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Department of Educational Studies

Embedding Formative Assessment in the Writing Curriculum

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Abstract

This study investigates teachers' experience of using formative assessment to enhance pupil learning in writing. Teachers were presented with a cognitive resource comprising formative assessment principles, strategies and techniques. They were asked to integrate this with existing practice in teaching and assessing writing and to reflect on the process.

A mentored action research approach was adopted in a project which involved ten class teachers and five promoted staff, working in upper primary classes in three Scottish schools. Teachers maintained reflective lesson logs and gathered examples of pupil texts over the course of one academic year. These were used to focus discussion in 45 semi-structured interviews with the teachers. Pupil comments collected during lesson plenary sessions and interviews with promoted staff provided data triangulation. Qualitative data in the form of transcribed interviews and documents were managed and organised using NVivo software and subjected to interpretive, interactional analysis.

The findings of the study indicated that the primary teachers were able to integrate a variety of formative assessment techniques and strategies with existing practice and thereby enhance pupil learning. This involved the teachers in calling upon their prior knowledge of individual pupils and experience of teaching and assessing writing. Pupil learning gains were evidenced by improved skills in text production, the development of writer's 'voice', increased feelings of pupil self efficacy and enhanced metacognitive development. A model is proposed for sharing with pupils a hierarchy of learning goals in writing through 'crafting', 'coaching' and 'open' writing contexts. Teacher salience skills were shown to be important for the realisation of pupil learning gains. The project findings also indicated that, as formative assessment principles became embedded into practice, a more permeable relationship developed between teachers' formative and summative assessment understandings and practices.

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Introduction

Terms of Reference

In 1998, a small booklet entitled, *Inside the Black Box* (Black and Wiliam, 1998b), was published by two researchers working at King's College London, which is having a significant effect on the way Scottish primary school teachers understand their professional responsibilities in assessment. A recent commitment by the Scottish Executive, *Ambitious, Excellent Schools* (SEED, 2004), pledged to implement in Scottish primary schools by 2007, the assessment principles discussed in *Inside the Black Box* and the recommendations of its authors, Paul Black and Dylan Wiliam. The messages contained in the pamphlet have become the cornerstone of a new national assessment policy for this sector of the educational system.

The authors of the booklet asserted that improving teachers' formative assessment practice was an effective way to raise educational standards. Citing international research evidence (Black and Wiliam, 1998a), they claimed that the prevailing assessment practices of UK teachers served a managerial purpose, rather than one which supported pupils' learning. Justifying the need for further school-based research into formative assessment, they used the metaphor of a closed 'black box' to represent the classroom. They described, in system engineering terms, how certain 'inputs' (such as resources) were fed into the box, and certain 'outputs' (such as test results) measured. However the authors considered the assumption that the inputs led necessarily to the outputs to be flawed, and called for further investigation of what went on inside the black box of the classroom.

Chapters 1 and 2 of this dissertation consider international research on formative assessment and the policy background to the recent statement by the Scottish Executive, in order to identify issues that require further investigation. Those issues that emerged were the need for systematic investigation of:

- the processes of teaching and learning in classrooms
- how formative assessment maps on to existing epistemology and pedagogy in discrete curricular areas
- the tension for teachers around the differing purposes of formative and summative assessment

The theoretical base of current epistemology, pedagogy and assessment in relation to the subject area of writing is then reviewed. Consideration is given as to how formative assessment principles might be aligned with teachers' existing practice in this subject area, and the design of an action research project described which sought to investigate teachers' views of that alignment. The dissertation describes the progress and findings of that project, analyses them in relation to the literature background, and identifies resulting implications for both policy and practice. The project received ethical approval from the University of Strathclyde and appropriate permissions were granted from the teachers, schools and local education authorities involved in the project (appendix 3). The sample of schools and classes involved, and the period of data gathering, were constrained by financial and human resources. The project was supported by the Department of Childhood and Primary Studies at the University of Strathclyde, and conducted over a period of 3 years, while the researcher was working as a member of staff within the department.

Purposes of Study

- to make an original contribution to existing knowledge about formative assessment in relation to teaching and learning in writing
- to develop the research knowledge, skills and philosophy of the author

Aims

- to investigate teachers' experience of using formative assessment to enhance pupil learning in writing.

Objectives

- to review relevant research and policy literature on formative and summative assessment, writing epistemology and pedagogy
- to identify appropriate research questions from literature selected
- to conceptualise, design and implement a research project to address those questions
- to analyse data collected in relation to research questions
- to evaluate the findings with reference to the literature base selected
- to draw conclusions from that evaluation
- to use conclusions to make recommendations for policy and practice in relation to writing pedagogy, writing assessment and formative assessment
- to communicate findings and recommendations to a variety of audiences

Research Questions Identified

1. What is the nature of the benefit perceived by pupils of the embedding of formative assessment principles into their experience of the writing curriculum?
2. To what extent can teachers use formative assessment to enhance pupil learning in writing?
3. To what degree does the current criteria framework used for assessing children's writing match teachers' perceived demands of the task?

Methods of Enquiry

The methods of enquiry adopted included a review of literature in the fields under investigation. The study followed a mentored action research approach. This involved conducting semi structured interviews and professional discussions with teachers and promoted staff in schools. Pupil comments were collected by teachers to provide data triangulation. Qualitative analysis was employed of the data collected. Data management was achieved using NVivo software; this facilitated systematic interpretive, interactional analysis of documents and transcribed interviews.

Context of research

The investigation was conducted in three primary schools, in three different education authorities in Scotland. Ten teachers, working with upper primary classes, and five promoted staff participated in the study.

Influences that led to the Study

The researcher's decision to undertake the project was influenced by 15 years of teaching experience in Primary schools, 2 of which were spent in a specialist post focused on improving pupils' attainment in writing. She also had extensive experience of leading Continuing Professional Development for practising teachers and of working in Initial Teacher Education. The study was also influenced by her work in national developments in assessment in education, through her involvement with the Scottish Qualifications Authority, the Assessment of Achievement Programme and the Assessment is for Learning Programme (www.LTScotland.org.uk/assess). It responded to a professional context in which formative assessment had become an important agenda in primary schools, amid continuing concerns about pupils' attainment in writing (www.gov.uk/hmie). It was also conducted at a time in Scotland when teacher involvement in action research projects was perceived to be of value in professional development terms (www.gtcs.org.uk)

Difficulties Encountered

Some difficulties were encountered relating to sample attrition: two of the original 9 teachers left their schools during study. In response to this, a limited data set was collected for teacher 2L (cycles 1, 2, 3). The teacher who replaced her, (2M), had been involved in the study from the beginning, as she worked as a learning support teacher in school. She contributed data for cycles 4 and 5. A limited data set (cycles 1&2) was collected for teacher (1J)). One head teacher (HT2) was transferred to another school during the study. Final interview data was collected during the last cycle from the acting headteacher, who had previously been Deputy Head in the school and had attended the whole school CPD sessions offered by the researcher.

Chapter 1 The Rise of the Formative Assessment Agenda

- 1.1 Perspectives from Cognitive Science**
- 1.2 Learning Process and Learning Goals**
- 1.3 Scope of the Black and Wiliam Review**
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- 1.6 Formative and Summative Assessment Tensions**
- 1.7 Some Responses to the Review: Taking Feedback Forward**
- 1.8 Planned and Interactive Formative Assessment**
- 1.9 Convergent and Divergent Formative Assessment**
- 1.10 Identified Issues for Further Investigation**

Chapter 1 The Rise of the Formative Assessment Agenda

Inside the Black Box (Black & Wiliam, 1998b) was written in order to communicate the findings of an international academic review (Black & Wiliam, 1998a) to a wider audience, including teachers. This review summarised research from many countries which looked at the relationship between formative assessment and learning. In tracing the rise of the formative assessment agenda, this chapter looks closely at the findings of the review. It compares the conclusions of the authors with those of a report on the science and design of educational assessment produced for the National Research Council in the USA (Pellegrino *et al.*, 2001). It argues that the authors of the Report and the Review were working from differing theoretical perspectives, which affected their conclusions. It looks for common issues emerging from both bodies of work, in order to identify themes for further investigation; those in turn help guide the research questions, the curricular focus of the research on writing and the design of this project.

1.1 Perspectives from Cognitive Science

Much of the research in the Black and Wiliam Review represented a response to changing views of the relationships in a theoretical ‘assessment triangle’ of cognition, observation and interpretation which had been prompted by developments in cognitive science. According to Pellegrino, the cognition corner of this triangle refers to a theory about how pupils represent knowledge and develop competence in particular subject domains. The observation corner refers to a set of beliefs about the kinds of *tasks* that that will enable pupils to demonstrate their knowledge and skill. The interpretation corner of the triangle represents the methods and tools used to reason about, and evaluate evidence from observations of pupil

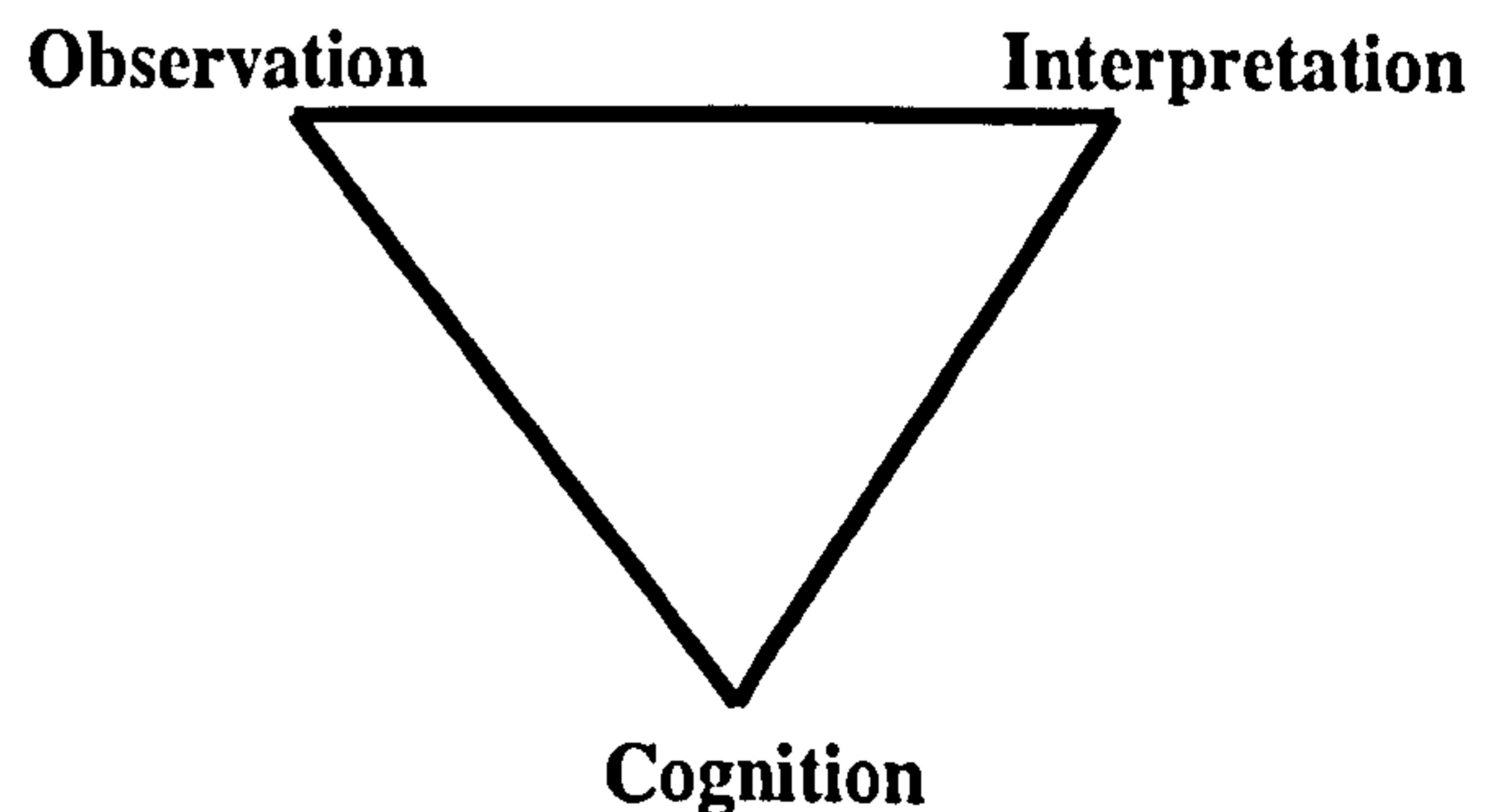


Figure 1. Assessment Triangle.
Derived from Pellegrino *et al.*, 2001 p44

performance on those tasks. The developments in cognitive science referred to by Pellegrino include how children create understanding; how they reason and build structures of knowledge; which thinking processes are associated with competent performance; and how knowledge is shaped by social context. An account is supplied below of how Pellegrino believes these developments have evolved from the four different viewpoints within cognitive science: the differential, the behaviourist, the cognitive and the situative perspectives. Pellegrino's Report and the Black and Wiliam Review are then considered in the light of these theoretical perspectives.

