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Intention, interpretation and implementation: some paradoxes of Assessment for Learning across educational contexts

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Abstract

The language of Formative Assessment, sometimes referred to as *Assessment for Learning*, is becoming ubiquitous within international educational discourse. Despite this, levels of common understanding might be considered questionable since the concept appears to have been subject to many different interpretations and to have resulted in varying implementations. The reason for this ambiguity lies partly in the way that the language of Formative Assessment or Assessment *for* Learning has increasingly been applied beyond the context of classroom practice. This development represents a shifting focus for assessment, moving from the purpose of explaining how interactions around learning in the classroom can enhance individual development to considerations involving larger scale, system wide accountability purposes. This shift appears to contradict the original spirit of Assessment for Learning (AfL) and has led to a blurring of the formative and summative boundaries of assessment.

This paper presents some empirical data from an ongoing University of Cambridge International Examinations (CIE) research project to suggest that this issue is not just of philosophical concern but has also a practical impact in the classroom. The paper considers the variety of ways that the language of AfL is used by teachers in differing international contexts and suggests that a conflict of purpose might underlie such variations. The paper goes on to suggest the need for further research addressing some of the fundamental paradoxes within assessment discourse caused by this conflation of purposes and identifies areas for further research and investigation.

Formative Assessment (FA): original intentions and recent concerns

Evidence from research allows us to build a better understanding of the processes involved in assessment. It also allows us the opportunity to reflect on the functions of assessment and how different elements interact within a single education system. Debates about the relationship between Formative Assessment (FA), sometimes referred to as assessment *for* learning (AfL), and Summative Assessment (SA), or assessment *of* learning, represent just such a case. One of the key issues for consideration surrounds the nature of successful FA practices and the preconditions for their implementation. Throughout this paper, to avoid confusion, we will use the term FA rather than AfL since the former is often considered to be an overarching concept which includes the latter.

One of the first hurdles to the successful implementation of FA might perhaps lie, ironically, in the power of its own arguments, with the terminology being widely used but potentially poorly understood. This phenomenon might relate to theories which suggest that common language can be open to differential interpretations in different contexts. Scholars of cultural psychology (cf. Smith, 1995) argue that meaning making is inextricably linked to the social context in which such interpretations are based. Black and Wiliam's 1998 review into the outcomes related to FA practices has been pervasive within education, having considerable influence from policy level through to school-based practices across varying national and international contexts. The seemingly ubiquitous nature of FA-related language within educational discourse might in fact mask a poor shared understanding of the underlying meaning around the phraseology of FA (particularly in relation to SA). This is emphasised by the confusion and conflation of related terms and ideas such as 'school based assessment', 'continuous assessment' etc. at all levels of the educational debate. Such a phenomena might have partially contributed to the findings of the 2005 review of the UK National Primary and Secondary initiatives in which the government inspectorate reported '*Assessment for learning is the least successful aspect of [primary] teaching*' and '*Assessment for learning is unsatisfactory in a quarter of [secondary] schools*' (OFSTED, 2005a, 2005b).

It is clear that the arguments supporting FA practices are supported by a rich vein of theoretical and research literature. Amongst other things, this literature suggests that in comparison to SA, FA practices can help to illuminate goal and assessment criteria awareness (Sadler, 1996, 1989; Gagne, 1977; Crooks, 2001; Biggs, 1998; Brookhart, 2001), support task mediation (Tang and Anderson, 1996; Herman et al., 1997; Ross et al., 1998; Aikenhead, 1997), and potentially influence positive student self-efficacy and motivation (Bandura, 1997; Harlen, 2005; Tunstall, 2003). What is sometimes less clearly articulated are the specific contextual confines within which FA can operate successfully. Pryor and Torrance (1998), citing earlier work (Torrance, 1993) warn that '*claims for the potentially positive impact of formative feedback on learning seem to overstretch the empirical evidence, particularly when interrogated in terms of the realities of busy classrooms, rather than highly resourced research and development studies*' (Pryor and Torrance, 1998, 152). This critique of some aspects of FA theorisation uses a sociological perspective to ensure that the classroom context, being the essential site of formative assessment episodes, is not overlooked.

