

Involving Children in their Own Learning: Report of an Action Research Project on Formative Assessment

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In the wake of Paul Black and Dylan Wiliam's 1998 publication, *'Inside the Black Box'*, much work has been done to develop more constructivist approaches to assessment in classrooms which strongly involve children in their learning. Traditionally, assessment procedures have been done *to* children, rather than done *with* them, and have typically done little to help children to open up their learning - instead they tend to rank them in ways which limit their potential from an early age. An action research project was carried out in Belfast, from February - April 2004, involving 13 teachers in 6 schools working with children aged from 4 to 18 years. Training sessions were provided by the author to acquaint the teachers with key research and practical strategies, borrowing principally from the work of Black and Wiliam (1998), and Shirley Clarke (1998; 2001; 2003). The teachers reported rapid shifts in behaviour and culture within their classrooms, and success in terms of learning gains, especially for lower achievers. Children appeared to be happier in their 'new' learning environment, more involved with the learning process, and more motivated, focussed and independent in action.

Introduction

I would like to begin with a short story. There was a boy - we'll call him Jim. Jim began school one day, it came as a bit of a shock but he got used to it in time. It was a place where he did lots of interesting things, and perhaps just one or two things not *quite* so interesting. Jim got lots of encouragement, and lots of feedback from his teacher about his work. She would often say, *'Just do your best, Jim!'* His Mum would often say the same thing to him at home, *'Just do your best Jim, no-one can ask you to do anything more than that!'* But Jim remembered the time when he *had* done his *very* best, and it had turned out to be not quite good enough. *'Is this it?'* the teacher asked kindly, *'surely this isn't your best effort Jim?'* she said smiling. He agreed - what else would he do? If it *was* his best then it would have meant that *he* wasn't good enough, although he knew it to be true from that day, he *wasn't* quite good enough, and he eventually learnt to keep quiet about his work in case he came even closer to being found out. Jim went into hiding.

At other times the teacher would say, *'Come on Jim, you can do it - it's so easy!'* Now that was really scary! If it was so easy, then it was a big risk to even *try* - for what if he failed at the easy things? At first he preferred trying at the hard things - it wasn't so bad to fail at them, but in time he learnt that it was best just not to try very much at all. Over the same period that this happened, he realised that school was not always a nice place

to be – it made him feel small and useless for some of the time, especially when he got compared with the other children in the class. Jim dreaded those days.

Jim learnt how to keep his eyes pointing straight ahead whenever the teacher was asking questions in class, although he didn't often get asked to answer, and if he did, he just started his 'hard thinking look,' until the teacher went to someone else, or she answered the question herself with just a tiny frown. He couldn't think of the answers quickly enough anyway, there was so little time. Jim wasn't so good at remembering lots of facts, though he'd always been really good at working out problems. However, the questions were nearly always about facts, and you had to remember them *instantly* to have a chance of winning.

And then it all changed. Jim got a new teacher who didn't ask him to do his *best* all the time, this teacher just asked him to try to do things *better* – and that was much easier! Life was much simpler when he wasn't expected to be at the top of his game *all* the time. This teacher would usually show him, not just *what* to improve, but *how* to improve it too, and he even got time to carry out the improvements instead of just being expected to do them *some* time. Question times were different too, as the children were given longer to think of good answers, and sometimes they got to discuss them with each other before answering. More of the questions were on problems instead of just facts, so Jim found himself getting to answer some of them. School seemed like a different place, a place where he *belonged*.

Jim's story might evoke a memory or two among readers, either of personal experience or vicariously in their observations of others who have relived it. Most will simply be thankful for the teacher who made the difference for them. We may even recall the name and the face of the one who helped us start school with such confidence and joy, or the one who helped us 'turn the corner' at some later point. As Reineke (1998 1-2) tells us, "*Teaching touches the mind, but assessment touches the heart*", and we neglect the emotional consequences of the experiences of children such as Jim at our peril. Jim provides us with an object lesson in the benefits claimed for formative assessment, in improving the learning experience for children (and their teachers).