The *differential perspective* focuses on the nature of individual differences in what children know and can do; mental capacities in this perspective are perceived of as fixed and measurable. This perspective can be traced back to Binet's work on cognition and intelligence, (Binet & Simon, as cited in Gardner, 1999). Binet's view of ability was that it could not be enhanced and his tests were premised on the assumption that performance in them could not be improved by instruction (Gardner, 1999). Although Binet's ideas link learning theory with assessment, pedagogy did not feature in his framework. Indeed Binet's tests were highly valued because they were specifically designed to eliminate from test results, benefits to the student that could have accrued from pedagogy or curriculum. Binet's IQ tests were therefore norm referenced, designed to rank students according to inherent intellectual capacity.

According to Pellegrino, in the *behaviourist perspective*, knowledge is the organised accumulation of stimulus / response associations that serve as the components of skills. These associations are seen to arise as a consequence of reinforcement or feedback. Behaviourists believe learning can be enhanced through the motivating effect of extrinsic rewards. Behaviourist accounts of learning can be considered as including limited representation of the richness of thought and language on learning processes. The *cognitive perspective* however, focuses on how individuals develop structures of knowledge, including the concepts associated with subject matter disciplines. By contrast, the *situative perspective* as described by Pellegrino, rejects an exclusively individualistic view of learning and considers how a person's activity is socially mediated by cultural artefacts such as language.

In his analysis, Pellegrino suggests that consideration of these issues in the U.S.A. led to dissatisfaction with state assessment policies which were premised on an assumption that the purpose of educational assessment was the creation of an educational meritocracy. The purposes of such policies were to evaluate the effectiveness of the educational programmes in schools, to rank pupils normatively, and thus to open up opportunity for individuals of high ability. As the meritocracy aim was challenged by a more inclusive aim of educational success for all, so the roles of observation and interpretation in the assessment triangle came under scrutiny. The nature of the tasks presented to pupils to test their understanding, and the ways in which evidence of the learning was evaluated, were challenged by researchers.

Pellegrino sees the 'authentic assessment' movement in the U.S.A. as resulting from this scrutiny. This movement championed assessment tasks that required the application of combined knowledge and skills, in the context of 'real' problems. However, Pellegrino explains that even these 'authentic' approaches to assessment may be limited in their ability to achieve success for all. He attributes this limitation to the fact that these assessments do not adequately encompass the new understandings about the nature of learning in relation to students' organisation of knowledge and use of strategies such as self monitoring. He calls for better alignment of high stakes summative testing with formative teacher assessment in the classroom, which aims to support learning. The present formative assessment agenda therefore can be seen as emerging from this background of progress in cognitive science, and particularly from developments in the spheres of cognitive and situative understandings.

For Pellegrino, the cognitive perspective appears to be the most significant one, with its emphasis on how individuals develop structures or schemas of knowledge, including the concepts associated with subject matter disciplines. (A schema is a way of organising knowledge in memory so that it can be used for problem solving purposes in new contexts.) His recommendations for a new assessment model emphasise the role of both short term and long term memory in developing individuals' knowledge and subject discipline 'schemas'. Pellegrino sees formal educational measurement (psychometric) techniques as offering a useful way of supporting the drawing of inferences from

assessment evidence. While Pellegrino acknowledges the contribution to assessment theory of the situative perspective, his conclusions about the desired direction for assessment practice in the USA remain driven by a predominately cognitive perspective. This is evidenced for example, when he discusses the importance for learners of metacognition on the process of reflecting on and developing one's own thinking. He characterises this process in an individualistic, knowledge- structuring way as a self - correction exercise, rather than a socially negotiated understanding. Pellegrino's emphasis on the importance of the development of subject- specific schemas is of relevance for this study which is focused on the curricular area of writing.

1.2 Learning Process and Learning Goals

In their international Review, Black and Wiliam (1998a) sought to identify evidence that innovations in formative assessment can lead to improvements in pupil learning. Their conclusions, which call for more qualitative studies of interactions within classrooms, seem to be driven by a predominately situative perspective. Like Pellegrino, they do not reject other perspectives; the difference between the two studies is one of emphasis, rather than polarised opposition. Their Review looked almost exclusively at studies which produced quantitative evidence of improvements in pupil learning. The bias towards quantitative evidence in itself suggests the desirability of further complementary qualitative studies. Twenty quantitative studies were found by the reviewers, which demonstrated a positive link between formative assessment innovations and pupil learning. Most showed that formative assessment helped low attaining pupils more than others, thus reducing the spread of attainment as well as raising attainment overall. This evidence therefore shows that formative assessment can help educators realise the inclusive educational aim of academic success for all. The following sections will look in more detail at the Review, drawing attention to those articles that have particular relevance for this study.

In their introduction to the Review, Black and Wiliam, acknowledge that, at the time of writing, the term 'formative assessment' was inadequately defined. The definition they

offer which emphasises the agency of the pupil /teacher partnership, clarifies their situative, social constructivist perspective:

“all those activities undertaken by teachers and or by their students which provide information to be used as feedback to modify teaching.”

(Black & Wiliam, 1998)

For Black and Wiliam, the aim of formative assessment is therefore the furnishing of information to be used reflexively by the teacher, for the benefit of the pupil. The focus for the researchers is the interactive *process* of learning, rather than the *product* of achievement.

What is uncertain in the introduction to the Review is the relationship envisaged by the authors between this learning process and learning goals. Teachers are clearly identified through the feedback process as mediators of learning goals but the nature of those goals is not clearly specified. This raises an important issue that is pertinent for this study. Pellegrino's 'assessment triangle' makes little reference to learning goals and focuses rather on tasks performed by pupils. However, the 'learning goals' issue is considered in some depth elsewhere in the Report. Pellegrino states that it is necessary for educational assessment to be aligned with curriculum and instruction if pupil learning is to be adequately supported. He therefore sees the curriculum as representative of teaching aims. His use of the term 'instruction', rather than 'teaching' implies a didactic view of the relationship between teacher and learner, rather than a dialogic one. He also states that the aspects of learning that are assessed and emphasised in the classroom should be consistent with the aspects of assessment 'targeted' by large-scale assessments. As discussed earlier, large scale assessments focus on summative testing and measure attainment in relation to curricular programmes of study. For Pellegrino therefore, classroom-based assessments should be *learning product* related; for Black and Wiliam, they are more *learning process* related. As suggested earlier, this indicates a difference of emphasis, rather than a polarised difference of opinion; it is perceived as linked to the difference in the theoretical perspectives adopted by the named authors. What is clear,

however, is that the relationship between learning process and learning goals has emerged as an important issue for consideration.

1.3 The Scope of the Black and Wiliam Review

Black and Wiliam describe eight examples of classrooms where formative assessment has become a normal part of classroom learning and characterise these as 'ecologically sound' for the purposes of the Review because of their authentic contexts and curriculum foci. However, none of the sample classrooms selected exemplifies research linked to the literacy curriculum. The majority are linked to either mathematics or science; only one has a direct connection with literacy (a minor focus on reading). As these eight classrooms are used to make generalisations about formative assessment and provide a basic framework for the rest of the review, this omission is significant, and suggests that studies focussed on other curricular areas such as literacy would complement the Review selection.

When Black and Wiliam consider teacher questioning, they claim that few teachers in the studies reviewed, focused on outcomes such as critical reflection. Many of the tasks routinely set by literacy teachers in both reading and writing are premised on critical reflection outcomes. This indicates that studies of their questioning practice may illuminate pedagogical knowledge in this area. It again points to a gap in the sample of teacher studies chosen by Black and Wiliam.

It can be argued that the issue of differences between discrete domains of learning is one that is underdeveloped in Black and Wiliam's analysis. Although they claim that implementing formative assessment calls for deep changes in teachers' perceptions of their own role, the notion of teachers' subject philosophies is not 'unpacked'. Pellegrino suggested that the 'cognition corner' of the assessment triangle was about how pupils represent knowledge and develop competence in *particular subject domains*. Formative assessment frameworks therefore may need to be differently interpreted in different subject domains. This would involve an examination of what is distinctive about learning in different subject areas; about what it means to 'know' in different domains. Such a domain-based epistemological focus would necessarily entail an exposition of

appropriate, domain specific learning goals. Adopting a specific subject focus may be one way of addressing the issue identified earlier of the relationship between learning process and learning goals. This strategy is adopted in Chapter 3 of this dissertation where the epistemological and pedagogical base of the curricular area of writing is examined in detail.

1.4 Learning Tasks Planned by Teachers

The relationship between the process of learning and the achievement of learning goals is illuminated by a consideration of studies in the review which looked at learning tasks devised by teachers. These can be seen as structures which teachers use to mediate learning goals with pupils; teachers design tasks to facilitate the achievement by pupils of learning aims. The nature and structure of tasks planned by teachers therefore deserves attention; this will include consideration of activities planned for pupils, contexts for learning and support strategies offered by teachers. Black and Wiliam consider research evidence about formative assessment strategies and tactics that are available to teachers to promote high quality learning. These include forward planning variables, such as devising tasks for pupils. The skills demanded by the alignment of teaching goals, learning and assessment are recognised to be among the most difficult that beginning teachers have to acquire and continue to prove problematic, even for experienced teachers (Lambert, D. & Lines, D, 2000). In a discussion of assessment tasks, Black and Wiliam indicate that it is important for pupils to understand the *purpose* of the assessment tasks set by teachers, if the tasks are to have assessment validity. Tasks, they assert, must also be stimulating and have the potential to offer short term, self referenced goals for pupils. These two criteria are together seen as structuring meaningful learning opportunities for pupils. Thus motivation for learning is portrayed as arising from a combination of cultural, affective and cognitive task features.

Affective issues are considered in a study which reports reasons students themselves give for the results of their learning (Vispoel & Austen, 1995). These reasons appear to differ between high and low achievers: high achievers attribute success to effort and low achievers attribute failure to low ability. Vispoel and Austen suggest that teachers should

help pupils overcome attributions to ability and should encourage them to regard ability as a collection of skills that they can master over extended periods of time, rather than through performance on single tasks.

In a consideration of the quality of classroom discourse, it is acknowledged that the provision of pedagogic structures can be helpful learning focusing devices. The example quoted of mind maps (Roth & Roychoudhury, 1994) helped locate the attention of teachers and pupils in a shared agenda for learning. Black and Wiliam call for better informed understandings of the connections between learning, tasks, assessments and pedagogy. As teachers use forward planning to connect these aspects of professional practice, this author sees a need, on the part of researchers for increased awareness of teachers' planning decisions.

