Chapter 7 More Than Good Intentions: Policy and Assessment for Learning in Scotland

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Abstract The major challenge in Scotland's long history of well-intentioned policy has always been implementation, in particular the realisation of a constructive and effective relationship across research, policy, and practice. Scottish experience provides a basis for radical changes, of potential international significance, in assessment policies to ensure better practical orientation to learning. The chapter considers critically the relationship between assessment policy rhetoric in the Curriculum for Excellence (for students aged 3-15) and provision of practical guidance and professional learning opportunities. It draws on understanding of what matters in the process of change gained from previous Scottish experience in the Assessment is for Learning programme. Evidence from a study of early Curriculum for Excellence assessment practice, Assessment at Transition, shows how the design, findings, and conduct of that project have led to some collaborative action by researchers, policymakers, and practitioners to make effective implementation of key assessment policy intentions more likely, despite the inadequacy of the support originally provided. The argument then moves beyond steps to help the implementation of current Scottish policy by proposing a number of major changes to the purposes and content of typical 'traditional' assessment policies and practices not only in Scotland but in many countries.

7.1 Implementing Change in the Assessment Is for Learning (AifL) Programme

From 2002, an Assessment is for Learning (AifL) programme was developed and implemented across the Scottish Education system. The approach strongly promoted the idea that the crucial purpose of *all* assessment of individual learners, formative and summative, and of *all* evaluation of educational provision (e.g., in school self-evaluation, in analysis of external examination results, and in inspections) was

E. Spencer (⋈) · L. Hayward University of Glasgow, Glasgow, UK e-mail: ernest.spencer@glasgow.ac.uk essentially to provide evidence about and to contribute to the improvement of learning (Scottish Government 2002, Circular 02). One key aim was the development across the system of assessment for formative purposes during ongoing classwork. This was integrated in a cyclic process with planning, learning/teaching, and identifying next steps for individual learners and for groups/classes. Clear learning aims and success criteria, feedback, reflection, and self- and peer assessment were strongly promoted as contributing to learning to learn, to engagement, and to self-confidence. This broad 'formative assessment' aspect came to be called in practice assessment for learning (AfL) and incorporated the idea of assessment as learning, involving self-and peer-assessment activities through which students come to develop reflection and independence as learners.

The programme was sophisticated. It aimed to enable and support teachers as they developed their own professional understanding of effective assessment integral to the process of learning (Hayward 2007). It drew on research about assessment, certainly, such as that reported in Black and Wiliam (1998a, b), Black et al. (2002, 2003), The Assessment Reform Group (2002), Harlen and Deakin Crick (2002, 2003). It was also informed by emerging research on transformational change. Senge and Scharmer (2001), in a meta-analysis of public and private organisations which were perceived to have transformed their practices, emphasized three key ideas that should underpin organisational change:

- a shared set of guiding principles across all participating communities—for the AifL programme, that meant shared principles across research, policy, and practice communities
- collaborative projects that relate to people's professional lives, offering real contexts for participants to deepen their understanding of principles and ideas and of what these might mean for their practice
- all parts of the system working together—for example, in the Scottish system, the guiding principles of assessment for learning should be endorsed and promoted by national and local government and by Her Majesty's Inspectors of Education (HMIE) during school inspections (Hutchinson and Hayward 2005), as well as by head teachers and teachers.

Consistent with the research findings on transformational change, the development was led by Scottish Government staff with significant expertise in assessment and sought to build innovative, supportive communities with clear practical tasks. Each Local Authority identified clusters of schools (primary and secondary) where staff discussed how they were going to explore the issue and produced a plan for what they intended to do. Scottish Government gave a small grant to each school to use as it wished to support its activities. Most used it to buy time for teachers to work together, to read the research evidence, to talk through ideas, and to learn from one another's practice. Teachers involved were also invited to network meetings, which offered opportunities to discuss ideas with others from across Scotland and from schools in England where similar approaches had been or were being developed.

