Grounded practice: merging grounded theory principles and action research to secure authentic school improvement

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This paper focuses on the methodological issues surrounding research aimed at school improvement with specific consideration given to grounded theory and action research. As a result of a proposed synergy between grounded theory principles and action research, a new model of practitioner research is offered that advances existing notions of ‘Grounded Action’, ‘Grounded Action Research’ and ‘Grounded Practice’. A case study charting the developmental journey of a UK state secondary school in its bid to embed formative assessment is outlined as an example of the model in practice. The research adopted an action research methodology in which the researcher (who is also author of this paper) assumed a participatory, practitioner role. Data were gathered via a multi-method approach that included focus groups and semi-structured interviews, observation and accompanying field notes, document and classroom artefact analysis, and non-inferential statistics. Through an iterative approach to data analysis, grounded theory principles became instrumental in guiding and shaping developments in the participating school. The inclusion, rather than exclusion, of data relating to pupil behaviour is offered as an illustration of how an inductive process might provide a new dimension to contemporary assessment practice, thereby adding a transformative quality to school improvement initiatives.

School improvement as organisational learning
That schools and educational systems should continually seek to improve is an established theme of international education discourse. The comment by West (2005) is illustrative of the drive for continuous improvement:

We do not believe that any school can feel entirely satisfied with its current provision – even the most successful of our schools could, indeed must, continually seek out ways to improve the quality of outcomes and of experiences for its students. (p. 99)

Learning, unsurprisingly, appears to be the main focus in terms of both students and schools as a whole. Hattie (2009) draws together a 15 year study of over 800 meta-analyses relating to the influences on achievement in school-aged students in his ground-breaking book ‘Visible Learning’. On a school and systems level, Whelan (2009) identifies key factors underpinning school development from over 40 countries on every continent in his text ‘Lessons Learned’. Given this learning union of students and school systems, the notion of school improvement being about the organisation as a whole seems appropriate. The term ‘organisational learning’ is not new (see Argyris and Schon, 1996). However, I would like to take the opportunity here to strengthen the theoretical principles underpinning learning, so that in subsequent sections I can draw on them for the purposes of aligning them to research, specifically Grounded Theory Method (GTM) and Action Research (AR), and authentic school improvement. This takes on real significance due to the danger of taking narrow and often flawed student/school outcome measures and treating these as goals rather than maintaining the focus on learning (Wroe and Halsall, 2001; Newton, 2005; Mansell, 2007; Gorard, 2010).

**A social constructivist approach to learning**
It is not my intention here to trace the historical trajectory of developments in theories of learning. Rather, I would like to offer an insight into what has become an increasingly supported view of learning (Cobb, 1994; Williams and Burden, 1997; Sfard, 1998; Shepard, 2000; Illeris, 2003; James, 2006; Gergen and Gergen, 2008; Stobart, 2008) reflected in what has become known, amongst other titles, as ‘social constructivism’. My rationale for this is to make my discussion relating to methodology transparent – to provide a lens through which I intend to view GTM and AR.

Informed by Blumer’s (1969) view of symbolic interactionism, social constructivism’s origins may be said to stem from the Chicago school of psychology. I mention this as a point of interest in that Anselm Strauss and Kurt Lewin, early proponents of GTM and AR respectively, had links to the University of Chicago. Strauss studied under Blumer and Lewin and drew on Blumer’s interactionist perspective in producing his theory for the interaction of nature and nurture as explanations for human behaviour.

Illeris’s (2003) model of learning, where cognitive, emotional, social and environmental dimensions interact, fits largely into both Williams and Burden’s (1997) and Stobart’s (2008) description of social constructivism in that the dynamic interplay of learner(s), task(s) and context is seen as core.

Although Williams and Burden (1997) outline these general characteristics of social constructivist learning principles, a more nuanced understanding of the various ‘branches’ and the contested nature of associated terminology provides a clearer picture. Gergen and Gergen (2008) use the term ‘…..social constructionist’ (p. 160) as distinct from social constructivist in order to stress the importance of human relationships in the former. Other authors (Cobb, 1994; Sfard, 1998; Shepard, 2000;
James, 2006) see social constructivist theories of learning as a fusion of active meaning making and socially supported interactions – a joining of sociocultural and constructivist principles. Indeed Cobb (1994) suggests that constructivist and sociocultural perspectives are complimentary active processes with sociocultural aspects informing theories of the conditions for learning and constructivist aspects underpinning the process by which learning takes place. In short, a social constructivist view of learning, based on this discussion, removes the forced choice between sociocultural and constructivist perspectives in favour of a fluid interaction of both. This interaction tends to view learning as a process of individual construction and a process of enculturation into the practices of a wider community or society.

It is against this backdrop of social constructivist principles that I will examine and discuss the issues surrounding GTM and AR, particularly in relation to their application to educational research geared towards school improvement.

**Constructivist grounded theory**

At its most fundamental level, grounded theory is where theory is grounded in data – it emerges from it through what has become known as ‘the constant comparative method’ (an inductive process of data, category and concept comparison). Although Glaser and Strauss’s (1967) seminal text ‘The Discovery of Grounded Theory’ perhaps laid the foundations for the Grounded Theory Method (GTM), it has undergone various adaptations over time. Indeed Glaser and Strauss themselves diverged in their view of GTM in the 1980s. Once again, it is not my intention here to trace the historical developments but instead I would like to draw attention to, and outline a view of, GTM that has strong links with a social constructivist epistemology.
This branch of GTM is probably most clearly outlined by Charmaz (2006) in her book entitled ‘*Constructing Grounded Theory*).