1.5 Feedback on Learning

Several of the studies included in the Review highlight feedback to pupils on the quality of their work as an important factor in improving learning. The previous section argued that teachers' forward planning decisions about learning are influenced by their perceptions about learning goals. Feedback to pupils about their responses to the planned learning tasks and contexts provides further opportunities for teachers to intervene in the process of pupils achieving learning goals. One of the studies reviewed (Schunk & Swartz, 1993a), which focused on learning in writing with primary aged children, looked at feedback supplied to pupils on process, rather than product goals. Children working in groups were subject to different treatments: either their teachers emphasised the process of *how* to solve problems or they emphasised the success criteria without built in self evaluation. Outcome measures of skill, motivation and self efficacy showed that engaging in the process of frequent, built- in self evaluation, was highly beneficial to pupils. Fostering problem solving capacities through self reflection and collaborative group work suggests an alternative approach to developing metacognition than that proposed by Pellegrino. This social constructivist approach would involve pupils in using a metalanguage to talk about their learning. The wide ranging pupil gains reported in the outcome measures for this project suggest that providing feedback on process

goals may lead to gains in areas of achievement not covered by programmes of instruction as well as improvements in subject specific skills. The nature of the feedback supplied to pupils was a crucial factor in this study and this has therefore emerged as an important issue for further consideration. Feedback focused on process goals may be a productive mechanism for structuring teacher/ pupil interactions.

A qualitative study by Ross *et al.* (1993) employed 'assessment conversations' with pupils to help them reflect retrospectively on their work, with positive benefits to the quality of the pupils' aesthetic judgements. Ross' work therefore extends the product/ process schism in assessment, by using retrospective dialogues to help pupils resolve the affective and cognitive conflicts involved in the creative process. This study is focused on assessment in expressive arts subjects, such as drama, sculpture, drawing and dance but also includes one case study on poetry writing. Black and Wiliam are dismissive of the claim that the qualitative improvements in pupil's aesthetic judgements are representative of improved learning, This seems to conflict with their support for a process driven approach to learning but may be due to the limitations imposed by the quantitative nature of the research evidence base of their Review. However, Ross' two principles of 'articulation of achievement and self assessment' seem to accord with Black and Wiliam's (1998b) formative assessment principles. If pupils are to be involved in expressing views about their own learning, this implies that they will need access to teachers' assessment discourse. Engagement in such a discourse involves the use of metacognitive strategies and a distinct metalanguage. Consideration of the studies above indicates that feedback to pupils about their learning is an important issue. Feeding back to pupils about their responses to tasks offers teachers intervention and mediation opportunities. The interactions between teachers and pupils that resulted in the studies considered suggest the desirability of further investigation of ways of structuring pupil self evaluation and developing their metacognitive capacities.

1.6 Formative and Summative Assessment Tensions

In a section of the Review which deals with assessments designed and conducted in class by teachers, the authors draw attention to the tension that exists when teachers are

responsible for both formative and summative forms of assessment; indeed they expressly refer to the Scottish context in relation to this claim. This difficulty persists, the authors explain, even though Scottish teachers work within a confirmatory testing system (Harlen, 1995, 1996, 2003) using external tests when they think pupils are ready. Black and Wiliam's view of the relationship between teachers' formative and summative assessment practices does not seem as straightforward as the one of consistency and dependence expressed by Pellegrino. It is suggested in the Review that a portfolio approach which involved students in reviewing and selecting their own work might help resolve the tension between teachers' formative and summative assessment practices. This contentious area therefore seems worthy of further attention.

In summary, Pellegrino's report highlighted the development of pupils' knowledge structures in relation to particular subject domains as an important issue for further investigation. He focuses on metacognition as an area of particular concern. Black and Wiliam are also concerned with pupil metacognition but their emphasis on the learning process in classrooms, leads to a focus on pupils' self monitoring through the use of interactive formative assessment strategies, rather than a cognitive model based on error correction. These strategies involve participating actively in dialogic questioning and answering activities, and are premised on an understanding by pupils of learning aims and success criteria.

Both Pellegrino and Black and Wiliam are concerned that pupils learn to make effective use of feedback on learning; both highlight the importance of a goal oriented view of learning. Pellegrino sees more effective use of psychometric techniques in educational research as offering a way forward. Although Black and Wiliam's study was quantitatively based, they suggest more qualitative studies of classroom processes would aid understanding of the issues raised.

1.7 Some Responses to the Review: Taking Feedback Forward

A response by Sadler develops the conclusions of the reviewers on feedback issues, and a study by Cowie and Bell published the following year (1999) adds an immediate, temporal dimension to Black and Wiliam's formative assessment principles. Torrance

and Pryor (1998) develop their earlier work (Torrance and Pryor, 1995) and present a conceptual framework for formative assessment which has pupil empowerment as a central theme. The latter three examples all therefore develop the understandings of formative assessment offered in the Review in significant ways and will be discussed in the following sections of this chapter.

Sadler (1998) focuses on the quality of feedback that pupils receive, as the crucial feature of successful formative assessment. He explains how understandings about feedback have progressed from a behaviourist stimulus / response model, to feedback which takes account of both the nature of the task and the individual learners' response. He describes Black and Wiliam's account of the role of the teacher in the feedback process, as a mediator between the learning goals and the learner, as described above. His comments on learning goals suggest that they need to be understood, not as fully formed or entirely predetermined, but as potentially malleable or negotiable. Sadler suggests that greater agency should be accorded to pupils in the feedback process, echoing similar suggestions from Ross (1993).

Sadler expresses a desire to see a framework against which teachers can judge individual pupil performances, independently of the rest of their learning cohort. He seems to be advocating that pupil performance be judged in terms of an individualised response to contextualised tasks, rather than by comparison with some external, criterion referenced, curricular standard. This notion of the 'internal cohesiveness' of a performance and its assessment is worthy of further exploration in literacy contexts, where achievement of task purpose in specifically defined contexts, can be seen as an integrating factor in assessment. Discussion of the role of genre theory in Chapter 3 develops this idea further.

Sadler identifies a need for teachers to be able to recognise 'true accomplishment' (Sadler, 1998) but acknowledges the difficulties teachers face in being able to *recognise when this happens*. Here he draws attention to the need for teacher 'alertness' when engaged in teaching and assessment activities. In acknowledging the dialogic nature of the feedback process, Sadler contributes views on what teachers bring to the task in addition to curricular knowledge; namely highly developed evaluative skills. He sees

these skills as arising from experiential learning; from extensive, first hand experience on similar assessment tasks. He implies that the daily requirement on teachers to attend conscientiously to features of student performances represents a particular form of professional learning, which results in the development of 'tacit' professional knowledge (Sadler, 1998, p. 82).

Sadler makes a suggestion to inform the issue raised above about how feedback can be used to help structure pupil self evaluation and develop metacognitive capacities. He proposes that what is required is a deliberate sharing of this tacit professional knowledge with pupils. He views the development of self evaluation skills as an important part of the learning agenda for pupils, widening the scope of learning goals across the curriculum, to include metacognition. Furthermore he asserts that this development should be accomplished by teachers by providing feedback to pupils in language that is already known and understood by the learners. He sees pupils' lack of experience in constructing evaluative judgements as a potentially limiting factor in this process.

Sadler's article therefore develops understanding of the important issue of providing pupils with feedback on their learning. He advocates a wider definition of learning goals than that espoused by either Pellegrino or Black and Wiliam. His discussion of the internal cohesiveness of tasks suggests a move away from strictly criterion referenced assessment frameworks, linked to the curriculum. He provides more information on the roles of teacher and pupil during the feedback process. He sees active pupil metacognitive development as being fostered through a sharing of teachers' skills of evaluation. He suggests that the demands upon teachers when they are engaged in interactive, assessment oriented dialogues with pupils are extensive. He sees as necessary the ability of teachers to 'think on their feet'; to 'orchestrate' knowledge of the curriculum and the capacities of individual children, while simultaneously employing high level evaluation skills. Sadler's article contributes to the theoretical argument in favour of formative assessment supporting learning, but he offers few practical strategies to help implement his ideas. The requirement for teachers to communicate with children at their own linguistic level is however one practical

recommendation. He does however, show confidence in the experience- based learning of teachers in his discussion of 'tacit knowledge'.

1.8 Planned and Interactive Formative Assessment

Cowie and Bell (1999) further develop the definition of formative assessment offered by Black and Wiliam in 1998, by adding a temporal dimension to it. This also builds on Sadler's suggestions about teachers being able to recognise accomplishment *when it happens*. Formative assessment for Cowie and Bell is contemporaneous with learning; it happens *during* learning. They characterise two types of formative assessment that teachers use: 'planned' formative assessment and 'interactive' formative assessment. Planned formative assessment involved teachers deliberately eliciting and interpreting assessment information, via planned assessment tasks, then taking action on the information. Planned formative assessment in their study was usually undertaken with the whole class and was linked to perceived professional responsibilities related to curriculum coverage of the knowledge based aspects of the science curriculum. As Sadler suggested (1998), the teachers noted the value of pedagogical experience in enabling them to interpret the (often written) assessment information elicited through the planned tasks.

Interactive formative assessment arose out of learning activities and occurred during teacher/ pupil interactions. Its purpose was seen as mediating in the learning of individual pupils, with respect to domain, social and personal learning. Interactive formative assessment was not therefore tied to purely curricular goals but was related to wider learning goals. One teacher in the Cowie and Bell study described it as '*linking students into her agenda*' (Cowie and Bell, 1999, p.108) which echoes the Black and Wiliam call for pupils to share responsibility for assessment. (Black and Wiliam, 1998) The ability of a teacher to respond swiftly to the information obtained during interactive formative assessment seemed to be important. The information obtained was usually verbal and therefore ephemeral, and often fortuitous, as it depended on the teacher being within hearing distance of the pupil. Cowie and Bell's teachers' ability to respond in interactive terms was dependent on their ability to '*notice*' and was again perceived by

the teachers to be influenced by pedagogical experience. Cowie and Bell recognise that the opportunistic nature of interactive opportunities, and commensurate lack of systematic application, is an important issue in the effectiveness of this type of assessment.

Cowie and Bell's teachers were described as 'switching' between employing planned and interactive assessment activities during their teaching. They 'switched' into an interactive mode when they 'noticed' an opportunity to apply this type of assessment during planned activities. They 'switched' back to planned assessment when their 'whole class' teaching and management activities made this necessary, exhibiting a preference for interactive over planned formative assessment. Planned formative assessment was viewed as curriculum driven; whereas the purpose of interactive formative assessment was to mediate in the learning of individual pupils with respect to science, personal and social learning. Teachers in the study reported that the 'eliciting' and 'noticing' aspects of formative assessment were less onerous than the 'acting' and 'responding' aspects, when they were teaching science. This suggests that the 'orchestration' of knowledge and skill that was deemed desirable by Sadler for the provision of effective feedback was challenging, even for experienced teachers.

Cowie and Bell's model of planned and interactive formative assessment can be seen as bringing together previously described understandings of formative assessment. It links assessment to staged curricular goals through teacher planning, yet also takes account of the dynamic learning potential of classroom dialogue. The importance of teacher experience on perceived pedagogical effectiveness was however deemed to be significant by teachers. The 'alertness demands' of 'noticing' and the skill demands of effective interactive questioning and feedback were all important factors related to pedagogy. Robust knowledge of individual pupils and the domain in question again emerged as significant factors for success in Cowie and Bell's model.

1.9 Convergent and Divergent Formative Assessment

In a third response to the Black and Wiliam Review, Torrance and Pryor (2001) suggest that teachers' understandings in formative assessment can be described in terms of a

conceptual framework involving 'divergent and convergent assessment'. Torrance and Pryor's analysis of the dynamic classroom environment highlights the dimension of 'pupil empowerment' in the formative assessment debate, which was also raised by Sadler. Their concern is that previous understandings of formative assessment have seen it as located in the teaching process and only indirectly concerned with learning; that feedback from assessment activities previously has been information for the teacher, rather than the pupil. They describe examples of incidents in classrooms where a teacher's prospective pedagogic agenda mediates her interpretation of pupil performance. These examples accord with Cowie and Bell's discussion of "planned formative assessment". In their discussion of classroom interaction, Torrance and Pryor suggest that teachers 'appropriate' children's responses in order to maintain order in the classroom and to scaffold the social construction of the class lesson, rather than to explore individual children's understandings. This adds weight to Cowie and Bell's description of the reasons for teachers 'switching' between planned and interactive formative assessment modes.