The support network for teachers was bolstered by other networks: one of local authority co-coordinators who each had responsibility for the assessment for learning activities in their own area; one of development officers, working for the national curriculum body, Learning and Teaching Scotland, who offered practical support to schools and local authorities; and a higher education research and development network, with representatives from across Scotland (including the authors of this chapter), whose tasks included ensuring that the programme was informed by research evidence and that initial teacher education and wider professional development programmes took account of the assessment for learning development. The possible risks to the success of assessment for learning were themselves the subject of research while the programme was being implemented. The Scottish Government-appointed Managing Committee of the programme (of which Louise Hayward was a member) commissioned research from the Higher Education network and from consultants, who gathered evidence about particular aspects of the development. These research activities provided feedback to all the various participants in the programme as it was being taken forward. There were parents' and students' networks, meeting in open forums across the country. Quality assurance personnel (HMIE and local authority officers) were actively involved in promoting and evaluating what was happening. At national level there were meetings with the Association of Directors of Education in Scotland (ADES) and a network of civil servants to promote internal consistency and continuity in national policies.

7.1.1 Assessment for Learning Success

Complex as the support structure for the AifL development was, it seemed to work. The overlapping networks ensured that no one group had total responsibility for supporting another and teachers had several groups to whom they could look for support. Good evidence emerged that the programme did enable many teachers to develop pedagogy incorporating assessment for learning and that many learners benefited. The evaluations carried out by the Institute of Education, University of London (Hallam et al. 2004), and the University of Strathclyde (Condie et al. 2005) were very positive. Teachers found that being involved in the development was professionally rewarding and that it made very positive differences to students' commitment to learning and the quality of their work. They were delighted to be able to focus on what mattered, learning and teaching. A common theme in their reports was that, in working through what its principles meant for them in planning and leading work in their classrooms, they had developed a deep understanding of how to use assessment to support children's learning (Hayward et al. 2005). The assessment for learning initiative had such an impact that it was described in the press as 'a quiet revolution in Scottish Education' (Henderson 2005).

Evidence is limited about the extent to which effective assessment for learning became and continues to be deeply embedded in classrooms across the country after the end of the formal development period. As Curriculum for Excellence was being developed and implemented, the national inspection system (now conducted by Education Scotland) has focused principally on evaluating curriculum development and the effectiveness of schools' internal self-evaluation and improvement processes. Inspection reports have provided little information about the nature and quality of assessment. However, some evidence is available from a small number of research activities. These include:

- An evaluation of Strategies for Early Arithmetical Learning (SEAL) used in years 1–4 of a small sample of primary schools in a local authority area. The East Lothian Council SEAL report (Hayward et al. 2014) described the development of young students' self-awareness as learners through stimulation of thinking, teachers' response to it, and student collaboration in the early stages of primary education. It identified a range of *interacting* factors in the learning and teaching experiences as crucial to success—not any one 'magic bullet.'
- The Highland Project, a Scottish Government-funded study in primary schools (Hayward 2012) which highlighted the significance in effective assessment for learning of 'student voice' and 'the learner's perspective.'
- A study (Hayward et al. 2009) commissioned by the Scottish Qualifications Authority (SQA) which described teachers in several Highland Council secondary schools enabling students to make very successful formative use of the formal published criteria for Intermediate or Standard Grade examinations at age 16 and Higher examinations at age 17 in a range of subjects.
- The Assessment at Transition (AaT) project (Hayward et al. 2012) commissioned by the Scottish Government in the early stages of the practical implementation of Curriculum for Excellence. The focus here was assessment to provide evidence about learning and progression at the point when students pass from primary education into secondary, at age 11–12. Both teachers and students interviewed made frequent references to assessment for learning principles and activities.