If we compare the title of Glaser and Strauss’s (1967) text with that of Charmaz (2006) we get an indication of the distinction between the two perspectives. The former seems to imply that theory is waiting to be discovered, the latter creates a sense of theory undergoing active construction through making sense of multiple meanings. In other words, Glaser and Strauss’s (1967) perspective sees data as ‘out there’ whereas Charmaz (2006) sees data as created through interpretation, social interaction and the shared experiences this creates. When one delves deeper into Charmaz’s (2006) work, there emerges a real emphasis on actions, throughout the GTM process, beginning with the initial coding of data as illustrated below:

Initial coding should stick closely to the data. Try to see actions in each segment of data rather than applying pre-existing categories to the data. Attempt to code with words that reflect action. At first, invoking a language of action rather than of topics may feel strange. Look closely at actions and, to the degree possible, code data as actions. This method of coding curbs our tendencies to make conceptual leaps and to adopt extant theories before we have done the necessary analytic work. (Charmaz, 2006, pp. 47-48)

Charmaz’s (2006) emphasis on action extends from initial coding to the more refined coding (focussed coding and axial coding). It also permeates into memo writing (a process of self-conversation and analysis of codes that allows categories to emerge), the formulation of categories (raising pivotal codes to the conceptual level) and subsequent theory creation (where key theoretical categories surface and become concepts of the theory). For now, the theme of ‘action’ will lead my discussion of action research.
Participatory action research, social constructivism and changing histories

Kemmis (2010) raises a pertinent question relating to ‘action’ and AR: ‘If action research concerns transforming people’s practices, their understanding of their practices and the conditions under which they practice, is it always achieving that goal?’ (p. 417). The issue explored here relates to the degree of emphasis placed on action research making an original contribution to knowledge, and action research making history by changing what is done. Kemmis’s (2010) position is clear from the outset when he states: ‘The central argument of this paper is that, while action research certainly does contribute to theory, it also, and perhaps more importantly, contributes to history’ (p. 117). I will explore the synthesis of theory and action in more detail when I discuss various ‘hybrid’ models combining principles from both GT and AR camps. However, at this point it is worth reminding ourselves that both theory and action play a role in the transformation of practice and I whole-heartedly support Kemmis’s (2010) powerful statement that if the balance is right then AR will change histories.

When one examines the various descriptions of key features of AR, together with associated models, some commonality emerges. Not surprisingly ‘action’ is one such commonality, although Kemmis’s (2010) concerns, over the degree of emphasis this sometimes takes, echo here again. For the purposes of this paper I will continue the theme of social constructivism by focusing on a specific branch of AR that has come to be known as ‘Participatory Action Research’ (PAR) (Zuber-Skerritt, 1996; McNiff and Whitehead, 2002). Here the underlying emphasis is on collaboration, reciprocal dialogues, and learning that is critical and dialogically supported. The aim is to
transform practice so that it reflects the needs of the community and not merely prescribed policy.

Regardless of the specific style of AR, the commonalities in fundamental basic processes form a useful reference point from which divergence may be viewed. Bloor and Wood (2006) refer to a key feature of AR as adopting ‘...a dynamic, cyclical process which moves through phases of planning, action, observation and reflection’ (p. 10). Zuber-Skerritt (1996) also refers to AR following a ‘cyclical process’ (p. 3) and uses the same terminology to describe the phases. When represented diagrammatically, the process looks very straightforward as shown in Figure 1.

![Figure 1. The basic action research cycle](image)

In my experience, this basic representation over-simplifies the social context of research. Whilst PAR undoubtedly involves a planning phase, it is not necessarily the first phase. In my own PAR investigations, I typically undertake a great deal of
monitoring and observation to establish current working practices before any plan for change is attempted. As a practitioner researcher, this approach has helped me to strike a balance between the demands of undertaking research with those of my professional role as teacher and leader. This practical problem is highlighted by Winter (1996). In the first edition of her book *Action Research: Principles and Practice*, McNiff (1988) refers to the inherent chaos of AR and the need to acknowledge this facet. Bloor and Wood (2006) draw attention to this also. However, in McNiff’s (2002) second edition she more explicitly outlines a ‘generative transformational process’ (p. 56) that more closely relates to my experience of conducting PAR. In respect of this process McNiff (2002) comments:

In developing my own theory of the nature of action research, I have come to see it as a spontaneous, self-recreating system of enquiry. I like the notion of a systematic process of observe, describe, plan, act, reflect, evaluate, modify, but I do not see the process as sequential or necessarily rational. It is possible to begin at one place and end up somewhere entirely unexpected. The visual metaphor I have developed is an iterative spiral of spirals, an exponential development process. (p. 56)

The essence of this perspective is illustrated in McNiff (2002, p. 57) and takes the form of a ‘core’ spiral with potential ‘spin off’ spirals.