Problems of conflated assessment purposes

Where assessment is expected to satisfy both summative and formative functions within the same arena a number of tensions can be seen to emerge. These tensions centre on a number of important areas; questioning whether the focus of education should be on the system or the individual, whether learning should be teacher or student focused, and whether assessment should primarily summarise learning outcomes or inform future learning. These tensions can lead the original ideals of AfL being hijacked to other purposes and uses.

1. Centralisation or individualisation?

Another potential hurdle for the implementation of FA in its purest sense is the notion that it conflicts with the concept of centralised standards that dominate national education systems. A report by the OECD (2005) suggests that one barrier to the adoption of FA practices is the common perception that the level of uniformity implied by expectations of national standards contradicts the model of individualised learning that underlies FA. This analysis contrasts with recent moves in the UK where FA has been used to support the personalised learning agenda. Hopkins (2004) identifies 'personalisation' as a key strand in the Government's ongoing public service reform, highlighting the pressure now being placed on the historical association of a universal coverage with standardised provision, and goes on to argue that '*the most powerful lever we can pull at the moment to achieve personalised learning is assessment for learning*' (2004, p.10).

This tension is reflected in recent work in the highly devolved UK post-compulsory sector which suggests powerfully that '*accountability targets lead teachers to adapt their teaching to the narrow requirements of the system rather than the needs of the learners, and thus directly affect teachers' ideas and practices in relation to formative assessment*' (Derrick and Gawn, 2007, p.1). Such tensions are also found in other contexts. Kirton et al (2007) list some of the practical constraints described by Scottish primary school teachers engaged in a formative assessment pilot project. Whilst introducing new pedagogic approaches to increase the discursive and interactive aspects of lessons teachers were concerned that the general pace of learning was reduced, that aspects of the curriculum were not covered, and that the concrete monitoring evidence demanded by school inspectorate bodies would not be available.

This final point articulates one of the major areas of tension between the formative and summative purposes of assessment. There are consequences for assessment when it provides data for accountability measures. The requirement that assessment outcomes are robust and reliable does not sit easily with the flexible and responsive qualities of assessment prioritised by FA. Establishing good levels of reliability between teachers within the same establishment or across different settings require support in order to calibrate judgements. Standardised assessment forms that are centrally marked by examiners can obviate this problem.

2. Teacher or student centred learning?

One of the more powerful ways of conceptualising the relationship between FA and SA is to consider the underlying purposes of assessment, and in turn to consider the importance of the wider context within which those using the assessment methods are engaged. Harlen (2005) points out that FA cannot be differentiated from SA purely on the grounds of the type or form of the assessment tool being used to gather evidence of learning. She argues that the essential root of the difference lies in the purpose to which such assessment tools are put; to help learning, or to summarise learning. The consequences of overlooking this distinction can be very important since it can lead to the inappropriate use of assessment data for unintended purposes.

Another crucially important consideration appears to be that a lack of clarity about the objectives of assessment will lead to a narrowing of assessment practice. Harlen states unequivocally '*If we fuse, or confuse, formative and summative purposes, experience strongly suggests that 'good assessment' will mean good assessment of learning, not for learning* (2005: 220). A sociological perspective would reaffirm this conclusion since it helps to consider the norms which inform teachers' behaviours and interpretations. For example, in systems where there is a strong emphasis on using student assessment data for school and teacher accountability purposes it might be possible to explain why SA practices can dominate FA practices. Again, recent work in the UK suggests that there is widespread misunderstanding amongst teachers and school leaders that teaching activities can be characterised as being either 'formative' or 'summative'.

In post-compulsory education there is a tendency to see formative assessment as a series of teacher-led techniques for feedback, diagnosis and review, where the techniques and associated paperwork are often used solely to 'track' students towards their summative targets (Ecclestone, 2002; Torrance et al, 2005). Pryor and Torrance (1998) also elicit powerful evidence of the classroom dynamics that can influence the way that assessment works within the classroom. They use the context of UK early years education to suggest that the aim of FA to empower learners can be undermined by the classroom context where the teacher dominates a discourse which is largely based on managing and organising the class and assessing their work within a heavily prescribed curriculum.