Though these four research studies involved assessment for learning activities which varied to some extent according to the age of the students and the subject contexts, there were evident common factors for success. There was a cycle of learning/teaching which incorporated collaborative enquiry by the learners and integrated assessment for learning as a constantly occurring activity, ensuring secure, shared understanding before moving on to next steps. The students were active, motivated learners, involved in collaboration with the teacher in co-regulation of learning and in clarification/agreement of aims and criteria. They explained their own thinking, engaged regularly in teacher-student dialogue and self- and peer assessment, and gave the teacher feedback about their own learning experiences which could be beneficial to the future learning of others.

Hayward and Spencer (2014), drawing on Black and Wiliam (2009), have argued that it is possible—and desirable—to think of assessment for learning as essentially consisting of three recurring generic activities: stimulating learners to

think about the topic, the curricular learning they are pursuing; finding out what and how they are thinking (often through dialogue); and identifying with them next steps for new challenges, more effective thinking, fuller, more certain grasp of what is being learned. Assessment for learning thus contributes significantly to psychological development and independent learning: the quality of interactive feedback and reflection is a critical feature in learning activity and assessment for learning develops the orientations, abilities, and confidence characteristic of independent and collaborative learning. This conception of assessment for learning is very much in keeping with what Marshall and Drummond (2006) called the 'spirit of assessment for learning,' as opposed to the mere use of 'techniques' such as 'traffic lighting.' It is heartening that the four research studies mentioned do indicate that, at least in localised contexts, assessment for learning matching the broad characteristics set out by Hayward and Spencer (2014) and by Marshall and Drummond (2006) has been going on across the whole range of education, from early primary school to the senior phase of secondary.

There was, however, another kind of important finding from Assessment at Transition. The students interviewed were asked which change in current assessment practice they most wanted to see; almost all said they wanted more one-to-one conversation with their teacher about their learning. This answer suggests that there may be less of the essential dialogue actually happening than one might have thought from the many references to assessment for learning in the interviews. Even during the development of assessment for learning in the original programme from 2002, which was evaluated as generally successful (Hallam et al. 2004; Condie et al. 2005), there were indications that some teachers tended to interpret assessment for learning as simplistic use of certain 'techniques,' such as 'traffic lighting' or 'thumbs up/down,' while others engaged students in much more sophisticated thinking and dialogue about their learning (Hayward et al. 2005). Overall, the Curriculum for Excellence practical reality is probably complex: a continuum from deep understanding of assessment for learning, curriculum and pedagogy, and the role of self-and peer assessment and agency in these, to superficial use of techniques and/or, as suggested by the students interviewed in the AaT project, provision of too little or unhelpful feedback to learners.

7.1.2 Successful Implementation of Change

The AifL development provided a rich context for deepening understanding of critical factors in successful change programmes. Hayward et al. (2005) reported on a study involving interviews with teachers, head teachers, and local authority coordinators to identify the characteristics of the programme which had facilitated its success, and Hayward and Spencer (2010) drew on this report to reflect and comment on important generic factors that contribute to successful change programmes. The central ideas emerging from this commentary relate to three concepts of integrity, all of which are crucial to successful action:

Educational Integrity Teachers and head teachers believed that involvement in assessment for learning had led them to a much sharper focus on learning and learners than on teaching and getting through the curriculum. They reported shifts in power relationships in their classrooms, with learners having far greater responsibility. They recognised that they themselves had developed greater concern for understanding what and how students were thinking and building from there. They saw these changes as manifestly valuable for students' education.

Personal and Professional Integrity Teachers had been attracted by the methodology of assessment for learning as professionals. They felt that their views mattered as it moved forward, that they were consulted as an essential part of the process. They welcomed opportunities to talk through problems and ways of doing things, both with teaching colleagues from their own school and elsewhere and with assessment experts supporting the development. Although many admitted to initial concerns about losing control, they enjoyed the more relaxed atmosphere in their classrooms and their own learning—some expressed regret that they had only now come to realise the effectiveness of assessment for learning after many years' experience in the classroom. Many referred to the challenge of what they were trying to do but spoke very enthusiastically of their enjoyment at seeing students learn more effectively.