Like those in the Cowie and Bell study, the teachers in the Torrance and Pryor study valued highly classroom opportunities which allowed them to respond interactively with pupils. Torrance and Pryor take a pragmatic view of the demands of a busy infant classroom. Like Cowie and Bell, they stress the importance of teachers developing observational skills, while engaged in planned formative assessment activities, in order to identify interactive assessment opportunities. They see 'focused' questioning as the answer to both planned and interactive formative assessment purposes, and provide transcripts of this focused questioning 'in action'. The 'switching' examples are presented both as opportunities for teachers to gather evidence of achievement and opportunities for them to facilitate children's social and cognitive development.

Like Cowie and Bell, they indicate that teachers find the skills involved in the 'switching' activity problematic. The solution offered by the authors is for teachers to focus on the 'here and now', to find ways of incorporating formative assessment with pedagogical style.

They identify two conceptually different approaches to classroom assessment: convergent and divergent formative assessment. 'Convergent' assessment, like Cowie and Bell's planned formative assessment, is tied to curricular goals; the important thing here is to find out *whether* the child knows, understands or can do a particular, pre-specified 'thing'. This purpose is usually pursued via 'closed' type questioning, often following the initiation / response / feedback pattern of standard classroom discourse. 'Divergent' assessment, on the other hand, emphasises the learner's understanding, rather than the agenda of the assessor. Here the important thing is to establish *what* the child knows, understands or can do.

Torrance and Pryor's detailed exposition of teacher / pupil dialogues in the study allow them to suggest that divergent formative assessment involves a departure from the initiation / response / feedback type of classroom discourse, towards a questioning style which focuses on 'miscues'. These aspects of learner's work, it is claimed, yield insights into their current understandings and enable improved qualitative feedback. The authors admit, however, that this is a pedagogical ideal, worth striving for, rather than commonly experienced and that it depends greatly on teachers' skill in structuring questioning effectively. Opportunities to develop this approach are also limited, as the authors acknowledge, by the essentially convergent demands of the curriculum. Like Cowie and Bell, they recommend a form of switching from the planned / convergent mode of assessment, to the interactive / divergent mode, as classroom contextual circumstances allow. Essentially both studies encourage teachers to develop an *alert, flexible 'open assessment' disposition* during teaching and to employ this approach in an opportunistic way, as contingent circumstances allow. What remains distinctive about the Torrance and Pryor framework is their exposition of power transfer in the classroom, and its links to self efficacy for pupils.

Torrance and Pryor's comments on teacher planning are likely to be significant for this study. They stress that the sort of planning that would encourage divergent assessment would have to be flexible and enable teachers to move away from the attainment of short term objectives, towards ensuring that some element of metacognition was being consciously pursued and an underlying understanding developed. Torrance and Pryor

view planned pedagogic opportunities for children to speculate, argue and critique their work as a vital part of a divergent assessment approach and a necessary step in the transfer of classroom power that they advocate. They suggest that these opportunities for explorative talk may be between pupils as well as between teachers and pupils; this is an important element in their power transfer discussion. They use the term 'negotiation' to characterise teacher/ pupil interactions. They outline the strategies they observed teachers using in order to implement a divergent model of formative assessment (Appendix 1). In summary these involve sharing success criteria with pupils, encouraging self assessment, questioning in divergent ways and providing useful feedback. Torrance and Pryor therefore provide a wide ranging theoretical discussion, contrasting two approaches to formative assessment: a behaviourist one, stressing measurement against objectives; and a social constructivist one, integrating assessment into learning (Black & Wiliam 1998 p. 39). They conclude that the most promising formative assessment strategies appear to include: the use of clarifying and metacognitive questioning; explicit discussion of success criteria; discussion of methods of self monitoring; careful intervention to promote understanding of learning goals and intrinsic motivation. They emphasise that well structured small group work is likely to achieve the desired outcomes as effectively as teacher/ pupil interaction.

Teacher planning has resurfaced from the Torrance and Pryor work as an important pedagogical factor to consider in this discussion. The move away from short term objectives to more global aims is seen to be a more realistic way of achieving interactive discourse with pupils. The development of thinking about improved questioning, related to building on miscues, seems grounded in sound classroom observation and as such, it complements Sadler's theoretical discussion by providing practical exemplification. What seems to emerge from all three studies as necessary is improved observational skill as part of pedagogy, so that teachers can time interventions in the learning process which carry a likelihood of success.

1.10 Identified Issues for Further Investigation

In conclusion, the literature reviewed in this chapter has allowed a number of issues to emerge which have helped frame the focus of this study and the research design:

- relationship between learning process and learning goals
- importance of appropriate, well focused feedback
- development of pupil metacognition
- observational skills demanded of teachers for effective use of assessment information
- formative and summative assessment tensions

The tasks planned by teachers, the contexts for learning they devise and the support strategies they offer pupils are seen, by this author, as pedagogical structures used to mediate learning goals. Learning goals may be either product-related (linked to curriculum based achievements) or process-related (linked to active, socially constructed learning). Investigating teachers' forward planning for learning would shed light on their understanding of learning goals. The feedback on learning offered by teachers to pupils furnishes further opportunities for the mediation of both product and process learning goals. Structuring feedback opportunities to encourage the active participation of pupils in reflection and self evaluation enhances their metacognitive development, with positive benefits for learning. Investigating ways of structuring effective feedback would increase understanding of this process. It must be remembered however that the pupil's main resource in self evaluation is the model provided by the teacher; this makes the adoption of a shared agenda for learning of crucial importance. (Black, 1998) Making effective use of assessment evidence gained from pupils' work, reflexively during teaching, demands a high level of pedagogical skill. Lambert and Lines (2000) describe this as requiring,

'the application of relentless mental and physical energy, excellent classroom management and organisational skills and secure subject knowledge'.

(Lambert & Lines, 2000 p.121)

The research base analysed above indicates that enhanced observational skills, in particular, may be necessary for teachers who wish to use formative assessment strategies to enhance pupil learning. More in-depth understanding of those skills in relation to specific subject domains would contribute to existing knowledge in this area. The research project for this study had, as its aim, the investigation of teachers' experience of using formative assessment to enhance pupil learning in writing. The project was therefore designed to address the issues identified above of learning goals, feedback, metacognition and observational skills, in order to provide answers to Research Question 2:

To what extent can teachers use formative assessment to enhance pupil learning in writing?

It is also clear from the research literature that teachers experience difficulties in coping with the differing demands of formative and summative assessment across the curriculum. The researcher sought to progress understanding of this issue by approaching it via a subject specific focus on writing, within the teaching of literacy, as this area seemed relatively neglected in previous studies.

Chapter 2 Curriculum and Assessment: the Scottish Policy context (1989-2004)

2.1 Background to the Scottish Experience

2.2 The 5-14 Curriculum and the Raising Standards Agenda

2.2.1 The Introduction of the 5-14 Guidelines

2.2.2 National Testing and Raising Standards

2.2.3 The Assessment of Achievement Programme (AAP): Evidence for a Focus on Social Inclusion

2.3 The 1998 Review of Assessment

2.4 The Assessment is for Learning Programme

2.4.1 Consultation and the Ministerial Response

2.4.2 A Comparison with the English Policy Context

2.4.3 Shifting Purposes for Assessment within the Learning Triangle in Scotland

2.4.4 Investigating Links between Assessment and Pedagogy

Chapter 2 Curriculum, Pedagogy and Assessment: the Scottish Policy Context (1988-2004)

Chapter 1 investigated the research background to the emergence of the formative assessment agenda from an international perspective. This chapter develops two of the issues identified for further investigation: the relationship between learning process and learning goals; and the tensions perceived between formative and summative assessment procedures. In Chapter 1, reference was made to Pellegrino's 'assessment triangle'. Murphy (1999) adopts a more holistic stance, where dynamic, interdependent relationships between assessment, curriculum and pedagogy are portrayed as a 'learning triangle'. This 'learning triangle' provides a framework to help reappraise learning goals, learning process and their integration with assessment. A national curriculum reflects what is valued for learners by the people who constructed it. It is concerned both with what is to be learned, how it is taught, and what is assessed (SEED, 2004). It therefore can be taken as representing the learning goals of policy makers, and offering an interpretation of their translation into pupil learning.