The need to be more clear and precise about the purposes of formative assessment is confirmed by research which shows that the same assessment activities or methods can lead to very different kinds of learning in different contexts. Marshall and Drummond (2006) use the terms 'spirit' and 'letter' of formative assessment to capture how it is practiced in the classroom. They suggest that the 'spirit' is found where there is a 'high organisation based on ideas', where the underlying principle is to promote pupil autonomy and where this doesn't involve the application of 'rigid technique'. On the other hand, the 'letter' of FA is practised where FA 'rules' or techniques are employed which leave unchallenged the essential elements of teacher-centred/led assessment procedures which aim to transmit knowledge and skills.

Outside the Western contexts, where most of the debate and research has been focussed, subtle differences might alter the dynamic interplay between SA and FA practices. Many have cited the various Dharmic or Confucian influences on education (Kam 1984, Kam-cheung 1998) as the basis for this difference, although the real reasons are likely to involve wider cultural and social phenomena, e.g. parental expectations from their own school experiences or a highly competitive examination system etc. In many of these educational traditions ideas such as student-centred learning and formative assessment as proposed by Black and Wiliam are not readily integrated into traditional classroom practice and can be damaging to educational outcomes if they do not take into account the realities of the challenges of implementation (O'Sullivan 2004). Some would go further to argue, either on anti-

colonial grounds or on the back of the performance of Indian and Chinese minorities, that these educational ideas have no place in these contexts. It should be emphasised that the socio-economic makeup of these ethnic groups as minorities within Western contexts and in Asian contexts is likely to be very different and great care must be taken in extrapolating research findings.

3. *Summarising or informing learning?*

Many Asian countries are grappling with the same educational issues faced in the West, such as engagement and equity of opportunity to achieve, and the solutions might be similar. Formative assessment could be argued still to have a powerful role within all educational traditions, indeed the underlying Asian philosophies and traditions have very strong reflective roots; what is without doubt is that they will have to be adapted to work in harmony with local contexts rather than assuming local contexts will automatically adapt to models developed in the West (Gopinathan 2006). Some of the preconditions that could facilitate such an interaction include; crucial decisions about the appropriate time to give feedback (during the course of study to influence further learning or at the end of a course to quantify achievement); having the same person responsible for using the evidence for both purposes, helping to counteract concerns about reliability and bias; and using detailed criteria on a frequent basis to evaluate ongoing learning. It is worth noting that a number of these preconditions would appear to be less problematic when applied to primary education models which are structured around teachers having prolonged and regular interactions with the same learners.

Roos and Hamilton (2005) draw on theory from communication engineering and cybernetics to argue that the two different forms of assessment (FA and SA) are underpinned by fundamentally different purposes and that these are based, in turn, on deep philosophical differences about the nature of learning. Roos and Hamilton argue that the feedback mechanisms implicit to FA have roots in constructivist views of learning, an assumption that learners are inducted (and induct themselves) into ways of thinking, working and seeing and '*that learned abilities are fostered through mediated learning opportunities*' (2005, 16). On the other hand, Roos and Hamilton argue that SA is based on behaviourist principles, overlapping with Pryor and Torrance's (1998) concept of 'convergent' teacher assessment. Pryor and Torrance describe this assessment form as being '*characterised by adherence to precise planning, the use of methods of recording such as check lists and can-do statements, and an analysis of the interaction of the child and the curriculum from the point of view of the curriculum. It is routinely accomplished by closed or pseudo-open questioning and tasks and results in judgmental or quantitative feedback, often following the Initiation-Response-Feedback pattern of standard classroom discourse. The implications of this form of assessment are essentially behaviourist with the intention being to teach or assess the next predetermined thing in a linear or at least a pre-planned progression. It is assessment <u>of the child by the teacher</u>*' (1998, 153). In contrast to this view, Harlen suggests that there is scope for a synergy between summative and formative assessment practices. She argues that this should be based around teachers making use of the same assessment evidence for different purposes.

Illuminating the paradox: messages from a CIE research study

A key concern from the research literature is that the language of FA is interpreted differently in varying contexts due to their differential conditions. In order to explore this issue empirically CIE surveyed teachers and heads of department from an opportunistic sample of 125 international schools who were nominally using formative assessment in their primary or lower secondary programmes.