It is the iterative nature of the AR process outlined by McNiff (2002) that provides a link with GT. McNiff (2002) also makes the following point in relation to sorting AR data that also strikes a chord with GT principles: ‘It is also important to start sorting your data as soon as you can. This will help you to make sense of the project in an ongoing way.’ (p. 98). The next section relating to the merger of GT and AR principles explores this link further and culminates in a proposed model of PAR that I have come to identify as best representing my own methodological approach.
From grounded action to grounded practice

The notion of merging GT and AR is not new and a number of researchers have either discussed this area or adopted it as a methodological approach (Dick 2003; Simmons and Gregory 2003; Poonamallee 2009; Butterfield 2009). Indeed, Simmons and Gregory (2003) take a rather literal approach in the development of what they call ‘grounded action’ (GA). This definition takes the premise that if GT is a theory inductively derived from the data it represents, then it follows that GA is a response that is inductively derived from first the data and then the theory it represents. In short, it takes the stance that GT provides the framework from which to extract theory from data, while GA provides the operational response to the generated theory. In this way GT may be said to define whilst GA transforms.

Although I can identify with the concept of GA, I do not hold the view that it is a logical end point for GT studies or educational developments. Moreover, the constantly shifting educational landscape means that any notion of arriving at ‘the end’ is futile. That said, I do hold the view that there is a point beyond which GA takes us. It is a point where inductively derived actions become part of the working culture of the organisation; where actions become embedded in practice through a process of evaluation, constant comparison and refinement. The result of this process forms my working definition of ‘Grounded Practice’ (GP).

At the core of my proposed model of GP is Burden’s (1998) ‘SPARE wheel’ approach to illuminative evaluation. I view Burden’s (1998) emphasis on the Setting (situation or context) in the first instance to be particularly important in retaining a GT dimension as it is the setting that provides us with the rich data from which we can
derive our theory based Plan. Using the constant comparative technique at this point allows the theory based plan to inductively evolve. Since AR has action as a fundamental component it may come as little surprise that the next stage is Action – where what actually happens ‘on the ground’ is gauged. Burden (1998) makes the following point in relation to this:

This is where the match and mismatch will occur, particularly when the plans are those of powerful figures who seek to act or bring about change without full consultation or have not fully thought through the likely consequences of their actions. (p. 18).

Here the constant comparative and inductive process becomes dual facetted in terms of looking at data to gain a clear picture of the actions, and also referencing actions back to intended plans. By definition PAR (the branch of AR I favour due to its close alignment with social constructivist principles) relies on participants. It therefore makes sense that from action we move to Reaction. This is where we attempt to gauge the extent to which we have won the hearts and minds of our participants as Burden (1998) points out:

Basically, what do the participants think and feel is going on? What is their level of involvement and commitment to the success of the project? Where do they see its strengths and weaknesses lying? By taking this kind of approach we are able to provide another surface to the prism through which we are trying to make sense of what we see and what we hear. (p. 18).

It is through the action-reaction interface that we can gain an insight into the extent to which planned actions are grounded in practice or embedded. Evaluation is the next stage in what must be stressed as a cyclical process. This is where decisions are made about whether to continue with the original plans, to change them, or to discontinue
completely. As it is rare in my experience that original plans work first time, or that the educational setting or context remains stable, evaluation leads us to the original and new data and the inductive process continues. It is from this cycle that saturation and consistency begin to emerge through the constant comparative process of data analysis. It is at this point that we can lay claim to grounded action becoming grounded practice. Figure 2 illustrates the proposed process of GP diagrammatically.

Although the synergy of GT and AR can provide an alternative lens through which one may view the process of research, it is worth noting a fundamental dimension that distinguishes GP from GT – *time*. The time dimension in GP differs from that of GT due to the nature of PAR – a concept at the heart of the proposed model of GP. The urgency of PAR comes out of the practical situation. Schools are very busy places and the intensity of the working environment means that developments need to keep pace. GT, by comparison, takes a more in depth reflective approach to the data analysis process of converting codes to categories via memos, for example. GP, through PAR,
takes a more concise, and to an extent superficial, approach to data analysis and relies on the action-reaction interface along with formative evaluation to refine theory based plans and actions. GP could therefore be described as dynamic, whereas GT is more reflective.

The model of GP illustrated in Figure 2 provides a methodological overlay for the research process of the project I present next.

**Grounded practice – a case study**

*The research method/process*

Figure 3 outlines the research method/process diagrammatically and should be viewed through the methodological lens illustrated in Figure 2.
Figure 3. The research method/process
Assessment and evaluation policy and practice at the beginning of the project

The story began in the Autumn term of 2007 with an analysis of documentation and observation of practice in the school in which I work, with a specific focus on assessment. I started with the school’s most recent Office for Standards in Education (OfSTED) reports (2002 and 2007) and two recent subject reviews, one undertaken by OfSTED in 2006 and the other by the Local Authority (LA) in 2007. I felt it important to get an ‘outside’ perspective from the outset in order to avoid ‘internal’ bias or contamination.

