as isolated factors that can be controlled by the implementation of various strategies on the part of individual teachers, schools or policy makers, but rather as interacting parts. This demands that we consider the process of change in a more complex relational manner than is often the case, analysing how these ingredients come together in their particular enactments in specific settings. Of course, this is not generally a possibility for policymakers, situated at a distance from these settings, and instead requires a more active agential role for teachers. Our research provides just such an example of how contemporary forms of curriculum, with their renewed emphasis on teachers as agents of change and the importance of school-based curriculum development, might be put into practice by local administrators and policy makers. As such, this has implications for the implementation of *Curriculum for Excellence* more widely across Scotland, and indeed for school-based curriculum development more generally. Moreover, the research strongly suggests that for change to be sustained, it is necessary to address the wider social, cultural and policy environment within which the teachers are operating and to look more closely at how these interact with the dynamics of the classroom and school environments in which

the curriculum enactments are carried out. Further research is needed to illuminate these issues.

## Acknowledgements

We wish to acknowledge and thank the following people for their valuable support for the research that has underpinned this paper, and especially for their enthusiastic participation in the project: Kevin Logan, the Highland Council Education Officer with responsibility for the teacher networks; and the teachers who volunteered their time for the case study research and focus groups. We also wish to thank Val Drew for her insightful comments about earlier drafts of the paper.

## References

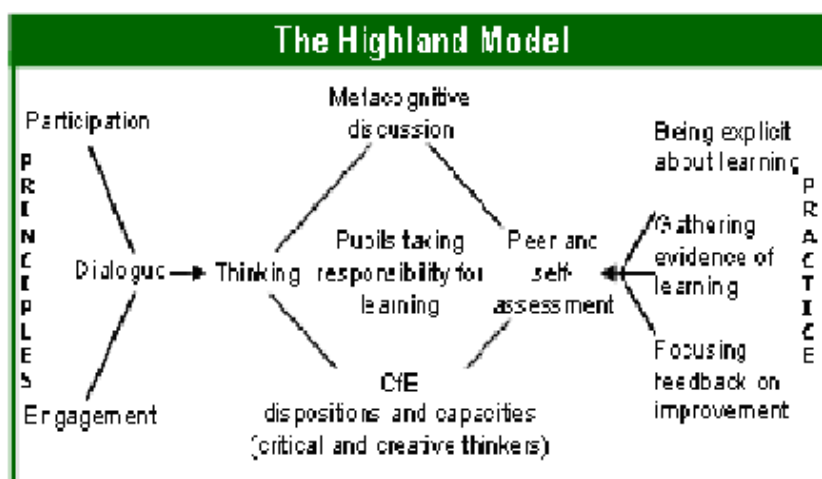
- Allen, L. & Glickman, C.D. (1998) Restructuring and Renewal: capturing the power of democracy, in A. Hargreaves, A. Lieberman, M. Fullan & D. Hopkins (Eds), *The International Handbook of Educational Change, Part One* (London, Kluwer Academic Publishers).
- Altrichter, H. (2000) Introduction, in H. Altrichter & J. Elliott (Eds), *Images of Educational Change* (Buckingham, Open University Press).
- Ball, S.J. (1987) *The micropolitics of the school: towards a theory of school organization* (London, Methuen).
- Ball, S.J. (2001) 'You've been NERFed!' Dumbing down the academy: National Educational Research Forum: 'a national consultation paper': a brief and bilious response, *Journal of Education Policy*, 16(3), 265-268.
- Ball, S.J. (2008) *The Education Debate* (Bristol, The Policy Press).
- Biesta, G.J.J. (2004) Education, accountability, and the ethical demand; can the democratic potential of accountability be regained, *Educational Theory*, 54(3), 233--250.
- Black, P., Harrison, C., Lee, C., Marshall, B. & Wiliam, D. (2002) *Working inside the black box: assessment for learning in the classroom* (London, Department of Education and Professional Studies, King's College London)
- Blase, J. (1998) The Micropolitics of Educational Change, in A. Hargreaves, A. Lieberman, M. Fullan & D. Hopkins (Eds.), *The International Handbook of Educational Change, Part One* (London, Kluwer Academic Publishers).
- Charmaz, K. (2000) Grounded Theory: objectivist and constructivist methods, in N.K. Denzin & Y. Lincoln (Eds) *Handbook of Qualitative Research* (London, Sage Publications).
- Cowley, T. & Williamson, J. (1998) A recipe for success? Localised implementation of a (flexible) National Curriculum, *The Curriculum Journal*, 9(1), 79-94.
- Cuban, L. (1988) Constancy and change in schools (1880s to the present), in P.W. Jackson (Ed), *Contributing to Educational Change: perspectives on policy and practice* (Berkeley, McCutchan).