The survey included a variety of open response questions aimed at probing respondents' understandings of FA, which could then be further analysed by follow up email interviews. Literature suggests that email interviews are a useful tool for eliciting data across some international contexts (Meho 2006).

We received 54 responses (representing a 43% response rate) from participants in 15 countries spanning all continents, stages of economic development and a range of GDP indicators. Of these 54

respondents 35 agreed to follow up email interviews, which are still on-going, to probe their initial answers.

Analysis of these interview data involves a grounded theory approach (Strauss and Corbin, 1990) to inform an iterative analytical process where the researcher identifies emerging themes found within the interview data. If we assume that context is central to respondents' understanding, then these initial findings cannot be generalised; but they do indicate that the issues raised in this paper are very real issues for some classroom practitioners in a wide range of contexts.

When it comes to a shared understanding of the term *assessment for learning*, most respondents could supply a definition that was broadly in line with those given by the originators; although the number of identically phrased definitions and repetitions verbatim from the literature suggest a danger that many respondents are only engaging with the meaning at a superficial level. Some of the responses also showed a clear misconception or unfamiliarity with the term, e.g. "*Assessment for learning is the opposite of assessment of learning*" or "*I am unfamiliar with the phrase*".

When we follow up with questions designed to elicit information about forms of feedback used, to probe whether the respondents have fully engaged with the ideas originally espoused by Wiliam and Black, we start to see greater divergence from a common understanding. Some respondents give responses which suggest that they are using a form of formative assessment that closely links to AfL as originally proposed, e.g. "*Activities with different approaches to detailed feedback, teacher questioning and peer and self-assessment in the light of learning goals and explicit criteria*" or "*We give qualitative or quantitative feedback depending on the aims of the assessment. Teachers may wish to comment on the performance of the student either verbally or in writing in order to show areas of weakness and strengths of the students and drawing students' attention to ways by which they can achieve better results*" and "*A variety of types of feedback are used from notes on paper to verbal comments*". But a lot of respondents report feedback in terms of its impact upon teaching practice and as a summative end of unit activity. Many give feedback in the form of marks and grades, e.g. "*Feedback is given by grades, remarks and marks*". Indeed, in some situations feedback does not appear to be given directly to the learner at all, e.g. "*Feedback is given to parents by recording grades in Report Card*" and "*We give feedback in the form of parent orientation cards*".

The initial responses also show that the results of formative assessment are used for a variety of purposes, highlighting the concern expressed earlier in this paper that the recorded outcomes of AfL could be hijacked for other purposes, "*…the Head uses feedback to identify teaching weaknesses and arrange staff training as necessary and also to monitor progress that is made from one year to the next*" and "*Senior management use it to monitor standards throughout the school over years*". Although this monitoring is not bad *per se*, and could be beneficial, it is contrary to the original aims of FA.

Overall, a majority of the research participants express positive uses of FA, articulated in the following quote "*(the results are used by) Students to reflect on their performance to motivate them, to find their strengths and weaknesses, self evaluation, teachers to improve teaching learning process and to achieve their aims and objectives. Parents to help their children perform better. Management to know the effectiveness of the course selected*".

Discussion
It is useful to balance theory with these research findings since it is possible that a potential paradox might exist within assessment practice. The emerging tensions found within the interview data appear to reflect the pressures of using assessment data for accountability whilst maintaining formative assessment aspirations. Ecclestone and Pryor (2003) describe the diverse assessment systems at play within the different sectors of the UK education system. Their research suggests that the moments when the ambitions of formative assessment are best realised are when teachers and learners have a more

balanced distribution of power. They call this *Divergent Formative Assessment,* where teacher-learner relationships are not actually symmetrical but are dialectically responsive to each other's ideas. They argue that this practice contrasts with *Convergent Formative Assessment,* where teachers manipulate language to control dialogue around learning and suggest that this is one consequence of test-related accountability structures and the high degree of content specification in the UK National Curriculum.