Systemic Integrity It was clear that systemic integrity was important to the commitment of all those who took part in the AifL development. Head teachers and teachers involved reported explicitly that knowing their local authority, HMIE (the inspectors), and government were supportive of the programme gave them confidence to change.

Hayward and Spencer (2010) also argue that the complexity of the process of change is actually itself a desirable characteristic and that attempts to make it 'manageable' often in effect oversimplify it and damage and reduce the richness of its effects. They therefore advise against 'traditional' development models such as 'pilot and roll out' or (unsupported) 'cascade.' Things that matter in the process of change matter to *all* participants in *every* phase of the development: it is therefore essential that the kinds of support, collaboration, and professional learning opportunities which benefit those participating in the early stages of a new development should be sustained and built into the normal professional life of all those who take part at later stages.

Before leaving this account of the assessment for learning development it is worth noting that both evaluations of it (Hallam et al. 2004; Condie et al. 2005), as well as identifying positive features, highlighted factors with potential to constrain its success. The potentially negative factors remain problematic ten years later in the context of Curriculum for Excellence. A particular challenge was the relationship between formative assessment and the demands of summative assessment. Practical concerns were raised about finding time for teachers to deepen their professional understanding of the assessment system, to allow them to engage with principles and ideas, and to work collaboratively to explore how best to put these into practice. Provision of time was perceived to be related to the availability of funding for teacher cover, and this too was identified as a concern. Finally, both evaluations

highlighted the potential danger of bureaucracy dominating learning and teaching and problems emerging from the polarisation of assessment purposes in secondary schools, most evident in the senior years, where high stakes external examinations were perceived to dominate practice.

7.2 Assessment in Curriculum for Excellence

The Curriculum for Excellence seeks to provide a coherent curriculum from ages 3–18 (Scottish Government 2008a, b, c, d, 2009). 3–18 experience is divided into two phases, Broad General Education to age 15 and the Senior Phase, involving pursuit of qualifications through assessments provided and/or verified and accredited by the Scottish Qualifications Authority. This chapter addresses only issues relating to the 3–15 phase.

The development and implementation of Curriculum for Excellence began formally with the Education Minister's acceptance of initial proposals for principles and purposes (Scottish Executive 2004) and schools began to implement it in 2009. Critical questions arise about the extent to which the whole process has conformed to the 'Integrity' model described by Hayward and Spencer and, in particular, the extent to which the preexisting improved assessment for learning has been incorporated into Curriculum for Excellence practice.

7.2.1 Curriculum for Excellence Policy

Curriculum for Excellence policy aims to promote outcomes essentially similar to those of the earlier AifL programme—breadth, challenge, and application in learning, increased emphasis on process and skills, rather than memorisation of content, and teacher professionalism. Key purposes are to encourage students to become 'Successful Learners,' 'Confident Individuals,' 'Effective Contributors,' and 'Responsible Citizens.'

Curriculum progression for young people 3–15 is described in Experiences and Outcomes in eight curricular areas across five levels, early, first, second, third, and fourth (which offers possibilities for choice for those who have completed the Experiences and Outcomes at the third level). Experiences and Outcomes also exist at the various levels for three cross-curricular areas, literacy, numeracy, and health and wellbeing 'across learning' (Scottish Government 2009). The levels descriptors are not highly specific about objectives: their deliberate broadness is partly intended to encourage teachers to develop their professionalism in deciding how to pursue and achieve the curriculum aims in various ways. The level descriptors are also intended to be not strictly age related: some Experiences and Outcomes have the same wording across two or three levels.