Key Research

Black and William (1998) claim in conclusion to their seminal research analysis that where assessment is formative, significant gains in learning result, with greater engagement, self-confidence and a shift in role for both learner and teacher. They cite the increased emphasis on standards as the strategy used by several countries to bring about improvements in school effectiveness. However, if schools are to improve in response to a climate of 'raising standards', then it must happen in classrooms. That much is now a

well-honed convention of educational wisdom. The real issue is, has the focus on standards made a qualitative difference to learning in classrooms? Wiliam (2000) suggests that when improvement in any system is measured by reference to test outcomes, then that system is prone to the consequences of 'Goodhart's Law'. This law states that as soon as a test regime becomes a central tenet of policy, then its usefulness rapidly declines while its importance increases, as people at the sharp end of operations ignore the policy and focus their attention solely on the test instrument by which their own success is to be measured.

Weeden *et al.* (2002) have claimed that the most noticeable result of the 'raising standards' agenda, with increased emphasis on target-setting and summative assessment, is that teachers have simply honed their skills in preparing children for tests. Children have adapted themselves to a duller diet of education, but show little increased aptitude for using their increased knowledge and skills in other contexts, despite their improving test scores. The outcomes of the LEARN Project (Weeden and Winter, 1999), which was designed to determine children's self-concepts as learners and conducted with students from four to eighteen years, strongly support this conclusion. Black and Wiliam (1998) conclude that this is a result of educational strategy-makers not appreciating the bewildering complexity of life in classrooms, and the dangers of failing to help teachers to reconfigure their management of learning, rather than simply pressuring them into managing mere performance. In other words, children and their teachers deserve more than external inputs in the form of pressures and threats to raise their performance levels. They follow this diagnosis with the following prognosis: *"We focus on one aspect of teaching: formative assessment....this feature is at the heart of effective teaching"* and further, *"Indeed, (we) know of no other way of raising standards for which such a strong prima facie case can be made."* (Black and Wiliam, 1998: 12) They constructed three questions:

- *"Is there evidence that improving formative assessment raises standards?"*
- *Is there evidence that there is room for improvement?"*
- *Is there evidence about how to improve formative assessment?"*

After analysing nine years worth of research literature, Black and Wiliam (1998) concluded that the answer to all three of the above questions was yes, though reminding us that it would be foolish to once again underestimate the complexity of both learning and classrooms, by identifying formative assessment as *"yet another 'magic bullet' for education."* Their key conclusions were:

- Improving formative assessment raises achievement for all learners;
- Improving formative assessment helps low achievers more than other students, and so narrows the range of achievement in classrooms.

Black and Wiliam (1998) further identified a number of areas of classroom practice recommended for reflection and improvement by teachers:

- Feedback to children should offer guidance on how to improve work;
- Tests used by teachers often encourage rote and superficial learning;
- Questioning strategies are often unproductive and should be reviewed for effectiveness;
- (In primary schools) quantity and presentation of work are often emphasised over quality in relation to learning;
- Marks and grading are often over-emphasised;
- The practice of comparing children with their peers teaches lower achievers that they lack ability and ultimately that they are unable to learn;
- The collection of marks sometimes appears to have a higher priority than analysis of children's learning;
- Self-assessment is often a key element of successful innovation in formative assessment practice – this appears to be an inevitable link.

In the wake of the disturbance thrown up by Black and Wiliam (1998), the Assessment Reform Group (1999) and notably Clarke (1998; 2001; 2003) took up the recommendations and the challenge to provide direct practical support to teachers in managing formative assessment in their classrooms for the benefit of children and their learning. The above literature provided many practical strategies, well trialled in classrooms in a number of major projects such as the Gillingham Formative Assessment Project (North Gillingham EAZ (DfES)/Institute of Education, 2001). These strategies were to prove most valuable to our teachers, committing to greater formative assessment in the Belfast action research project.