In 2002, OfSTED noted in relation to assessment at the school: ‘Although some departments have good policies and procedures in place, this is not consistent across all subjects’. This was a common theme to emerge in all data (gathered via a multi-method approach and included observations, interviews, documents and classroom artefacts) analysed by myself and subject leaders at the outset as part of our own ‘internal’ audit, designed to check the validity of ‘external’ judgments made by evaluative bodies like OfSTED and the LA. The overall picture was one where policies across the school stressed the formative aspects of assessment and evaluation but practice did not reflect this.

Lesson observation data gathered by paired observers (subject leaders) using an observation schedule developed and piloted by our own subject leaders, and with a specific focus on formative assessment (see Figure 4), provided an illustration of formative assessment practices at the start of the project. The formative dimensions of objective led lessons, written feedback, oral feedback, and peer and self-assessment were categorised along a four stage scale ‘focusing’ ‘developing’, ‘establishing’, and ‘enhancing’. This was seen by subject leaders as preferable to the four OfSTED
categories ‘inadequate’, ‘satisfactory’, ‘good’, and ‘outstanding’. As one subject leader put it: ‘I’d rather be focusing than inadequate!’.
**COLLEGE LESSON OBSERVATION**

<table>
<thead>
<tr>
<th>Date:</th>
<th>Teacher:</th>
<th>Group:</th>
<th>Subject:</th>
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<tr>
<th>Length: ____ mins</th>
<th>No. Present:</th>
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</table>

**LEARNING:** Progress in knowledge skills/ideas/understanding; productive; students show interest; sustained concentration and can think independently; understand their work, progress and how they can improve; appropriate standards attained.

**TEACHING:** Subject knowledge; technical competence; planning and objectives; challenge; appropriate methods; personalisation; learning support; expectations; pace; use of resources (human and ICT); assessment; homework/extended learning; classroom/behaviour management.

**SEAL/ATTITUDES/ BEHAVIOUR:** Students behave well; show respect; form constructive relationships; reflect on their work; respect differences; show initiative and take responsibility; show self-awareness and empathy; manage feelings; motivated.

**COLLEGE PRIORITY THEME: AFL (FORMATIVE ASSESSMENT)**

<table>
<thead>
<tr>
<th>ASPECT</th>
<th>Focusing</th>
<th>Developing</th>
<th>Establishing</th>
<th>Enhancing</th>
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<tbody>
<tr>
<td>Objective led lessons</td>
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<tr>
<td>Written feedback</td>
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<td>Oral feedback</td>
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<tr>
<td>Peer and self-assessment</td>
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<tr>
<th>Teaching strategies for effective dialogue</th>
<th>Eavesdropping on group dialogue</th>
<th>Wait time after a teacher question</th>
<th>Rich questions</th>
<th>No hands-up questioning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Questions linked to resources or task</td>
<td>Big questions</td>
<td>Prompts and body language used to encourage continuation</td>
<td>Peer discussion</td>
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**SUMMARY:**

Observer:

*Figure 4. Lesson Observation Form*
During the Autumn term of 2007, 77 teaching staff were observed in lessons spanning Key Stages (KS) 3, 4 and 5. Teachers were asked to provide a selection of lessons from which the observer might choose. Thus, although they did not know exactly which lesson would be chosen, they did have some scope to put their best practice on show. The urgency of the observation deadlines meant that there was limited scope for departmental discussion about the exact nature of formative assessment practice in the classroom. Staff were aware that this was the main focus however. Figure 5 illustrates the pattern of classroom based formative assessment practices across the school at the beginning of the project and Figure 6 shows this graphically.

<table>
<thead>
<tr>
<th>ASPECT</th>
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<th>Developing</th>
<th>Establishing</th>
<th>Enhancing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Objective led lessons</td>
<td>8 lessons (10%)</td>
<td>49 lessons (64%)</td>
<td>16 lessons (21%)</td>
<td>4 lessons (5%)</td>
</tr>
<tr>
<td>Written feedback</td>
<td>12 lessons (16%)</td>
<td>48 lessons (62%)</td>
<td>15 lessons (19%)</td>
<td>2 lessons (3%)</td>
</tr>
<tr>
<td>Oral feedback</td>
<td>0 (0%)</td>
<td>41 lessons (53%)</td>
<td>26 lessons (34%)</td>
<td>10 lessons (13%)</td>
</tr>
<tr>
<td>Peer and self-assessment</td>
<td>57 lessons (74%)</td>
<td>11 lessons (14%)</td>
<td>7 lessons (9%)</td>
<td>2 lessons (3%)</td>
</tr>
</tbody>
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Figure 5. Pattern of classroom based formative assessment practices at beginning of research – October 2007 (77 lessons observed in total)
Figure 6. Graphical pattern of classroom based formative assessment practices at beginning of research – October 2007 (77 lessons observed in total)
When, at a subject leaders’ meeting in October 2007, we examined the data relating to objective led lessons, written feedback, oral feedback, and peer and self-assessment, it appeared that these aspects of formative assessment practice were weighted more towards the ‘focusing’ and ‘developing’ categories than ‘establishing’ and ‘enhancing’. When we then analysed the criteria relating to these categories, a more qualitative picture of classroom formative practice emerged. This was characterised by teaching that had some evidence of planning using learning objectives, written feedback to pupils that did not always clarify what they needed to do to improve, oral feedback provided by the teacher that reinforced learning objectives but did not encourage pupils to offer extended answers or ask questions of the teacher or each other, and little opportunity for pupils to assess their own work or that of their peers against clear success criteria. Correspondingly, learning seemed to be characterised by pupils having some limited understanding of what they were trying to do (but not knowing why), showing some understanding of the written feedback provided (but not always responding to it), expecting some specific oral feedback as a class, individual or small group and acting upon it, lacking the skills and dispositions for peer and self-assessment.