From the beginning policy documentation (Scottish Executive 2004) emphasized individuals' needs and entitlements and warned against unnecessary bureaucracy, tight specification of curricular outcomes and standards, and overly complex systems. The Building the Curriculum (BtC) series of documents, 1-4, published by the Scottish Government in 2008 (covering curriculum areas, active learning in the early years, learning and teaching, and skills for learning, life, and work) consistently referred to the need to ensure that both curriculum and assessment focused on learning and were in alignment. BtC5: A Framework for Assessment (Scottish Government 2011) and its three additional supporting documents argue the same case. They also specify that teachers should make summative assessments of students' attainment of the Curriculum for Excellence levels; that they should report this attainment to parents/guardians; and that students should be enabled to develop their own profiles of successful learning at Primary 7 (age 11) and Secondary 3 (age 14): these personal profiles are intended to record achievements, whether within school or elsewhere, that students themselves value highly. Policy also emphasizes strongly the importance of moderation of the quality of assessment activities and judgements.

7.2.2 Assessment Issues in Curriculum for Excellence

The Assessment at Transition (AaT) Report (Hayward et al. 2012) suggested that there were major challenges in putting key aspects of policy into practice in the early stages of the implementation of the Curriculum for Excellence. A range of issues relating to assessment of learning, described below, may well have been, and may still be, constraining teachers' and learners' opportunities to engage in valuable assessment for learning activities because they are very time consuming. They may also have been leading to erroneous evaluations of both the progress of individual learners and the overall quality of achievement in a class or school because they suggest significant weaknesses in the quality of assessment of learning which was taking place.

There was evidence that teachers needed support to be able to think of all the factors contributing to very effective learning as part of one coherent process. These factors include curriculum planning, design of learning tasks, agreement on success criteria, making judgements about whether young people's work meets the criteria, helping learners to reflect on their own learning and to identify next steps and, on occasion, summarising success and progress, and moderating judgements about these.

In some local authorities, the demand for frequent overall summative (level) judgements—three or four times per year, with the ostensibly good intention of monitoring individual students' progress—dominated assessment activities and actually militated against teachers' developing professional understanding of curriculum, pedagogy, and assessment as a coherent whole. A few local authorities had divided each level into three sublevels (Developing, Consolidating, Secure) and

required progress records using these subcategories. Teachers were consistently very uncomfortable with the requirement to make levels judgements, with or without the sublevels. They argued that they had no confidence in their own understanding of standards or of appropriate summative assessment processes. They could find in the national documentation no clear definition or exemplification of standards and no helpful guidance on how to proceed to make a level judgement or to record progress in other ways. Some tried to use the level as a kind of grade, evaluating individual pieces of work as, e.g., 1st or 2nd Level, rather than making a 'best fit' judgement about achievement of the level based on a body of evidence.

Despite the absence of national testing from the Curriculum for Excellence 3–15 Phase, almost all local authorities perceive a continuing 'requirement' for accountability to local politicians in terms of 'hard evidence': hence the demand on teachers to provide regular summative assessment of levels achievement, even though there were wide variations and probably little validity in the methods used. The perceived need for 'hard data' has led to widespread use by local authorities (including those also gathering teachers' levels judgements information) of standardised tests to provide 'accountability evidence.' Standardised test results are also often used to 'track' students' progress. These tests are regarded as appropriate for these purposes despite the fact that they typically test only aspects of literacy and numeracy and are not designed to assess the specified outcomes of Curriculum for Excellence.

One other factor emerged as significant from the Assessment at Transition discussions with staff in secondary schools. Although at that point the new National Qualifications arrangements for the Senior Phase (15–18) had not yet been published, it was clear that many secondary teachers were awaiting sight of these arrangements before deciding firmly how to structure and teach the curriculum and assess progress in the first three years of secondary education (12–15). National Qualifications exert a powerful influence on learning/teaching in secondary schools.