Action Research Project

This project came about as a result of a confluence of recent trends. Interest has, of course, been growing in the promise of formative assessment as schools have increasingly focussed their attention on learning, as well as their traditional focus on teaching. There has been a notable increase in the number of Northern Ireland schools seeking advice and support in finding out more about how children learn, and how best to support their learning. Formative assessment is an almost inevitable addition to the 'guest list' of issues that schools are addressing in the learning-centred trend. A number of visits by Shirley Clarke to Northern Ireland to present lectures and workshops on formative assessment has further stoked up considerable interest in schools. Meanwhile, the Curriculum Council for Examinations and Assessment (CCEA) in Northern Ireland has put together proposals for a revised curriculum, in which formative assessment is to be a key part of school provision. Thus, a combination of interests led to the CCEA funding a

small pilot project with all five of Northern Ireland's Education and Library Boards between February and April 2004. Four of the boards chose to run the project with primary schools only, but I chose to work with a mixture of primary and post-primary schools in Belfast. Six schools were invited to participate by nominating two teachers each to receive professional development training and carry out action research in their classrooms. The schools included one infant school (4 to 7 years), two primary schools (4 to 11 years), two single-sex secondary schools (11 to 16 years) and one co-educational grammar school (11 to 18 years). The grammar school elected to fund a further delegate from its own budget and so we commenced the project with thirteen teachers.

The teachers received three days of professional development training at a board centre, spread over a period of six weeks. Each session ended with the teachers being given a sheet of tasks to try in the classroom. However, such tasks were not to be comprehensively completed. It was stressed that the teachers should exercise full discretion over what they attempted and the design of children's support materials, over and above whatever was provided to them on the course. To limit the stress of managing innovation, primary teachers were asked to try the strategies in one subject area only, with the advice that it should not be literacy or numeracy. Post-Primary teachers were advised to try the strategies with one selected teaching group. The training went through three phases:

- 1 Presentation, reading and discussion of key research papers mentioned above;
- 2 Classroom strategies to introduce or extend formative assessment practice;
- 3 Thorough evaluation of the outcomes.

The strategies were structured around four key areas:

- 1 The formulation, agreement and sharing with children of intended learning outcomes, together with the use of 'success criteria' to scaffold children's learning behaviour;
- 2 The development of teachers' questioning strategies;
- 3 The use of formative feedback to recognise strengths in children's work and to provide guidance on improving it;
- 4 The development of self- and peer-evaluation in classrooms.

Observations of the Participating Teachers

All of the teachers were given a 'learning log' in which they entered notes of strategies attempted and amendments they made, as well as observations of their effectiveness in promoting learning behaviour in children. They were encouraged to bring photographs and video-records of elements of their practice, as well as any artefacts that they produced such as WALT Boards for publishing intended learning outcomes to the children.

Furthermore, the final day of training was largely given over to individual and group evaluation, providing much feedback to inform future training programmes. No use was made of pre - and post-testing to measure learning gains by children, rather evaluation was solely based on teachers' perceptions.

The perceptions of the participating teachers were quite striking, and were apparent long before the summary evaluation. A debrief session was held at the start of the second day of training and already most of the teachers were reporting gains, particularly in learning-focussed behaviour of the children, at all age levels. Some of the teachers, particularly those from post-primary phases, were initially sceptical about the potential of another 'initiative', but this scepticism was rapidly dispelled following initial trialling of strategies in the classroom.

With the exception of one teacher who felt that her practice was already well infused with formative assessment principles, there was much enthusiasm for the outcomes of strategies tried by the end of the pilot period, and a strong commitment to try out further strategies for which there had not been time. The formulation and publication of intended learning outcomes and accompanying success criteria was a focus for everyone's efforts, for which much impact was claimed. It was reported that children asked for learning outcomes when the teacher was a little slow in publishing them in most of the classrooms, and that the use of success criteria, in particular, enabled children to self-direct, promoting independence. Several of the teachers were impressed with this strategy as being one to reduce the heavy reliance that young children had on them during work. Some teachers experienced difficulty in constructing success criteria, but found that the children quickly became quite expert at it, especially in the primary classrooms.