In many national education systems, including many sectors in the West, the role of summative assessment is usually regarded as paramount. The dominance of summative assessment is often reinforced by strong parental pressures which make the direct implementation of many of the proposed models of FA difficult. Whilst this may sound negative it does not mean that FA and SA cannot be successfully integrated into educational systems to both improve outcomes and also to shift educational paradigms. But it does mean that very careful attention has to be paid to the construction of FA methods that work within any social and cultural constraints to add value to the traditional SA. Over time the constraints can be challenged but, in the initial implementation, assessment designers need to be highly aware of the contextual issues.

India, Singapore and Hong Kong are experimenting with such changes, with many other countries being faced with strong pressures to find workable solutions to allow FA and SA to work constructively, suggesting that new models need to be found. Malaysia is looking to introduce its own interpretation of school based assessment as part of far reaching educational reforms (Malaysia Examinations Syndicate 2007).

One of the issues that such reforms will have to engage with is that of teacher confidence and subject competence. Studies have highlighted the need for high teacher effectiveness and subject expertise for FA to be successful. It is possible for formative interactions to be limited or distorted by the level of teacher ability (Sadler 1998, Moreland and Jones 2000). In many contexts it is likely that FA will require a wider skill set than more transmissive teaching paradigms that it seeks to replace.

A pre-requisite is the role of strong and supportive school leadership in managing the interaction of FA and SA. In a school environment where the principal may not have an educational background and monitors pedagogic value in terms of grades, the role of FA is going to be perceived as of lower value, regardless of positive impact upon learning and attainment. In this case SA becomes the overriding metric, reducing the opportunity for early intervention and improved learning. This is likely to impact most upon the achievement of the lower ability range, widening inequity and exacerbating lack of engagement in this group of learners. Education and engagement of all the involved stakeholders is a necessary pre-condition to having FA and SA work together to improve educational outcomes (Mohammed 2006).

It appears that one of the keys to conceptualising the difference between SA and FA entails recognising the purposes that each fulfil. This task is made more complex because educational assessment is carried out in varied and shifting national contexts which sometimes place varying and conflicting demands on the assessment tools. A first stage in discourse about configuring a new relationship between SA and FA requires clear articulation about the expected purposes that any particular system seeks to demand from its assessment. By so doing it is easier to recognise the potentially competing pressures that might exist within a system and which might also undermine the success of assessment tools in attaining any desired outcomes. Research has an important part to play in investigating these varying contexts; not only through looking at the systemic pressures that exist but also by considering the meanings that coalesce around the terminology of FA. For example, research in the devolved UK post-compulsory learning context suggests that practitioners might construe the concept in different ways. This finding also has consequences for practitioners working in diverse international contexts, suggesting the need for cross national research to investigate teachers' and school leaders' understandings of this influential concept.

Conclusions

As with all the responses stated above, we need to be careful to investigate further to clarify the meaning behind them, identify what works and in what circumstances, and the nature of further research that is required. In some cases it is clear that the respondents have a clear and sound grasp of both the principles and practices involved in effective formative assessment but the local context and contradictory pressures placed on the assessments mean they cannot achieve these in the classroom effectively. This is neatly encapsulated by the following quote from a classroom practitioner whose other responses show a deep and clear understanding of the pedagogic theories of FA and a desire to implement them: "*This assessment is always biased assessment. Due to various pressures prevailing in the school environment, teachers are forced to give biased evaluation,*" and elsewhere the same respondent says "*The school does our own tests which are mainly prepared by teachers. But due to little low standard of kids, teachers are in embracing position while preparing tests and forced to give excessive marks*".

The problematic issue of the shared understanding of terminology implicates theory which suggests that research needs to recognise the context in which language users exist since this influences their understanding (e.g. Smith, 1995). Qualitative research methods play an important role in gathering contextual information and the emerging data from this study identifies some of the pressures that influence the debates around assessment within particular contexts. As assessment experts we need to identify these pressures and find ways to encourage effective use of assessment in the classroom even in the presence of these pressures. It is only by further investigation which base assessment and educational theories on an empirical footing and which are '*contextualised in the actual social setting of the classroom*' (Pryor and Torrance, 1998, 171) that we can formulate effective strategies that might work beyond the short term.

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