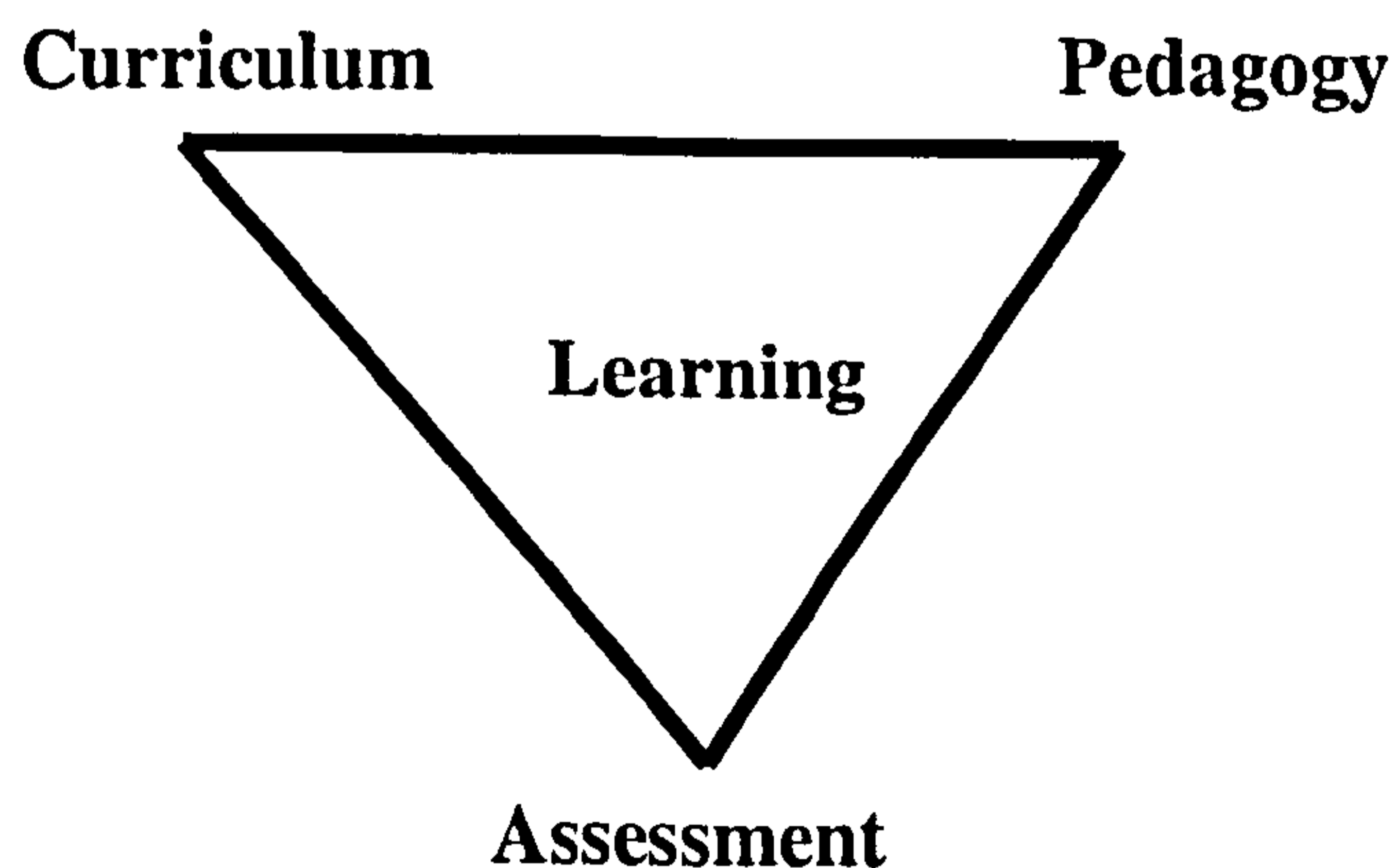


Figure 2. Learning Triangle

Pellegrino (2001) acknowledges the need for clearer links between assessment curriculum, and 'instruction'. Black and Wiliam (1998) place less emphasis on the curricular corner of the triangle in their review, but more on links between teaching and learning. Their discussion of learning goals 'fills' the curricular 'corner' of the triangle in a non-subject specific way. Murphy suggests that the relationships in the 'learning triangle' between curriculum, assessment and pedagogy are dependent on theoretical understandings of mind and learning. However, the 'learning' within the triangle takes place in real school classrooms, and is not only a theoretical construct. It is therefore logical that the link between learning theory and the realisation of that learning in the classroom is also subject to contextual pressures. In this chapter, I suggest that the prevailing national political climate exerts powerful pressure on the learning that is realised in classrooms. I propose that national educational policy makers can exert influence on all three 'corners' of Murphy's triangle: curriculum, assessment and pedagogy, and that that pressure in turn affects the classroom learning. Consideration of the issues of learning goals, learning process and assessment is therefore contextualised within a particular policy context, that of the Scottish education system since 1988. Some comparison with the English context during the same period is also offered, in order to draw out distinctive features of the Scottish context. In 1988, Scottish teachers were coping with a shift in national examinations from a norm referenced approach to a criterion referenced approach. That year saw the publication in England of a report (DES, 1988a) which challenged the underpinning philosophy of the existing national system of examinations. The analysis offered provides further evidence to suggest that a classroom based study, which concentrated on teachers' views of pupil learning and focused on that learning, in a particular curricular area, would add to understanding in the field.

This chapter therefore explains how relationships between assessment, curriculum and pedagogy have been characterised by researchers and policy makers in Scotland since 1988. In order to address the formative/ summative assessment issue, it reviews how government policy impacted on teachers' understandings of the differing purposes of assessment. It draws upon writing by Scottish academics and policy makers, to give an

account of the background to the Assessment is for Learning Programme (AifL) in Scotland which arose in 2000. This programme aims to develop a coherent national assessment policy, which takes account of different assessment purposes. It suggests that assessment policy in Scotland during the period under consideration was shaped by two distinct political aims of the governing Labour administration: the raising of educational standards and social inclusion.

2.1 Background to the Scottish Experience

Brown (1988), writing about assessment practice in secondary schools in Scotland, applauds a move at that time away from norm referencing (driven by the meritocracy educational aim) towards the criterion referenced system which was introduced for Standard grade examinations. However, the introduction of criterion referencing through a system of formal external examinations indicated that the move was one of change of emphasis, rather than a paradigm shift. The linking of criterion referencing to the examination system can be seen as perpetuating a normative underpinning in the system. Levelled Standard Grade examinations with their 'credit, general and foundation' categories are designed to map on to the achievements of pupils across a wide ability spectrum. Thus, although performance is criterion referenced, those criteria are linked to differentiated curricular targets, perpetuating norm referencing. At this time in primary schools there were no national curricular guidelines and no system of nationwide tests. Brown (1988) rejects selection and ranking of pupils as the sole purpose for assessment, and suggests instead that assessment *should* have a more constructive role to play in teaching and learning. In her discussion of the new criterion referenced assessment system, she acknowledges that this will involve teachers in making diagnostic, qualitative judgements in relation to curricular goals.

'Any kind of function for assessment which will help young people to learn, or teachers to teach, will require an evaluative description of what has been achieved'

(Brown, 1988, p.6)

The move to criterion referencing therefore strengthened links between the curriculum and assessment and represented a shift in Scottish education towards a more cognitive perspective. Brown's conception of assessment at this stage acknowledges the role of pupil motivation in attainment, but the discourse relies upon terms such as 'success' and 'failure' and diagnosis of difficulty. Sadler (1989) was already warning around the time of Brown's paper, of the limitations of criterion referencing. His view then was that criteria alone are unhelpful in judging the quality of a piece of work or in guiding progression. He felt that that it was necessary to take a wider view and consider the effect of the many variables at play in the social context of the classroom. This view of Sadler's can be seen as providing a setting for the interest in formative assessment described in Chapter 1. Similar social constructivist influences can be detected in the Scottish 5-14 curricular documents which followed shortly afterwards (SOED, 1991; SOED, 1991a; SOED, 1991b).

2.2 The 5-14 Curriculum and the Raising Standards Agenda

This section analyses Scottish government policy documents to trace the development of ideas about assessment in relation to curriculum and pedagogy from 1990-1998. It argues that the *principles* for a national assessment policy for the 5-14 age group, underpinned by assessment as an integral part of learning, were established at this time. However, it also suggests that the policy makers' aim of raising standards of attainment through national testing and target setting 'stalled' the development of that policy, by focusing attention on high stakes testing and engendering a culture of accountability within education. In Scotland, the principles for a national assessment system firmly rooted in the notion of assessment as an integral part of classroom learning were adopted as national policy in the national policy document *Assessment 5-14* in 1991, (SOED, 1991a).

2.2.1 The Introduction of the 5-14 Curricular Guidelines

Curricular guidelines published for Scottish primary schools in the early 1990s suggested that children were expected to acquire knowledge, skills and attitudes progressively across a range of domains. The understated discourse of 'guidelines' rather than prescribed curriculum indicated an underpinning liberal policy ideology. Assessment within these guidelines was viewed as a means of measuring pupil progress in relation to the specified 'ladder' of attainment, through a system of criterion referencing (SOED, 1991). There have since been criticisms of this metaphorical 'ladder' of education (Bryce, 1999). They explain the deficits of the 'single track' view of learning that underpins a criterion referenced system of curriculum and assessment. The *Assessment 5-14* document was intended to explain the relationship between learning, pedagogy and curriculum. Arguably the opening paragraph to the document set up a tension that affected teachers' assessment practice for a decade.

"Assessment is a means of obtaining information which allows teachers, pupils and parents to make professional judgements about pupils' progress. The starting point for this is the curriculum and the processes of teaching and learning. Although assessment has many facets, its essence is determining what a pupil is actually achieving in relation to expectations of attainment and drawing conclusions from that comparison."

(SOED, 1991,p1)

Unwittingly perhaps, the authors of *Assessment 5-14* had identified, not one but three starting points. The collapsing of curriculum, learning and teaching into a single point can be seen as setting up confusion about the purpose of assessment that was not addressed by the educational establishment until a decade later.

This section argues that the starting point of the 'curriculum' was the one which attracted greater currency in schools at the expense of the 'learning' and 'teaching' starting points for assessment, and identifies possible reasons for this. Assessment was conceptualised as an integral part of learning and teaching in *Assessment 5-14*, and the

assessment process described as having five elements: planning, teaching, recording, reporting and evaluating (Fig. 3). It was emphasised in the document that the elements were not separate or sequential stages, and that in practice they should continuously 'intermingle'. (SOED, 1991, p.4) However, the document is structured in such a way that implementation of the five elements is described as if they were discrete entities, rather than as continuously integrated elements of a coherent process. The individual subject guidelines for Mathematics and English Language (SOED, 1991), reiterated that the assessment guidelines *Assessment 5-14* explained *how* assessment should be

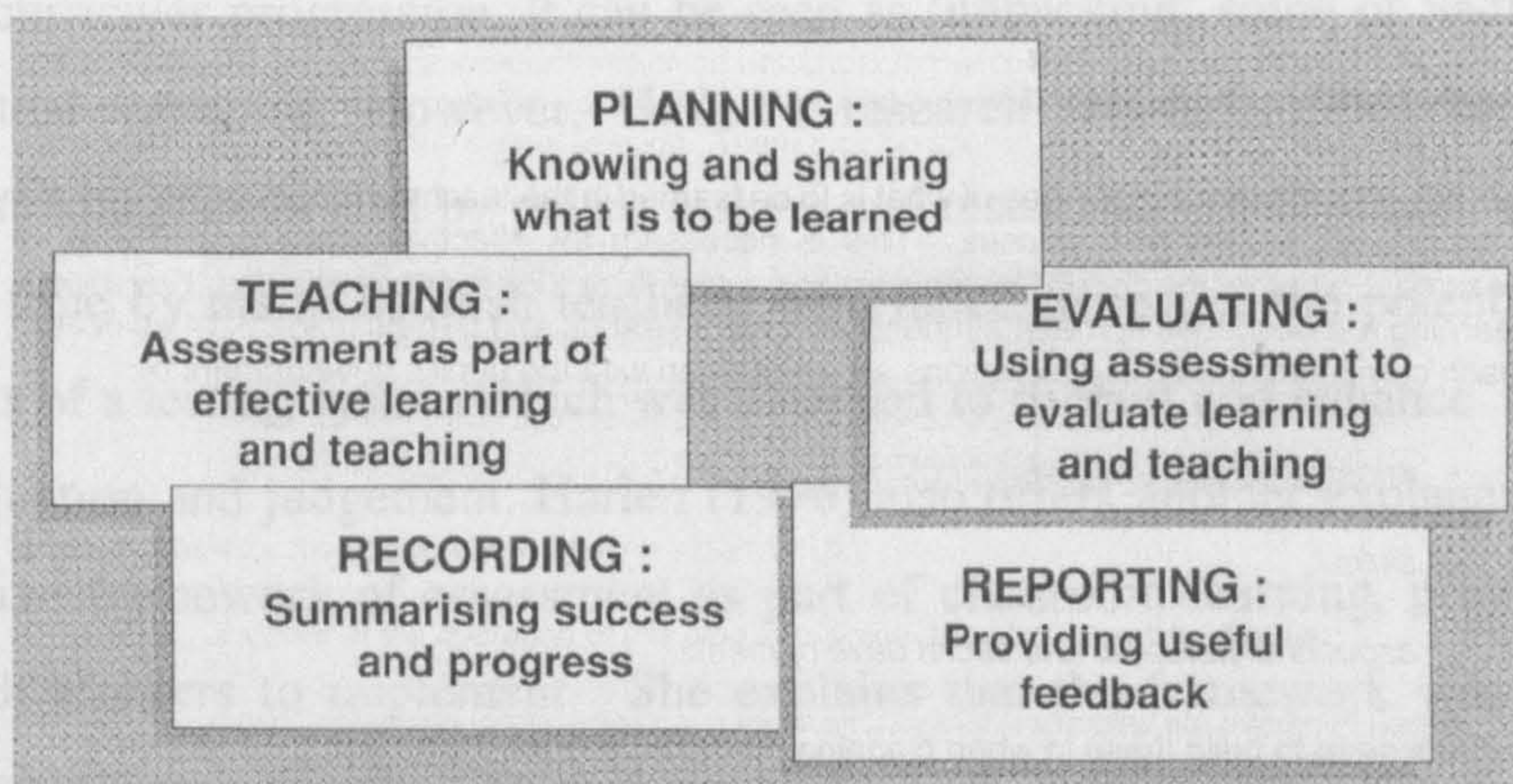


Figure 3. The 5-14 Assessment Cycle (SOED, 1991a)

developed as an integral part of teaching and learning. Bryce (1999) argues that although the theoretical link between teaching, and assessment was made explicit in *Assessment 5-14*, the document was deficient in the advice that it offered as to *how* the link might be implemented by teachers in practice. As indicated earlier, Brown had pointed out that conceiving of assessment as part of teaching and learning would be problematic for Scottish teachers tied to a criterion referenced system.