7.3 Curriculum (and Assessment) for Excellence and the Process of Change

A major challenge for Curriculum for Excellence was to merge the new ideas about curriculum and learning processes with the preexisting successful assessment for learning practice. A member of the Board responsible for the design and implementation of the Curriculum for Excellence Programme has suggested that the Board seems to have *assumed* there would be a natural integration of effective assessment for learning, rather than actually planning for it (Hayward 2015). Another kind of policy mistake (made in a different forum) led to a public declaration that the Curriculum for Excellence Experiences and Outcomes (Es and Os) represent *assessment* outcomes and constitute the standards statements for the various attainment levels. In fact, the writers of the Es and Os did not intend this use

of them—they were meant as curricular guidance only—and, in many cases, they make poor standards statements (for example, some have identical wording across two or even three levels). The policy documents for assessment were not developed in conjunction with the curricular thinking and the publication of the curriculum guidance: they emerged later, almost as an afterthought. This delay might be interpreted as a strategy designed to ensure that teachers thought about the curriculum before thinking about assessment. It could also be argued, however, that it separated thinking about curriculum and assessment. The assessment guidance was typically couched in general exhortatory terms about the desirability of good assessment rather than providing specific guidance on steps to achieve it. The absence of advice on *how* to achieve what the policy advocated was particularly noticeable in relation to the processes of assessment of learning—deciding on and recording learners' success in achieving the standards (or levels) of work expected.

In these circumstances it would seem that we cannot say that all three types of 'Integrity' elaborated by Hayward and Spencer (2010) are fully apparent in the implementation of Curriculum for Excellence and of assessment within it. A case can be made that many aspects of the Curriculum for Excellence initiative and its development are indeed manifestly educationally valuable; and it is true that the programme explicitly seeks to encourage and promote teachers' individual professionalism and their teamwork. However, interviews with teachers in the Assessment at Transition project showed that in general they did not feel that the implementation of the programme sought to engage them professionally in the way that some previous developments, including AifL, had done. Many felt that they were being required to make assessment of learning judgements about level attainment without appropriate professional guidance and support and that they were simply being told to use their professionalism without the opportunity to develop it appropriately. They felt that the kind of support they needed to develop successfully the professionalism the Curriculum for Excellence explicitly aims to promote had been misjudged. They did not have a sense that the whole system policymakers, the two agencies with assessment responsibilities, inspectors, local authorities, head teachers—was in fact working effectively together to make assessment in Curriculum for Excellence highly successful.

7.4 Current Action: Research, Policy, and Practice in Collaboration

The AaT project was designed to improve the alignment of research, policy, and practice *during implementation of the new curriculum*: it aimed (1) to find ways of helping schools to implement policy and (2) to use research (both a comprehensive literature review, which underpinned the project, and findings on schools' and local authorities' practice) to inform and influence desirable policy changes through interaction with Scottish Government and local policymakers in seminars.

Members of the research team have been interacting with national and local policymakers since the completion of the project. Both policy and practice communities involved in the study emphasized the importance of a *limited number* of *sharply focussed* action proposals. The four key areas where action has been stimulated are:

- Developing teacher professionalism in bringing together curriculum and assessment
- 2. Managing learning and progression at transition
- 3. Building trust in professional judgement
- 4. Ensuring intelligent accountability in Curriculum for Excellence.

The researchers argued that, to relieve pressure on teachers and students of too much summative assessment and create space for effective assessment for learning, levels judgements should be *infrequent* (three times in the Broad General Education phase, 3–15). Drawing on a wide range of research evidence, including Morrison et al. (1994) and MacPhail and Halbert (2010), they proposed that the most valid means of determining level achievement was to use a 'best fit' approach, considering whether a body of classwork matched the description of key curricular learning and the quality of work required, which would be described and exemplified. Social moderation arrangements for discussion of judgements were also proposed. The AaT report also highlighted some key principles for accountability arrangements. It emphasized the need to focus more on the quality of educational experiences and less on test results, in order to ensure consistency with Curriculum for Excellence aspirations and to avoid negative washback on classroom activities.