When we explored the data relating to teaching strategies for effective dialogue, the bias appeared to be towards teacher questioning using resources (worksheets, pictures, video, demonstrations etc.). However, the use of ‘big’ and ‘rich’ questions, to elicit breadth and depth respectively, was not common practice. As a result, pupils were rarely required to develop their answers and teachers did not appear to encourage this quality through prompts and body language. The relative infrequency of peer discussion and group dialogue seemed to indicate that lessons were often teacher-led, and rapid questioning techniques were more likely to be used leaving little time for pupils to reflect on their answers. At a subject leaders’ meeting in September 2007, several subject leaders felt that the term ‘no hands-up questioning’ needed clarification. We decided as a group that the principle behind it was that
the teacher should select the pupil who will respond to a question (i.e. they are conscripts rather than volunteers), and that the insistence on pupils not putting their hand up to answer need not necessarily be used. Therefore, it was decided that the teacher should be judged in relation to the extent to which all pupils are given an opportunity to answer questions. However, it appeared from the lesson observation data that certain pupils were given more opportunities than others to answer questions.

Overall we agreed that our observations seemed to support the external review judgements that, whilst there was good practice across the school in terms of teaching and learning, this was not consistent. We arrived at this conclusion by aligning the OfSTED judgement categories of ‘inadequate’, ‘satisfactory’, ‘good’ and ‘outstanding’ with the AfL categories of ‘focusing’, ‘developing’, ‘establishing’ and ‘enhancing’. The lesson observation data shown in Figures 5 and 6 were judged to support this conclusion on that basis. We also agreed that we should endeavour to raise all teaching to a ‘good’ standard. However, our working definition of ‘good’ was agreed to be formative practice that fell into the ‘establishing’ or ‘enhancing’ categories used in our initial review of practice. This way our preference for ‘…non-OfSTED speak’ would be retained.

**Practice relating to recording and reporting assessments**

Although formative elements relating to recording appeared in the school’s assessment policy, the statement in the policy: ‘There is no prescribed form in which records should be kept…’ seemed to be reflected in the range of practices I observed at the beginning of the project in September 2007. At an individual teacher level, ongoing records of pupils’ assessments were kept in ‘traditional’ paper based mark books. Although this allowed the individual teacher to monitor the progress of specific pupils and groups, it only allowed
comparisons of marks so that improvement or deterioration in attainment could be detected. Most of the teachers interviewed admitted that they routinely kept pupils’ scores but, as one member of staff commented, ‘We rarely use them for anything other than transferring marks onto reports or covering our back in case anyone checks up’. Some departments (notably Mathematics, Science, English, Art and Physical Education) used ‘core’ assessment tasks throughout the year to gauge pupils’ attainment at key points. In the case of Mathematics, Science, English (KS3) and Physical Education, individual staff were expected to put their scores, levels or grades for their classes into an electronic central recording system or spreadsheet. These spreadsheets varied in complexity, and analysis of the data was, at best, limited to upward or downward trends in attainment. The other departments left record keeping in the hands of the individual teacher and their mark book and did not attempt to collate assessment data centrally.

Although the school’s assessment policy had formative qualities in terms of reporting assessments (namely, ‘…highlighting strengths and particular achievements and identifying any particular weaknesses so that future targets can be set’), these qualities were not consistently translated into the school’s report templates (blanks) or content when completed. The picture across the school was diverse and inconsistent.

In short, the school’s assessment policy’s aim in relation to reporting: ‘To provide consistency of interpretation for both parents, pupils and teachers’, appeared to fall well short of achieving it in practice. Thus, the formative nature of reports seemed to be undermined by problems associated with their interpretation and ability to evoke meaningful dialogue between parents, teachers and pupils.
The ‘live focus group’ – many eyes

At the beginning of October 2007, I had an idea of the size of the assessment and evaluation focus group and the likely blend of colleagues it would contain. By the end of October 2007, I felt confident that I had the skills to embark upon this method of research following the lessons learned from the practice sessions undertaken earlier in the month. I decided that the focus group would comprise six subject leader colleagues from English, Mathematics, Science, Physical Education and Art, together with an administrative colleague with responsibility for examinations and assessment data and reporting. My thinking was that this would retain the optimum group size theory and also have a good spread of perspectives from the core and foundation subjects. I judged the fact that the teachers were subject leaders as an important factor in lending professional weight to any outcomes that emerged as a result of the focus group sessions. The inclusion of the exams and assessment administrator was to provide a practical application perspective so that any ‘blue sky thinking’ could be realised in terms of the systems and technology we had at our disposal. Finally, my personal knowledge of the research context meant that I knew that the focus group members had strong opinions, particularly in relation to assessment and evaluation, and that they had all come into conflict with each other on issues relating to these areas on various occasions. Their passion for their subject area of responsibility meant that they had developed good policies and practices in their field. However, they had little tolerance for mandated policies or practices of a whole school nature. In short, I felt the group had a diverse and volatile composition that I had not experienced elsewhere in my career. In my view it was unique.