Harlen (1996) reported that teachers did indeed experience the predicted difficulties and attributed this partly to their inability to embrace the paradigm shift involved in the constructivist policy message of assessment as part of teaching and learning. Harlen claimed teachers clung instead to prior conceptions of assessment: a concern with 'checking up' *after* teaching and record keeping. Harlen distinguishes between criterion referenced assessment and 'pupil referenced' assessment. She claims that there is no

need for formative assessment to be strictly criterion referenced, and suggests instead that assessment for formative purposes can instead be 'pupil referenced'. She expands on this term, describing it as including an appraisal of student effort, prior achievement, next steps and some awareness of the affective dimension of assessment. Although this notion of pupil referenced assessment does not match directly on to either divergent assessment (Torrance & Pryor, 2001) or interactive formative assessment (Cowie & Bell, 1999) it nonetheless indicates awareness in the Scottish research community of refined understandings of formative assessment which went beyond criterion referencing tied to linear curricular progression. It can be seen as 'unpacking' some of Sadler's classroom contextual variables. However, Harlen's research (Harlen, 1996) shows that these understandings embraced by policy makers and researchers in Scotland, were not shared at this time by many Scottish teachers, who failed to realise the potential professional benefits of a testing system which was designed to support and enhance their own skills of evaluation and judgement. Harlen (1996) also offers another explanation of why the formative framework of assessment as part of classroom learning, proved difficult for Scottish teachers to implement. She explains that the framework was presented in a decontextualised, generic way in *Assessment 5-14*. She suggests that it may have been more useful to teachers if it had given assessment advice tied to specific curriculum content. Harlen's views therefore support the suggestion that understandings of formative assessment may be translated differently in different curricular domains and support a rationale for a study focused on the investigation of formative assessment in a single curricular area, such as writing.

2.2.2. National Testing and Raising Standards

This section considers how the introduction of National Testing 5-14 and the 'raising standards' agenda of the government, coupled with the criterion referencing legacy, compounded this problematic situation for Scottish teachers. It suggests that increasing accountability for national testing results, put pressure on teachers to focus on summative assessment. In their Review, Black and Wiliam (1998a) claim that teachers

have difficulty reconciling formative and summative assessment roles, even within a confirmatory system of national testing, such as that in Scotland. However, their account does not acknowledge that by 1998, the Scottish 'confirmatory approach' had become subject to overwhelming summatively driven pressures.

The political climate of the 1990s in Scotland which emphasised improving educational 'standards' through target setting policies, (SOEID 1998) meant that National Testing for Language and Mathematics was introduced into Scottish schools in 1991, amid much public debate. The national tests were an integral part of a national assessment policy which sought to measure pupil progress in relation to the outcomes, strands and targets of the national curriculum (Munro & Kimbar, 1999). Although the Assessment 5-14 document had made the link between assessment and teaching and learning explicit, it was the link between assessment and the curriculum, in the form of criterion referenced national testing, that became the focus of public attention. Furthermore, it can be argued that this was reinforced by developments at national policy level in relation to the evaluation of school performance.

During the 1990s, this link between curriculum and assessment held sway, at the expense of that between pedagogy and assessment. The publications, *How Good is our School* (SOEID, 1996) and *Setting Targets –Raising Standards in Schools* (SOEID, 1998) made clear the focus of the New Labour political agenda. Schools were required to engage in a programme of self improvement, based on self evaluation using performance indicators, similar to those used by HM Inspectors of Schools. Tables of results of National Tests represent a readily available measure of school 'performance' and they therefore assumed greater currency than other, harder to measure performance indicators. As evidence of this, by 1998 an annual survey of attainment against 5-14 levels was conducted by all schools as part of the government's *Setting Targets* initiative. Thus, the summative purpose of assessment assumed greatest importance in the relationships that existed between curriculum, assessment and pedagogy. It has been argued therefore that in the 1990s, summative assessment of the curriculum came to represent, a principal purpose of teaching, and driver of the curriculum in Scottish primary schools.

However, this situation was mitigated by the fact that teachers in Scotland were accorded some autonomy and control over national testing. National Tests in Scotland were issued when teachers decided pupils were ready for them, rather than at set times prescribed by government (as a result of powerful pressure led by teachers' trade unions and several local authorities). The tests were also marked by the teachers themselves and moderated, by teachers or promoted staff, internally, at school level by colleagues. Scottish National Tests were described in policy documents as confirmatory of teachers' own professional judgements, and results could be overridden by teachers if they had other contradictory, more positive evidence of pupils' attainment on classroom tasks. Thus, it can be argued that teachers' classroom assessment practices were always accorded status in the national arrangements for pupils' assessment. Teachers' knowledge of their own pupils was seen as an important factor in the assessment process. Harlen (1995, 1996) argues that Scottish teachers did not take full advantage of this status. However, the policy status attributed to *teachers' perceptions* of pupils' progress and development needs did mean that those perceptions always remained an integral part of the Scottish 'learning triangle', despite the aforementioned pressures of attainment raising and target setting. As discussed in Chapter 1, the potentially dynamic role of teachers' informal, interactive, classroom based assessment is seen by many researchers to lie at the heart of developing formative assessment practice and theory. Although the accountability agenda may have delayed the growth of Scottish primary teachers' formative assessment practice, the conditions to revive their development remained in place, enshrined in the discourse of policy documents. However further stimulus was required to activate that growth. In the next section it is argued that it came again from a policy source, this time a political focus on social inclusion by the Scottish government.

2.2.3 The Assessment of Achievement Programme (AAP):

Evidence for a Focus on Social Inclusion

The Assessment of Achievement Programme (AAP) has been in existence in Scotland since the mid-1980s as a means of monitoring trends in standards of attainment

nationally, for the 5-14 age group of pupils. It has run alongside the collation of national testing data, but separate from it, as its purpose is different. The main aims of the AAP are to provide a picture of the performance levels of pupils at certain stages within specific curricular areas; to gather evidence of any change in performance over time and to provide feedback to education authorities, curriculum developers and teachers which will contribute to the improvement of learning and teaching. (Stark *et al.* 2003). The AAP is not concerned with individual pupil performance, but with a nationally representative sample of pupils. The results of the AAP surveys which are conducted in English Language, Mathematics and Science (and more recently in Social Subjects) have consistently shown that although there is generally a general trend of gradual improvement in attainment, that there is a large group of underachievers in Scottish schools. This group of pupils has remained fairly constant since the AAP survey began.

International studies such as PISA in 2000 (www.scotland.gov.uk/library5/education/pisa) and PIRLS in 2001 (www.nfer.ac.uk/research), show that the percentage of highest achieving pupils and their relative attainment compares reasonably favourably with other countries. However, the group comprising the lowest achieving pupils in Scotland is relatively large, compared to other countries. The 2001 PIRLS IEA study of reading showed that 13% of Scottish pupils failed to reach even the lowest quartile benchmark. Collation of national testing results by SEED has demonstrated that those schools which have the highest numbers of pupils entitled to free school meals, have the lowest attainment. Thus in Scotland, social deprivation is seen as contributing to lack of educational attainment. The current Labour administration has used this evidence to justify a programme of social inclusion in education.

Following a National Debate on education, the present Scottish government established in 2000, National Priorities for Education (www.nationalpriorities.org.uk) which were premised on a social inclusion agenda. These priorities have been used to allocate funding and guide policy making, in all areas of education, including assessment. One of the major findings from the Black and Wiliam review (1998) was that formative assessment was of most benefit to lowest achieving pupils. This evidence has been used

by Scottish policy makers since 2001 as part of the social inclusion agenda to support a gradual move towards a more formatively based national assessment policy. This shift of emphasis followed a period in the mid 1990s, when national testing, summative assessment and attainment raising had been closely linked, as described above.

2.3 The 1998 Review of Assessment

In 1998, a consultative review of national assessment policy for the 3-14 age group was conducted by SEED which took account of the developments outlined in sections 2.2 above. It acknowledged that increased focus on national standards of attainment, and on public accountability had led to a demand for more consistent and reliable information about pupils' performance, (SOED, 1999a). It reiterated the relationships between curriculum, pedagogy and assessment enshrined in *Assessment 5-14*, and acknowledged the tension which had arisen in the ensuing decade between what were identified as two distinct purposes for assessment in Scottish schools: namely

- assessment which had as its purpose *supporting learning* and
- assessment which had as its purpose *monitoring and evaluating provision and attainment* at school, education authority and national level.

The two purposes were seen as having different audiences: the former was seen mostly as the concern of classroom teachers; the latter as the concern of managers and policy makers. In order to address this disjunction in assessment policy, the Assessment is for Learning Programme was funded in 2001 by the Scottish Executive to implement the findings of the *Review of Assessment in Pre-school and 5-14*. Parents and pupils themselves were also identified as important audiences for assessment.

The Scottish review of assessment addressed issues of validity and reliability in assessment, suggesting that authentic, contextualised assessment that supported learning was inherently more valid, but inherently less reliable than assessment which had a monitoring or evaluating purpose. Conversely, the monitoring type of assessment was perceived to be more reliable, but less valid. The review suggested that what was

nationally desirable was a balance between validity and reliability. This pragmatic assumption can be challenged; it is hard to see as worthwhile, assessments which are reliable but lack validity. The Scottish review however implies that this type of assessment is fit for the purposes of monitoring and evaluating curricular provision. It seems that the policy discourse at this stage was influenced by the New Labour 'raising standards' agenda; indeed this is acknowledged in the Scottish review, (SEED, 1999a) It is reliability which is emphasised in the conclusion of the review, rather than validity.

It was also clear from the Scottish review that teachers were struggling to implement the criterion referenced model of 'authentic' assessment based on the 'laddered' 5-14 curricular paradigm (Bryce, 1999, 2003). In the recent inspection reports quoted in the review, which was published in 1999 (eight years after *Assessment 5-14* was published) only one tenth of primary schools were achieving an inspection rating of 'very good' for assessment. There was some variation in how schools were coping with implementing assessment as part of teaching in different curricular areas. Schools were most successful in achieving this in Mathematics (with 60% achieving 'good' or better) but in English language, fewer than half of schools inspected achieved this rating. Teachers viewed assessment in writing as particularly difficult, again suggesting that this curricular area is particularly problematic for them.

The review concluded that if teachers' assessment was to be fully effective to support learning, it would need to be more focused and better structured. Its recommendations were couched in terms of what had been the prevailing assessment discourse to that date. The *Assessment 5-14* language of record keeping and reporting held sway, with an adherence to performance criteria and exemplification of the 'rungs' of the curricular ladder (Bryce, 1999, 2003). This view of 'formative assessment' described in the Scottish review therefore aligned with 'planned' formative assessment (Cowie & Bell, 1999) and the convergent view described by Torrance and Pryor, (1998, 2001) However, the Scottish review also reiterated the role of assessment to support pupil learning, that had been outlined in *Assessment 5-14*. This view 'integrated' assessment with teaching, by tying it to teachers' forward planning aims, which were in turn referenced to curricular goals. The integration of assessment with pupil learning, necessary for a truly

'interactive' approach was much less clearly articulated in the Review. However, the notion of pupils following *individual* 'learning paths' to reach common 'milestones' was also introduced at this time into policy discourse. This can be seen as an indication that a more divergent view (Torrance & Pryor, 1998, 2001) of interactive formative assessment (Cowie & Bell, 1999) was entering the debate. It was also acknowledged that the demands of assessment might be different in subjects which involved creatively *applying* knowledge or skills. The linking by implication of writing to the expressive arts indicates that it was considered a creative, aesthetic subject, as indeed it was viewed by Ross (1993).

The two developments in policy discourse described above (individual pupil learning paths and distinctive subject based assessment) represented a significant shift in the thinking about assessment from the Scottish Executive. They paved the way for a more sophisticated, domain driven approach to assessment than the generic, 'one size fits all' approach which had previously been suggested in 5-14 policy documents, and which had been criticised by Harlen (1995, 1996). However, the conclusions of the Scottish assessment review did not suggest that this path would be followed. Rather, the message that came from the review indicated adherence to the prevailing accountability discourse of this period. Two alternative conclusions were presented in the review to support the target setting agenda: either a system of reliable external standardised tests could be used to measure 'value added' by schools, or a framework of key skills and competences matched to that in existence for Higher Still (SCCC,1998) could be established. The option of standardised tests represented a return to a normatively driven system; the key skill and competences framework solution, a revision of curricular goals. As the next section explains, neither of these options was in fact adopted. McConnell, then the Minister for Education, chose instead to take account of the research evidence of the Black and Wiliam (1998a) Review in his decision to establish the Assessment is for Learning Programme.