- Dunn Schiffman, C., Riggan, M., Massell, D., Goldwasser, M. & Anderson, J. (2008) Channelling Adaptation: the role of design in enactment patterns, in J.A. Supovitz & E.H. Weinbaum (Eds), *The Implementation gap: understanding reform in high schools* (New York, Teachers College Press).
- Eisner, E.W. (1992) Educational reform and the ecology of schooling, *Teachers College Record*, 93(4), 610-626.
- Eisner, E.W. (1996) *Curriculum and Cognition Reconsidered* (London, Paul Chapman Publishing).
- Elmore, R.F. (2004) *School Reform from the Inside Out: policy, practice, performance* (Cambridge, Mass., Harvard Education Press).
- Fink, D. & Stoll, L. (1998) Educational Change: Easier Said than Done, in A. Hargreaves, A. Lieberman, M. Fullan & D. Hopkins (Eds), *The International Handbook of Educational Change, Part One*, (London, Kluwer Academic Publishers).
- Fullan, M. (1993) *Change Forces: probing the depths of educational reform* (London: The Falmer Press)
- Giacquinta, J.B. (1998) Seduced and Abandoned: some lasting conclusions about planned change from the Cambire School Study, in A. Hargreaves, A. Lieberman, M. Fullan & D. Hopkins (Eds), *The International Handbook of Educational Change, Part One*, (London, Kluwer Academic Publishers).
- Gleeson, D. & Knights, D. (2008) Reluctant Leaders: an analysis of middle managers' perceptions of leadership in Further Education in England, *Leadership*, 4(1), 49-72.
- Hallam, S., Kirton, A., Peffers, J., Robertson, P. & Stobart, G. (2004) *Evaluation of Project 1 of the Assessment is for Learning Development Programme: Support for Professional Practice in Formative Assessment. Final Report*. Available online at: <http://www.scotland.gov.uk/library5/education/ep1aldps-00.asp> (accessed 24 July 2009).
- Hammersley, M. (2002) *Educational research, policymaking and practice* (London, Paul Chapman Publishing).
- Harlen, W. & Malcolm, H. (1994) Putting the curriculum and assessment guidelines in place in Scottish Primary Schools, *The Curriculum Journal*, 5(1), 55-67.
- Hayward, L., Priestley, M. & Young, M. (2004) Ruffling the calm of the ocean floor: merging practice, policy and research in assessment in Scotland, *Oxford Review of Education*, 30(3), 397-416.
- Hayward, L. & Boyd, B.(2009) *Building Teacher Learning Communities* (Dingwall, The Highland Council).
- Helsby, G. & McCulloch, G. (1997) Introduction: teachers and the national curriculum, in G. Helsby & G. McCulloch (Eds) *Teachers and the National Curriculum* (London, Cassell).
- Highland Council (2008) *Embedding A Curriculum for Excellence in the Classroom: A Highland CPD Journey 2004-2008* (Dingwall, The Highland Council).
- House, E. & McQuillan, P.J. (1998) Three perspectives on school reform, in A. Hargreaves, A. Lieberman, M. Fullan & D. Hopkins (Eds), *The*

- International Handbook of Educational Change, Part One* (London, Kluwer Academic Publishers).
- Howes, A., Booth, T., Dyson, A. & Frankham, J. (2005) Teacher learning and the development of inclusive practices and policies: framing the context, *Research Papers in Education*, 20(2), 133-48.
- Hutchinson, C. & Hayward, L. (2005) The journey so far: assessment for learning in Scotland, *The Curriculum Journal*, 16(2), 225-248.
- Imants, J. (2002) Restructuring schools as a context for teacher learning, *International Journal of Educational Research*, 37(8), 715–732.
- Levin B. (1998) An Epidemic of Education Policy: (what) can we learn from each other?, *Comparative Education*, 34(2), 131-141.
- Levin, B. & Fullan, M. (2008) Learning about system renewal, *Educational Management Leadership & Leadership*, 36(2), 289-303.
- Lieberman, A. & Miller, L. (1999). *Teachers: transforming their world and their work* (New York, Teachers College Press).
- LTScotland (2009) Future Learning and teaching Programme. Available online at: <http://staging.ltscotland.org.uk/lts/flat/aboutflat.asp> (accessed 7 October 2009).
- McLaughlin, M.W. (1998) Listening and learning from the field: tales of policy implementation and situated practice, in A. Hargreaves, A. Lieberman, M. Fullan & D. Hopkins (Eds), *The International Handbook of Educational Change, Part One* (London, Kluwer Academic Publishers).
- Miles, M. (1998) Finding the keys to school change: a 40-year odyssey, in A. Hargreaves, A. Lieberman, M. Fullan & D. Hopkins (Eds), *The International Handbook of Educational Change, Part One* (London, Kluwer Academic Publishers).
- Miller, L. (1998) Redefining Teachers, Reculturing Schools: connections, commitments and challenges, in A. Hargreaves, A. Lieberman, M. Fullan & D. Hopkins (Eds), *The International Handbook of Educational Change, Part One* (London, Kluwer Academic Publishers).
- Miller, K., Edwards, R. & Priestley, M. (in press) Levels and equivalence in credit and qualifications frameworks: contrasting the prescribed and enacted curriculum in school and college, *Research Papers in Education*.
- Osborn, M., Croll, P., Broadfoot, P., Pollard, A., McNess, E. & Triggs, P. (1997) Policy into practice and practice into policy: creative mediation in the primary classroom, in G. Helsby & G. McCulloch (Eds) *Teachers and the National Curriculum* (London, Cassell).
- Priestley, M. & Sime, D. (2005) Formative assessment for all: a whole school approach to pedagogic change, *The Curriculum Journal*, 16(4), 479-492.
- Reeves, J. (2008). Between a rock and a hard place? A Curriculum for Excellence and the Quality Initiative in Scottish schools, *Scottish Educational Review*, 40(2), 6-16.
- Reeves, J. & Boreham, N. (2006) What's in a vision? Introducing an Organisational Learning Strategy in a Local Authority's Education Service, *Oxford Review of Education*, 32(4), 467-486
- Ruddock, J. (1991) *Innovation and Change* (Buckingham, Open University Press).