The assessment and evaluation focus group (AFG) sessions took place at the end of October 2007 and were organised on a full day schedule. Three days were set aside over a two week period to avoid creating pressure to rush through discussions and make decisions. I
arranged for the teaching members to be released from their teaching commitments and booked a large meeting room in the school with projector, laptop, flip chart, pens and paper. In order to avoid the participants feeling under pressure to take part, I arranged to meet each member individually so that I could explain the nature of my research and their part in it, including my intention to record the sessions using a voice tracer. Once I had their approval, I then asked them to read and sign an ‘Informed Consent’ form. Ethically, I believed this to be a less threatening environment than handing out the forms to the whole group at the first session. It also allowed me to go through the format of the focus group sessions individually and brief them on the nature of the topics we would be exploring. I did not provide a traditional agenda. Instead, I used a list of topics as a reflective focus prior, during and after the sessions. No breaks were scheduled and I left the decision about when to take them to the group. The only pre-determined stopping point was lunch as I had booked this at a local pub so that we could relax and get to know each other away from the school environment.

Our starting point with assessment was to agree a common language for the terms ‘assessment’, ‘recording’, ‘reporting’ and ‘marking’. From here we addressed the key research questions as outlined below:

(i) Why assess, record, report and mark pupils’ work? For what purpose?
(ii) What is to be assessed, recorded, reported and marked?
(iii) How will assessment, recording, reporting and marking be undertaken?
(iv) When will assessment, recording, reporting and marking be undertaken?
(v) What are the barriers to successful assessment, recording, reporting and marking?

The exact nature of the outcomes of the work of the AFG go beyond the remit of this paper since the consideration here is centred around the use and effectiveness of a grounded
practice approach to embedding whole school developments. Therefore the following sections continue the process theme based on Gladwell’s (2000) metaphorical notion of ideas taking on the quality of viruses that subsequently spread.

**Dissemination and controlling new ‘viruses’**

Once the research questions had been addressed by the AFG and an emergent assessment policy had been outlined, a process of wider dissemination and consultation was undertaken. This went ‘outwards from the middle’ (so to speak) to include the school’s senior leadership team (SLT) in one direction, and the classroom teachers/support staff in the other. Pupil behaviour became a recurring theme and a satellite focus group was set up to work alongside the AFG in order to integrate behaviour tracking and monitoring with our assessment developments. The work of the two focus groups then fed into a wider consultation involving pupils, parents/carers and governors of the school. This culminated in a ‘new’ assessment policy being created.

**Starting the ‘epidemic’ and embedding**

Retaining Gladwell’s (2000) epidemic metaphor, a series of staff and pupil briefings relating to the intended developments outlined in the new assessment policy were set out. The aim here was to get the policy ‘out there’ and into the daily working practices of the school by giving it a high profile and public ‘airing’. In short, the word needed to be spread. In order to preserve a collegiate approach, staff briefings were led by a team of colleagues, including members of the SLT, middle leaders and support staff. All briefings were opened by the school’s headteacher to reinforce the whole school nature of the planned developments.
Key aspects of the school’s working practices were changed to ensure that the new developments became part of the daily fabric of the school’s practice. Lesson observations, performance management, processes of induction for new staff, recruitment procedures and professional development activities, and the school’s evaluation processes were all changed to better align them to the new assessment developments.

New policy in practice – indicators of formative assessment being embedded in practice

Classroom practice was the first indicator of formative assessment being embedded in practice to be examined. Figures 5 and 6 illustrate the pattern of formative assessment in the classroom at the beginning of the project as illustrated by the AfL lesson observation proformas. I decided to revisit this process during the Summer and Autumn terms of 2008 to get an idea of how things had developed through comparing patterns with those detected during the Autumn term in 2007. To aid this, I analysed the lesson observation data using the same format as illustrated in Figures 5 and 6. Observations were conducted by experienced paired observers (as in October 2007) where possible in order to provide as much consistency as possible. A spread of lessons across the Key Stages was evidenced as in 2007. Figures 7 and 8 illustrate the resulting pattern of classroom based formative practice in October 2008, and Figure 9 shows a comparative picture of 2007 and 2008 data relating to teaching strategies for effective dialogue.

When, at the subject leaders meeting in November 2008, we examined the data relating to objective led lessons, written feedback, oral feedback, and peer and self-assessment, the trend appeared very positive. In contrast to the 2007 data where the bias in each aspect was towards the ‘focusing’ and ‘developing’ strands, the 2008 data indicated a shift in bias towards the ‘establishing’ and ‘enhancing’ strands (as seen in the move from the dominant pie chart
sectors in Figures 6, towards the dominant sectors in Figures 8). This shift indicated a trend where these formative assessment practices were well developed across the school. A similar improvement trend was evident in our analysis of ‘Teaching Strategies for Effective Dialogue’ (see Figure 9) where improvement was illustrated in every aspect. Although there were areas still in need of further development (e.g. use of ‘rich’ and ‘big’ questions), areas like ‘wait time after a teacher question’, ‘eavesdropping on group dialogue’, ‘no hands-up questioning’, ‘prompts & body language used to encourage continuation’, and ‘peer discussion’ all showed marked improvement. In short, the evidence relating to formative assessment practices in the ‘classroom’ supported the notion that these practices were indeed embedded to a greater degree in October 2008 than in October 2007.