2.4 The Assessment is for Learning Programme

2.4.1 Consultation and Ministerial Response

A consultation process followed the publication of the Review and a report of views gathered, *Improving Assessment in Scotland* was published in 2000. The views of stakeholders in Scottish education, who largely supported the principles in *Assessment 5-14*, were presented alongside the ‘alternative’ research evidence (Black & Wiliam 1998a, 1998b). This evidence suggested that the type of assessment most likely to raise attainment, focused particularly on assessment as an integral part of teaching and learning. This research resonated with both the ‘social inclusion’ and ‘attainment raising’ agendas of the government, with its claim that improved formative assessment helped reduce the ‘spread’ of attainment, as well as raising attainment overall (Black and Wiliam, 1998b). Perhaps because of this, in his response to the report, presented at a debate in the Scottish Parliament in September 2001, McConnell, then Minister for Education, chose not set up a system of external standardised testing. Instead, he moved away from the prevailing accountability discourse and towards a research oriented discourse, establishing the Assessment is for Learning Programme. The programme title clearly articulated the shift of emphasis directed by the minister, though the published programme aims still conveyed the tensions of competing purposes for assessment identified in the 1998 review.

“The programme aims to:

- *develop one unified system of recording and reporting, the Personal Learning Plan*
- *bring together current arrangements for assessment (AAP, National Tests, annual 5-14 Survey of Attainment)*
- *provide extensive staff development and support through its project based approach”*

(www.LTScotland.com.assess)

Hayward *et al.* (2004) described how SEED explored ways of bringing together research, policy and practice in the Assessment is for Learning Programme, through a 'bottom up' project based approach, with funding devolved to schools. This followed the recommendations of Black and Wiliam for more classroom based research to inform practice. Scottish policy makers at this time were therefore receptive to the formative assessment agenda; the scene was set for a re-activation of the formative role for assessment originally established in *Assessment 5-14*, eight years earlier. The willingness of policy makers to accept the situative perspective espoused by the Black and Wiliam Review may also be attributed to the continuing status accorded to teachers' classroom assessments of their pupils' achievements and development needs, within the confirmatory assessment system of national testing, discussed earlier.

Simpson (2003) offers a consideration of assessment policy in Scotland during the 1990s. She traces the roots of formative assessment practice, via norm referencing, criterion referencing and diagnostic assessment. She echoes the concerns of both Brown (1988) and Sadler (1989) in relation to a criterion referenced assessment system. She explains that although such a system identifies *what* is unlearned, it does not identify *why* the learning has been deficient. She sees this fundamental difficulty as a reason why Scottish teachers have difficulty conceptualising assessment as an integral part of teaching and learning. Simpson suggests that resolving this difficulty would require a change in teacher/ pupil relationships in the classroom, but also acknowledges that this is not a straightforward solution. Her focus on teacher/ pupil dialogue echoes that of others: (Harlen, 1996), (Sadler,1998), (Torrance and Pryor, 1998) and (Cowie and Bell,1999). In a discussion about addressing 'remediation of learning failure', she suggests that assessment evidence might result in teachers responding by adapting their instruction. She therefore accords with the Black and Wiliam view that formative assessment is about adapting teaching in the light of evidence gathered in order to meet pupil need (Black and Wiliam, 1998b). Although expressed in terms of a deficit model of learning, these insights gleaned from a consideration of the Scottish context add further weight to the desirability of further research focused on teacher/ pupil

interactions. Simpson explains how the diagnostic assessment discourse (which arose out of the remediation of failure approach) was extended by a consideration of pupil agency in the assessment process. She sees the engagement of pupils in self assessment as one way of addressing the question of *why* learning has been deficient. However she acknowledges that involving pupils in this way is a major shift in practice for Scottish teachers as it involves the sharing of their 'professional knowledge' with their pupils in unfamiliar ways. She does offer some guidance about how this 'sharing' might be achieved, claiming that teachers will require an underlying understanding of formative assessment *principles* as well as practical pedagogical suggestions about how to translate them into *practice*. Furthermore Simpson takes the view that although in general teachers did not share their expertise with pupils in the ways she has described that this was not because of antagonistic advice from the educational policy, practice or research communities. Rather, she sees the political disputes around national testing in the 1990s as responsible for thwarting widespread adoption of formative assessment developments. Thus, although Simpson does not refer to the social inclusion argument presented earlier in this chapter, she does provide further support for the argument that the political pressures associated with the 'raising standards' agenda contributed to the 'stalling' of formative assessment developments in Scotland.

In the following section, a comparison with events in England during the same period strengthens the argument being presented, that learning in the classroom is subject to the influence of the prevailing national political climate on assessment, curriculum and pedagogy. The comparison allows the distinctive features of the Scottish context to emerge.

2.4.2 A Comparison with the English Policy Context

Murphy (1999) argues that although teaching in English schools was influenced by the symbolic cognition research of Piaget (1952) and later, the social constructivism of Vygotsky (1978), that this influence did not extend to teachers' assessment practice. As late as 1987, a study by Wood indicated that teachers did not relate test and examination results to their teaching and still perceived results as related to fixed intelligence (Wood,

1987). Black (2001) attributes teachers' continuing adherence to this differential perspective to two factors: lack of resources being devoted to the development of teacher understanding of assessment and a 'raising standards' political agenda. Murphy's views on the misalignment of teaching and assessment approaches in the English context provide an additional lens through which to view these emerging issues. The raising standards agenda seems congruent with the Scottish context, which was described above.

Black (2001) saw the raising standards agenda in England in the 1990s as arising from economic pressure to monitor the efficiency of a programme of mass education. He argued that this pressure is necessarily detrimental to pupil learning because it results in teachers 'teaching to the test', rather than addressing children's cognitive needs. He explained that misplaced public and political confidence in the efficacy of testing leads to a dilemma for policy makers.

As can be seen from its report (Department of Education and Science, 1988a), this dilemma was addressed by the Task Group on Assessment and Testing (TGAT). The group suggested that if the quality of the external tests was high, in terms of being multidimensional and appropriately contextualised (i.e. 'authentic'), then the negative effects of testing would be more benign. However, the politicians of the day were not prepared to invest in developing such costly assessment instruments. In advocating the development of teachers' own internal assessments, the Task Group offered an alternative solution to the testing dilemma facing policy makers. Black explained that this suggestion was also marginalised by politicians in England. The task group recommended the integration of teachers' formative and summative assessments with external tests, but politicians decided instead to direct resources to the development of external tests. Black saw this decision as flawed because of its focus on the *products* of assessment (test results) rather than the *process* of learning.

The task group in 1998, recommended a broadly criterion referenced assessment system, tied to ten curriculum levels reflecting a 'mastery goals' view of progression in pupil learning. This model was adopted by English policy makers and accompanied by the introduction of an external system of summative national testing, which did not take

account of the recommendations of the TGAT group about the value of teacher assessments and authentic, contextualised assessment tasks. Nor did it take account of the mutually supportive relationship that the Report authors envisaged as developing between teachers' formative and summative assessment practices. What policy makers did attend to, was the view expressed in the Report that assessment policy should *follow* from decisions about the curriculum. The relationship between assessment and curriculum in the English system was portrayed, by the task group, as one of dependence, with curriculum assuming the dominant role. The selective uptake of the recommendations of the task group by English policy makers resulted in the imposition of a rigid curriculum and an equally rigid, externally administered and assessed national testing system. This contrasted starkly with the more fluid view of teacher evaluation 'continuously intermingling' with planning, teaching, recording and reporting envisaged in the Scottish policy document, *Assessment 5-14*. Unlike their Scottish counterparts, English teachers had no control over the timing of national tests, which were externally marked. They could not use their own judgements of a pupil's attainment to override the result of a national test. Thus the flexibility that was built into the Scottish system, (despite a similar accountability agenda) and the status accorded to teachers' professional assessment judgements, were absent from the more rigid English system. In my opinion, this meant that although the policy context of accountability in Scotland influenced assessment, curriculum and pedagogy in Scotland, that the effects of this influence were not as negative as those described by Black (2001) in England. Furthermore, it may be argued that the receptiveness of Scottish policy makers to the research evidence of the Black and Wiliam review was in part determined by the historic flexibility inherent in the 'guideline basis' of the Scottish curriculum and continuing status accorded to teachers' classroom assessment judgements. As previously stated, this receptiveness was also bolstered by the attainment raising agenda that was dominating education policy at the time and the increasing influence of social inclusion issues. By contrast, the system of national testing which was implemented by English politicians reinforced the constricting effect of the curriculum and narrowed the potential of formative assessment to support divergent learning pathways.

The Assessment is for Learning Programme therefore emerged from a policy context in Scotland that was essentially supportive of the value of teacher evaluation and that still espoused, at least in national policy documents, an integrating role for assessment within the learning triangle. Furthermore, policy makers were prepared to take cognisance of research evidence in favour of a formative assessment agenda because it aligned with their own attainment raising agenda and a policy of social inclusion. The following section analyses how, as the Programme developed, understandings about formative assessment altered. These changes were significant in shaping the focus on *learning*, rather than measurement of *attainment* in the research described later in Chapters 4 and 5.

2.4.3 Shifting Purposes for Assessment within the Learning Triangle in Scotland

Newsletters were published (2002a, 2002b, 2003, 2004a, 2004b, 2005) to disseminate information to the Scottish educational community about the Assessment is for Learning programme. Presentations by leading figures working on the programme at national conferences, and a website established by LTScotland, also served this purpose (www.ltscotland.org.uk/assess). An external evaluation of Project One, *Support for Professional Practice in Formative Assessment*, (SEED, 2003) provides further information about developments resulting from the Programme. In this section it is argued that as Scottish teachers engaged with the formative assessment teaching strategies suggested by Black and Wiliam in *Inside the Black Box*, that a new purpose for assessment emerged, to complement the summative and formative purposes which had been highlighted in the Scottish policy review of Assessment (SEED, 1999). This new purpose is characterised as the development of pupil metacognitive awareness. It logically develops the issues of supplying interactive feedback and developing pupil metacognition that emerged from Chapter 1 as requiring further investigation. Furthermore, it is suggested that this new purpose has the potential to resolve the tension that was perceived by teachers (SEED, 2003) involved in fulfilling their roles in relation to the two other purposes. Initially, the nine projects which comprised the Programme were presented in list form as discrete entities. As the projects got underway, links were

established between them and the Programme was presented (Figure 4) in a more integrated way, in the form of an interlocking jigsaw. (www.ltscotland.org.uk/assess/files/assessment_newsletter3)