- Sarason, S.B. (1990) *The Predictable Failure of Educational Reform* (Oxford, Jossey-Bass Publishers).
- Scottish Executive (2004) *A Curriculum for Excellence: The Curriculum Review Group* (Edinburgh, Scottish Executive).
- Scottish Executive (2006) *A Curriculum for Excellence: progress and proposals* (Edinburgh, Scottish Executive).
- Scottish Government (2008) *Building the Curriculum 3: a framework for learning and teaching* (Edinburgh, Scottish Government).
- Siskin, L.S. (1994) *Realms of Knowledge: academic departments in secondary schools* (London, The Falmer Press).
- Smyth, J., McInerney, P. Hattam, R. & Lawson, M. (1998) Teacher learning: the way out of the school restructuring miasma, *International Journal of Leadership in Education*, 1(2), 95-109.
- SOED (1992a) *5-14 Guidelines - Structure and Balance of the Curriculum* (Edinburgh, SOED).
- SOED (1992b) *5-14 Guide for Teachers and Managers - Structure and Balance of the Curriculum* (Edinburgh, SOED).
- Spillane, J. (1999) External reform efforts and teachers' initiatives to reconstruct their practice: the mediating role of teachers' zones of enactment, *Journal of Curriculum Studies*, 31(2), 143-175.
- Supovitz, J.A. (2008) Implementation as Iterative Refraction, in J.A. Supovitz & E.H. Weinbaum (Eds), *The Implementation gap: understanding reform in high schools* (New York, Teachers College Press).
- Swann, J. & Brown, S. (1997) The implementation of a national curriculum and teachers' classroom thinking, *Research papers in Education: Policy and Practice*, 12(1), 91-114.
- Tyack, D. & Cuban, L. (1995) *Tinkering toward utopia: a century of public school reform* (Cambridge, Harvard University Press).
- Wallace, C. & Priestley, M. (forthcoming) Teacher Beliefs and the Mediation of Curriculum Innovation in Scotland: A Socio-cultural Perspective on Professional Development and Change
- Whitty, G., Power, S. & Halpin, D. (1998) *Devolution and Choice in Education: The School, the State and the Market* (Buckingham, Open University Press).
- Wubbels, T. & Poppleton, P. (1999) Knowledge about change and its effects on teachers. In M. Lang, J. Olson, H. Hansen & W. Bunder (Eds), *Changing Schools/Changing Practices: perspectives on educational reform and teacher professionalism* (Louvain, Garant).

Figure 1 – The Highland Model



---

<sup>1</sup> Scottish schools and other local educational services are administered through local Education Authorities, which play a significant role in mediating national policy and operating quality assurance systems.

<sup>2</sup> AifL has been hailed as a successful national intervention to articulate holistic systems for assessment in Scottish schools. It is most closely associated with the formative assessment strategies promulgated by England's *Assessment for Learning* initiatives (see for example, Black *et al.*, 2002), but also incorporated a range of other developments, including personal development planning and local moderation of assessment.

<sup>3</sup> The FLAT initiative made available government funding to local authorities and schools to support pedagogic innovation, which would 'enrich young people's learning experiences; promote attainment and achievement; tackle barriers to inclusion; create a learning and teaching environment that is sensitive to individual needs' (LTScotland, 2009).

<sup>4</sup> Chartered Teacher status is a Scottish initiative to enhance the teaching practice of experienced teachers. It is linked to a post-graduate qualification, which may be extended to Master's level. There is a strong focus in such study on professional practice through the medium of professional enquiry/action research.

<sup>5</sup> This seconded post was established to promote formative assessment through the AifL policy, and latterly to support schools in the development of the new *Curriculum for Excellence*.