The project findings were directly addressed by Education Scotland's (2013) publication for schools and teachers Assessing Progress and Achievement of Levels in the 3-15 Broad General Education. A national initiative, established to support the development of policy, used research evidence on assessment analysed in the AaT literature review to offer guidance on using professional judgement to make decisions about achievement of levels. Work from Australia (Wyatt-Smith et al. 2010; Colbert et al. 2012) and New Zealand (Crooks et al. 2009) was particularly influential. The initiative identified significant aspects of learning (SALs) in curricular areas, developed, through working groups of teachers and subject experts and progression frameworks (rubrics) for these SALs. It has begun to bring together annotated exemplification of student work to illustrate attainment of a curricular level in terms of these rubrics. This was a major recommendation of the AaT research in response to teachers' very explicit requests for such support. Further, drawing on evidence from both the review of literature and from practice which had been developing in the schools and local authorities, the initiative proposed a process of professional learning through learning communities. In the first phase of this development of professional learning, groups of teachers have been meeting to discuss the exemplification being produced at national level, feed back their own views on it, and enhance their abilities to judge accurately the achievement of a level. A second phase has followed in which teachers bring evidence from their classrooms to discuss their own professional judgements with colleagues.

In addition, the research team has interacted with key local authority staff around the country, inviting them to reflect on the validity, usefulness, and advantages or disadvantages of current arrangements in their areas for gathering assessment information from schools.

The 'direction of travel' represented by this action in the period 2012–2015 is helpful. Significant adjustments are being made to policy and implementation processes as a result of research commissioned by the policymakers, which was designed to provide useful feedback to the Curriculum for Excellence programme as it was put into practice in the varying and dynamic contexts of local authorities and schools. Sustained support will be necessary to enable these adjustments to have the desired effects.

7.5 More Radical Steps?

The Scottish experience raises some more significant issues than just how to make the best of an existing flawed local system. We propose for international consideration potentially radical changes to traditional ways of thinking about and conducting assessment in primary and early secondary education.

7.5.1 Curriculum, Pedagogy, and Assessment as a Coherent Whole

The unsatisfactory nature of (at least) the processes by which Scottish teachers are making summative judgements about learners' progression and overall achievements reinforces the importance of taking forward thinking about curricular aims and about assessment simultaneously. To enable learning, teachers need clear ideas about progression routes, understanding of effective pedagogical steps to stimulate learners' thinking and action, and familiarity with means of gathering evidence about their learning and acting on it to promote further learning. An intention to develop teachers' professionalism in these areas requires provision of significant time to enable them to interact collaboratively. This need has, of course, a significant financial implication in terms of staff numbers. Guidance is needed about action to take to ensure the coherence of curriculum, pedagogy, and assessment, as is mediation of this guidance (by people with appropriate expertise) such that teachers' professional thinking and their interactions are stimulated and can influence national thinking, without just imposing a wholly centralised, top-down system. This kind of approach can work effectively only when researchers, policymakers, and practitioners really do come together in a synergy that optimises their various strengths. It seems clear that in the development or modification of curricula there is need for such integrated action to optimise pedagogy and assessment as well as learning aims.

7.5.2 Focus on Assessment for Formative Purposes

Perhaps the most crucial question is this: is there just too much demand for summative assessment of learning in primary and early secondary education?

We have indicated above the local pressures on teachers to provide summative information frequently. We have also shown something of the complex process necessary if teachers are to make summative assessments validly and dependably, involving the application of a 'best fit' model to a portfolio of work and a good deal of discussion with colleagues in moderation meetings. It is common practice in many countries for teachers to write reports on every student's progress for parents/guardians and for the information of the next teacher at least once a year, which may indicate an overall grade or level and provide brief comment and an orientation to next steps. In some administrations (as in Scotland) there may be in addition a need to help students prepare profiles of their personal achievements or to contribute to the reporting process themselves. If the essential purpose of assessment is to promote rich learning and to enable both students and teachers to build effectively on prior learning (at transition from primary to secondary education or transition from one class to another), we should be asking ourselves whether we really need summative assessment of levels performance—or standardised test results—in primary and early secondary education. Accountability arrangements could be refocused on the quality of learning rather than test results, or reshaped so that information about systemic performance comes solely from national monitoring surveys.