Most of the teachers had tried some of the questioning strategies, such as providing extended (and carefully scaffolded) 'wait time', and promoting paired discussion with 'response partners', and these were felt to be very powerful, quickly increasing participation levels among the classes (both in numbers of children and depth of engagement). A few of the teachers had also tried some formative feedback strategies, including the 'two stars and a wish' approach, and the provision of response time in class for children to follow up on 'closing the gap' prompts. It was most interesting that one of the grammar school teachers canvassed her 'trial class' about the practice of providing comments without grades on their work, and was met with enthusiastic approval from sixty per cent of the children, comprising the lower and middle ability bands in the class. None of the teachers had got as far as focussing attention on self- or peer-evaluation by the end of the pilot, but all expressed a wish to do so.

There was much recognition that importing the strategies changed not only what was done in the classroom, but also changed its culture. Children appeared to perceive themselves as more powerful and influential, and there was a clear observation that while all children gained from the practice, lower achieving children appeared to benefit most of all, being more motivated, involved with the learning process, focussed on their improvements and increasingly independent of the teacher. Perhaps most interesting of all was that these changes occurred over a matter of a few weeks, rather than the months we would perhaps expect for such radical shifts.

The following quotes were typical from the individual evaluation sheets:

- *"Not as daunting as first thought – needed time to digest."*
- *"Pupils accommodated to change well, wish to extend them into self-assessment."*
- *"Pupils liked the use of the WALT/SC Board, and to know the Intended Learning Outcomes."*
- *"Learning felt very positive, very motivational for pupils."*
- *"There were problems for me with phrasing the success criteria – the children actually produced better criteria."*
- *"Great for low achievers in classrooms."*
- *"It makes you much more specific with planning."*
- *"The questioning technique worked well – 'Wait Time' and 'Tell your partner your answer'."*
- *"Feedback worked very well, much more specific and leading naturally to individual target setting."*
- *"Using the 'next day' tactic for responding to feedback was powerful."*
- *"In a very high performing grammar school class, there were no major comments about not providing grades!"*
- *"It was very important, and very powerful to reinforce the success criteria throughout the lesson."*
- *"Good boost to understanding."*
- *"Encourages transfer of learning across subjects/themes."*

Conclusion

Much of value was learnt from the project. It gave valuable information about the relative effectiveness of the strategies employed, as well as feedback on modifications to the professional development programme timetable, emphasis on specific issues and the effectiveness of various resources which were provided to inform future training design. The findings of the participating teachers appeared to vindicate once again the propositions made by Black and Wiliam (1998) six years ago, although this was such a small scale study, without objective testing in any way, and as such, must be regarding

with caution. However, as a result of the apparent success, funding has already been secured for a larger scale project with 20 teachers from 10 schools to commence in Autumn 2004, and this is looked forward to with much anticipation!

Reference

Assessment Reform Group (1999). *Assessment for Learning: Beyond the Black Box*. University of Cambridge: School of Education.

Black, P. and Wiliam, D. (1998). *Inside the Black Box: Raising Standards through Classroom Assessment*. London: King's College School of Education.

Clarke, S. (1998). *Targeting Assessment in the Primary Classroom*. London: Hodder and Stoughton.

Clarke, S. (2001). *Unlocking Formative Assessment*. London: Hodder and Stoughton.

Clarke, S. (2003). *Enriching Feedback in the Primary Classroom*. London: Hodder and Stoughton.

North Gillingham EAZ (DfES)/Institute of Education (2001). *Three Reports of the Gillingham Formative Assessment Project*. Available from: www.gp4success.org. [Accessed: September 2004].

Reineke, R. (1998). *Challenging the Mind, Touching the Heart: Best Assessment Practices*. Thousand Oaks, CA: Corwin Oaks.

Weeden, P. and Winter, J. (1999). *The LEARN Project: Report for QCA*. London: QCA.

Weeden, P., Winter, J. and Broadfoot, P. (2002). *Assessment: What's in it for schools?* London: RoutledgeFalmer.

Wiliam, D. (2000). *Recent Development in Educational Assessment in England: The Integration of Formative and Summative Functions of Assessment*. ARG Conference, Bristol. Paper first presented at the first meeting of the Scientific Advisory Board for the Swedish National Mathematics and Science Tests (SweMas) held at the University of Umea, May 2000.