<table>
<thead>
<tr>
<th>ASPECT</th>
<th>Focusing</th>
<th>Developing</th>
<th>Establishing</th>
<th>Enhancing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Objective led lessons</td>
<td>2 lessons (3%)</td>
<td>5 lessons (7%)</td>
<td>31 lessons (42%)</td>
<td>35 lessons (48%)</td>
</tr>
<tr>
<td>Written feedback</td>
<td>2 lessons (3%)</td>
<td>13 lessons (18%)</td>
<td>33 lessons (45%)</td>
<td>25 lessons (34%)</td>
</tr>
<tr>
<td>Oral feedback</td>
<td>0 (0%)</td>
<td>10 lessons (14%)</td>
<td>20 lessons (27%)</td>
<td>43 lessons (59%)</td>
</tr>
<tr>
<td>Peer and self-assessment</td>
<td>2 lessons (3%)</td>
<td>22 lessons (30%)</td>
<td>24 lessons (33%)</td>
<td>25 lessons (34%)</td>
</tr>
</tbody>
</table>

Teaching strategies for effective dialogue

|                                                                                                      |
| Focusing                                                 | Developing                | Establishing               | Enhancing               |
| Eavesdropping on group dialogue                         | 46 lessons (63%)          | 42 lessons (58%)           | 33 lessons (45%)        | 47 lessons (64%)        |
| Wait time after a teacher question                      | 30 lessons (41%)          | 65 lessons (89%)           | 65 lessons (89%)        | 53 lessons (73%)        |
| Rich questions                                           | 72 lessons (99%)          | 33 lessons (45%)           | 65 lessons (89%)        | 53 lessons (73%)        |
| No hands-up questioning                                 | 72 lessons (99%)          | 33 lessons (45%)           | 65 lessons (89%)        | 53 lessons (73%)        |
| Questions linked to resources or task                   | 72 lessons (99%)          | 33 lessons (45%)           | 65 lessons (89%)        | 53 lessons (73%)        |
| Big questions                                           | 30 lessons (41%)          | 65 lessons (89%)           | 65 lessons (89%)        | 53 lessons (73%)        |
| Prompts and body language used to encourage continuation| 72 lessons (99%)          | 33 lessons (45%)           | 65 lessons (89%)        | 53 lessons (73%)        |
| Peer discussion                                          | 72 lessons (99%)          | 33 lessons (45%)           | 65 lessons (89%)        | 53 lessons (73%)        |

Figure 7. Pattern of classroom based formative assessment practices at end of research

October 2008 (73 lessons observed in total)
Figure 8. Graphical pattern of classroom based formative assessment practices at end of research October 2008 (73 lessons observed in total)
When further evidence sources relating to formative assessment practices were examined, a number of areas emerged to support a claim that the school had indeed developed between the start of the research (October 2007) and its completion (December 2008). By September 2008 new assessment technology systems were part of teachers’ daily working practices. Teachers routinely input data relating to pupil attainment, achievement, behaviour (good and bad), attendance and punctuality. Teachers were also tracking pupils’ performance in these areas and developing interventions (e.g. mentoring). Because all these systems were integrated through one source (the school information management system - SIMS), the Senior Leadership Team (SLT) and middle leaders could access electronic mark sheets and teacher records to check that staff were indeed routinely recording, monitoring, reporting and evaluating pupil performance data.

Also, by September 2008, formative assessment stages were a standard feature on the school calendar and reminders were included on teachers’ homepages in SIMS. Termly
progress reports (TPRs) were part of the ‘normal’ vocabulary in school and they were used for all aspects of monitoring and evaluation. Indeed, data relating to attainment, achievement, behaviour, attendance and punctuality, compiled through TPRs and other SIMS applications, were routinely shared with pupils, parents and other interested parties through assemblies, letters, phone calls, and tutor group competitions.

By September 2008, formative assessment processes were an intrinsic part of the school’s recruitment process, and candidates on interview would be expected to demonstrate formative qualities in their teaching session together with a secure knowledge of formative principles, as evidenced in their response to questions at interview. In addition, candidates for leadership positions would be expected to demonstrate a secure understanding of how assessment data could be used to evaluate subject or team effectiveness formatively. Also, by September 2008, the induction programme for new staff (including NQTs), and professional development sessions relating to trainee teachers from Initial Teacher Education (ITE) institutions, had formative assessment processes as fundamental elements.

Overall, the data indicated that, by September 2008, formative assessment was embedded in practice. The use of the focus groups as a core research tool and driver of initiatives for this study, together with the grounded practice methodology (see Figure 2) would tend to support a claim that both are effective elements for embedding whole school developments.