7.5.3 Prioritising Assessment Activities

Taking account of the complexity and time-consuming nature of summative assessment processes and of reporting, the AaT research team raised the question whether it is actually *feasible* for primary school teachers to conduct valid and reliable assessment of levels achievement or to write detailed descriptions of progress across the whole range of curriculum areas. There are major time-consuming assessment activities that serve little purpose and should be ended. Recognising that time is inevitably limited, the team argued that it is important to *prioritise* assessment activities, a process that entails stopping doing some things in order to make it possible to do other, more desirable, things well.

A particularly significant finding of the project gives support to the idea that some quite radical prioritisation could enable teachers to focus all their assessment activities very directly on helping students to develop as learners. Secondary teachers told the researchers that they did not use detailed reports sent by primary teachers to help them decide what and how to teach new students. They said they used any indication they received of the level a student had achieved only to give them a very rough idea of her/his current abilities—for example, to place her/him in

a high or low set for mathematics. What they did find very useful as a basis for building on students' prior learning was (a) information about previous curriculum coverage; (b) one-to-one or small group discussions with the students about what they had learned before they reached the secondary school; and (c) good professional interaction with their primary teacher colleagues about curriculum planning and ways of teaching. Interestingly, these views of the teachers harmonised well with the students' main concern, that they wanted more dialogue with their teachers, and with research highlighting the importance of discussion with students at the time of transition to secondary school, such as that reported in Doddington et al. (1999), and Demetriou et al. (2000).

There is a strong case for simplifying policy messages on assessment of progress and achievements in primary and early secondary education in the following ways.

7.5.3.1 Focus on the Learner

- Keep the focus sharply on the learner and on ensuring her/his progression.
- Continue to develop assessment for learning and learner independence strongly.
- Promote the idea of reporting to parents only through discussions based on manageable annotated portfolios of student work, with very broad categories of comment about overall progress—this would require time and organisation, but significant time currently devoted to report writing would be saved.

7.5.3.2 Change Expectations at Transitions

In order to be able to build on students' prior experience, 'receiving' teachers should

- Have clear curriculum coverage information.
- Discuss previous work with students—e.g., focusing on manageable folios of work
- Engage actively in a professional learning community with colleagues, including those in the 'other' sector (primary/secondary).

7.5.3.3 No Overall Grades or Levels

- Abandon attempts to make overall grade or level judgements about individual students.
- Ensure the curricular progression pathways are clearly defined and assess students' success in achieving key learning specified within them.

7.5.3.4 National Monitoring of System-Wide Standards of Achievement

- Develop well-designed national monitoring assessments to be administered on a sampling basis to provide information about system-wide standards of achievement.
- Such arrangements can be designed to ensure that, over an agreed period of time, all schools participate and receive individual feedback (as in Finland).

Radical changes of this type could be successfully introduced only with very full discussion with all stakeholders in the system. There would need to be a process of engagement with school managers, teachers, students, and parents to demonstrate the gains which could ensue in terms of dialogue about learning. There would also be a need to negotiate a very different use of teachers' time over an academic year, involving more meetings with parents and students in place of time committed to report writing.

We believe that changes such as those we have outlined would benefit Scottish education. We invite readers elsewhere to consider whether comparable prioritisation and streamlining of their country's use of assessment would similarly benefit students.

The relationship amongst research, policy, and practice is complex. It is all too easy for well-intentioned policy to result in practices that are very different from original aspirations. Bringing policy and practice into closer alignment will take more than good intentions. Research projects, such as those cited in this chapter, have a role to play in that process. Using research to explore the interrelationship of policy and practice as an evidence base to inform future action can help to realign policy aspirations and practice in schools and classrooms. Action based on evidence is the only way to build education systems that are truly learning systems.

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