Concluding thoughts

There were numerous occasions during my research where I encountered a tension between certain concepts and practices. This was the case right from the outset when I began the process of locating my research within a particular paradigm and subsequent methodology. In
resolving the tension between theory and practice as they related to GT and AR, I found myself drawn to a methodology that was based on a fluid interaction of both. During my fieldwork, I found myself trying to level the balance between pupil reports that were essentially quantitative in content with the pursuit of a formative assessment dimension. When the behavioural element of assessment emerged, I found myself trying to balance the tension between assessment as a curriculum development and behaviour as a pastoral area. From a methodological perspective, I was looking for a way of working that was both interpretative and scientific when the need arose. In the case of curriculum versus pastoral, I questioned whether there really was a division. In short, I was immersed in paradox and increasingly sceptical of viewing the world from an ‘either-or’ perspective.

It was only when my research was drawing to a close, and I had managed to balance the tensions created by the paradoxes I encountered, that I began to frame my way of thinking. Clarity emerged from a number of sources. The first was Palmer (2007) who comments: ‘We see everything as this or that, plus or minus, on or off, black or white; and we fragment reality into an endless series of either-ors. In a phrase, we think the world apart’ (p. 64). Handy (1995) struck a chord with me by stating:

   Living with paradox is not comfortable nor easy. It can be like walking in a dark wood on a moonless night. It is an eerie and, at times, a frightening experience. All sense of direction is lost; trees and bushes crowd in; wherever you step you bump into another obstacle; every noise and rustle is magnified; there is a whiff of danger around; it seems safer to stand still than try to move.  (p. 19).

When I read the above passage I felt that it not only summed up my experiences of research, it also illustrated the way of thinking I had become familiar with, albeit confusing at times. Palmer (2007) refers to a way of thinking called ‘Paradoxical thinking…’ where ‘…we embrace a view of the world in which opposites are joined, so that we can see it clearly and
see it whole’ (p. 69). Palmer (op cit) goes on to propose: ‘When we think things together, we reclaim the life force in the world, in our students, in ourselves’. Nagel (1986) further reinforced my understanding of thinking paradoxically in describing the fusion of subjective and objective elements. Nagel (1986) added a degree of ‘common sense’ to my clarity of this issue by stating: ‘It is based on a deliberate effort to juxtapose the internal and external or subjective and objective views at full strength, in order to achieve unification when it is possible and to recognize clearly when it is not’ (p. 4).

Having read the work of Palmer (2007), Handy (1995) and Nagel (1986) I found myself thinking: ‘If only I had thought this way from the beginning’. However, this way of thinking had only really developed as a result of the process of undertaking my research. Reading about paradox merely framed my experiences. I would argue that, in this respect, the process of research was transformative for me in that I viewed things differently at the end of the process than at the beginning. For me, reading about paradoxical thinking was not quite the same as living it.

**The transformative nature of education and research**

In May 2008 I went on a study tour to Michigan and, whilst at Michigan State University, I met with Professor John Dirkx. Sitting in one of his lectures I found myself watching an extract from the film: ‘Educating Rita’. It was my first introduction to the concept of the transformative quality of education. When I look back at my research, I am reminded of how the people involved changed over its duration and how transformative the processes of education and research can be. It would be a mistake to assume that learning is automatically transformative. Mezirow (1991) suggests: ‘Not all learning is transformative. We can learn simply by adding to our meaning schemes or learning new meaning schemes with which to
make interpretations about our experiences’ (p. 223). Mezirow (*op cit*) goes on to illustrate that: ‘Transformative learning involves reflectively transforming the beliefs, attitudes, opinions, and emotional reactions that constitute our meaning schemes or transforming our meaning perspectives’. I would argue that my chosen research methodology and method did much to transform those involved through an emphasis on practical application and collaborative work.

When I reflect on the use of a grounded practice methodology aligned to a focus group method, I remember how a cluster of diverse individuals from an equally diverse set of working backgrounds became involved in a *shared* project. The eight people involved constituted a small group. With reference to the transformational potential of collaborative work in small groups, Boyd and Dirkx (1991) remark:

> The small group, in the form of work groups, social groups, learning groups and families, represents a very common context for social relationships in all cultures. Unlike the one-to-one or group analytic session, these groups represent potential contexts for natural, everyday transformations of personality (p. 42)

Whilst it would be misleading to assume that transformation occurred as a result of a chosen methodology or method, the comments made during and after the research by those involved indicated that a degree of transformation had occurred. For example, one member of the group commented following the research: ‘It’s amazing when you think how the project has brought people who ordinarily had little time for things outside their own little world together’. Dirkx (2000) explains the transformation of the individual involved in small groups in terms of the process of ‘…individuation’ where one’s *self* is oriented as a result through the involvement in small groups.
On a more practical level, the participants in my research (myself included) developed a new range of skills. I learned the skills of shared inductive analysis and mediation through the use of GT data analysis principles and conducting focus group interviews. The new skills required of teachers and support staff across the school in order to fully utilise the new technologies that our new assessment and evaluation systems were based on meant that rapid skill development took place out of necessity. As a member of the group put it: ‘We’ve now got staff who could barely switch a laptop on using them without blinking’. In addition to the development of technical skills, participants indicated a development in their ability to make judgments about pupils’ work, evaluate performance data and monitor patterns of pupil behaviour. With reference to this another member commented: ‘We seem to have gone from 0-60 in three seconds and I bet there is still more to come’.

For anyone considering embarking on practitioner research, I offer the model of grounded practice outlined in this paper for consideration.
References