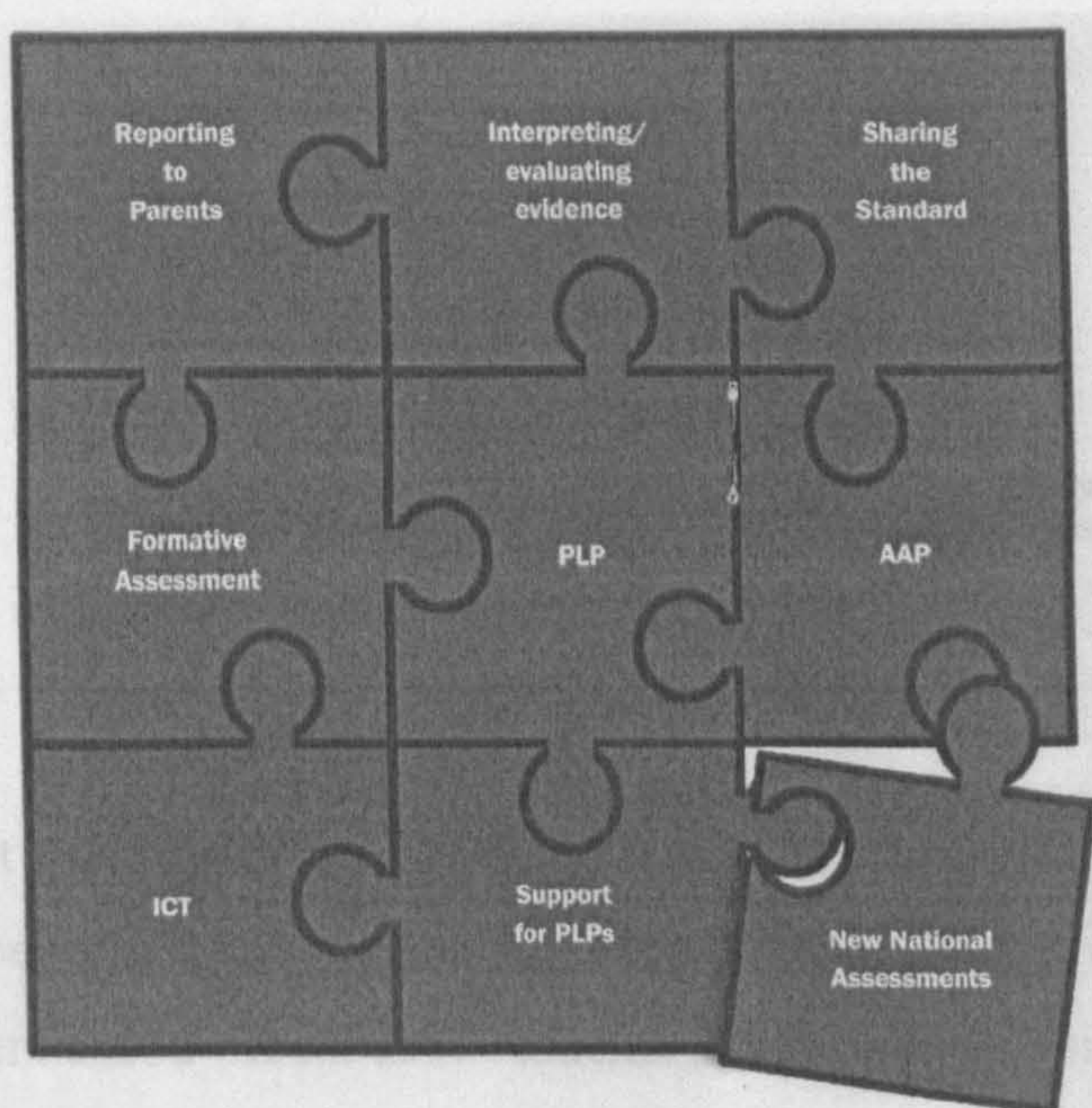
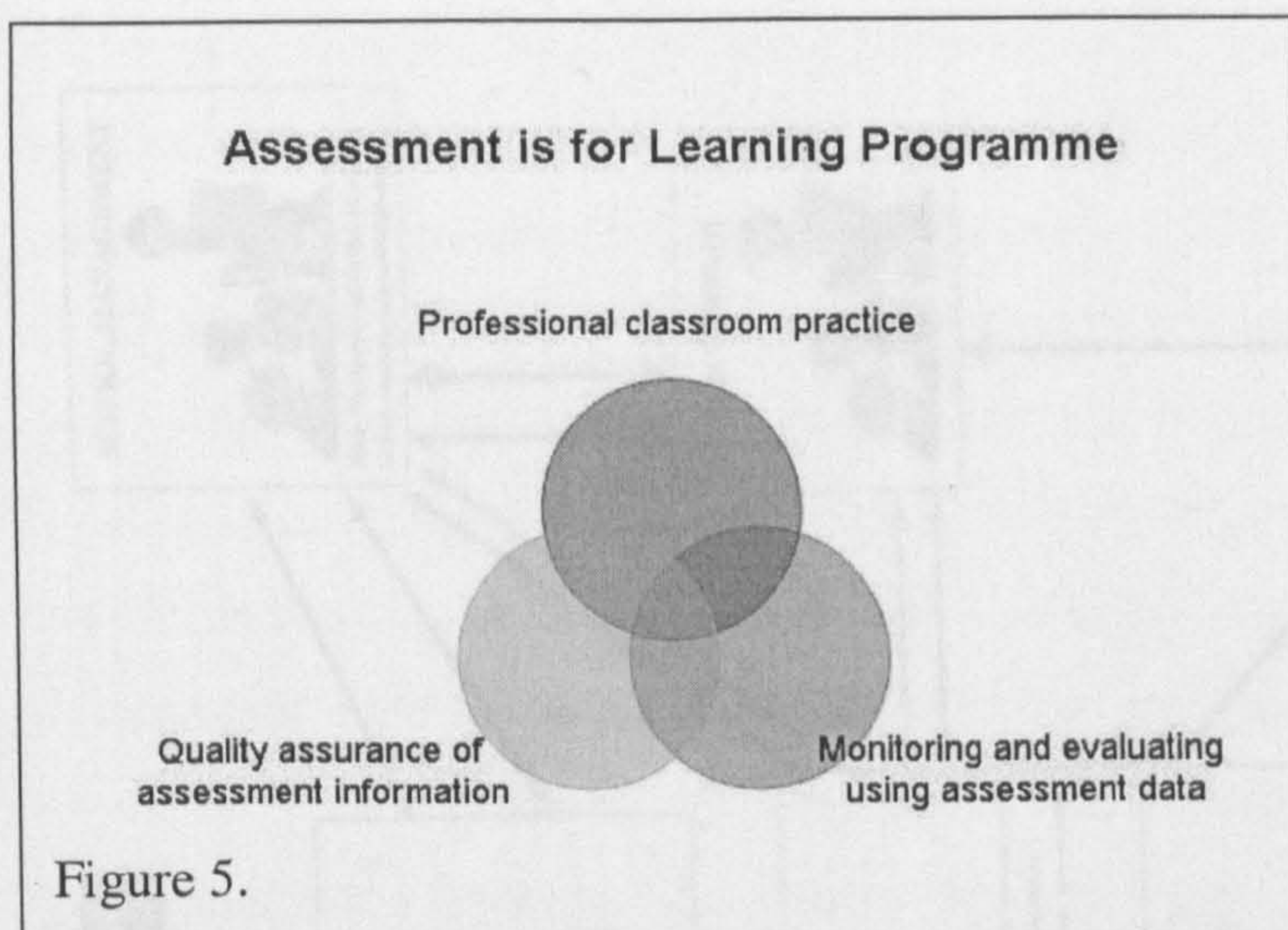


Figure 4. Assessment is for Learning Projects

Gradually, the foci of these nine projects coalesced on website information pages into three overlapping project groupings:

- classroom practice
- the quality assurance of assessment information
- monitoring and evaluating using assessment data.

These three project groups were portrayed (Hutchinson, 2003) as interlinking in the form of the Venn diagram below (Fig. 5)



It was suggested (www.ltscotland.org.uk/assess) that outcomes from the projects would benefit three groups of stakeholders in the education community: *pupils* through enhanced feedback; *teachers* through a simplified assessment system and a commensurate reduction in workload; *parents* through clearer assessment information about their child.

This represents a shift in thinking about the audiences for assessment from those identified in the Review of Assessment. Thus the audiences for the 'monitoring and evaluating' purpose of assessment that were identified in the Review (managers and policy makers) were deprioritised in favour of the audiences that were identified for the supporting learning and providing feedback purposes (pupils, parents and teachers).

Thus, although the project foci seemed to be weighted towards the monitoring and evaluating purpose of assessment, the benefits were conversely conveyed as being weighted towards the 'supporting learning' function of assessment. The foregrounding of the King's College research (Black and Wiliam, 1998b) further weighted the Programme emphasis towards a pupil centred approach. This was also obvious in the visual material which was presented at national conferences which placed the child visually at the centre of diagrammatic representations of the assessment process (Fig. 6), (Hutchinson, 2001). It is reminiscent of the pupil-centred view of assessment recommended by Harlen (1996).

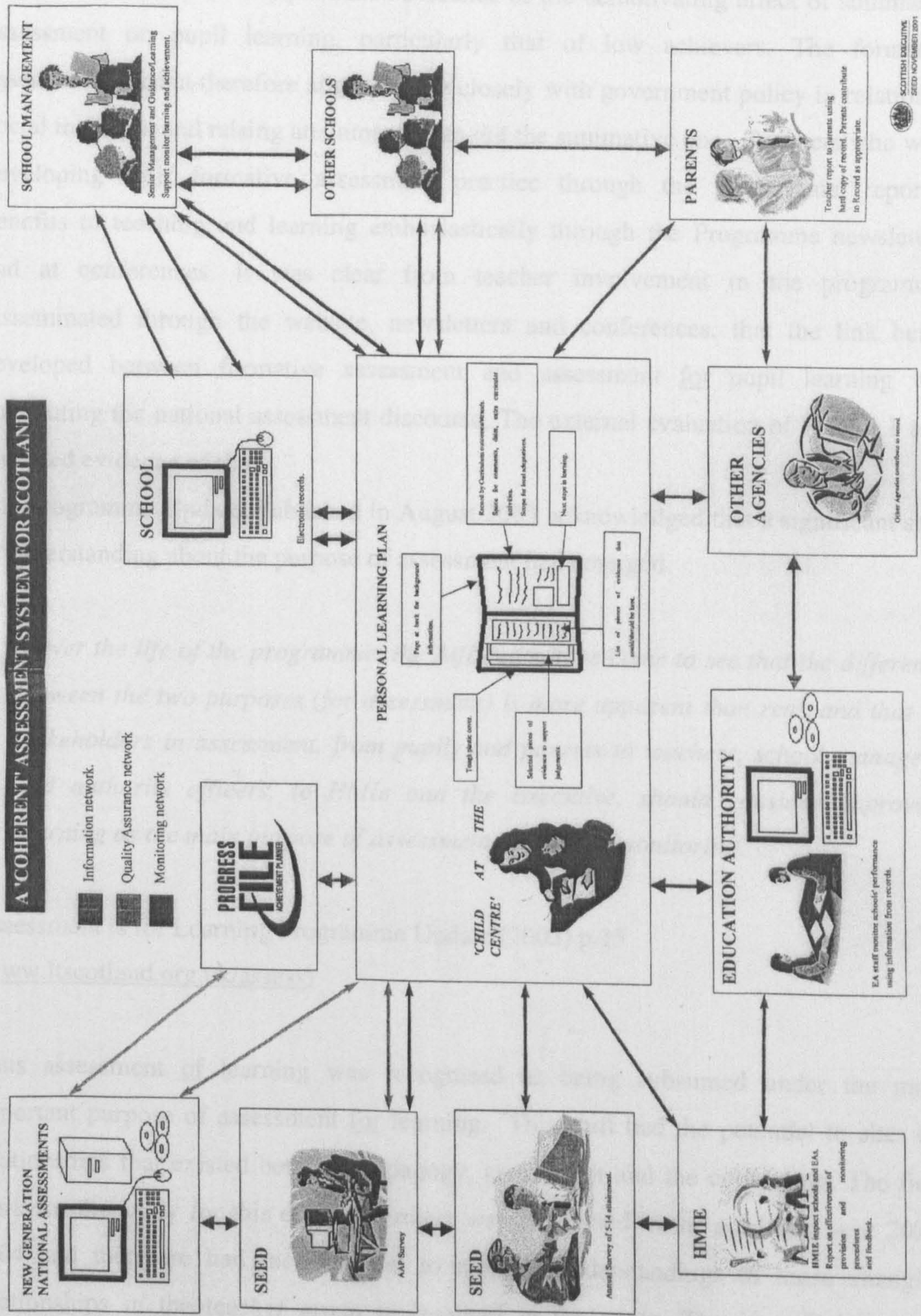


Figure 6. A Coherent Assessment System for Scotland.

Harlen and Deakin (2003) published evidence of the demotivating effect of summative assessment on pupil learning, particularly that of low achievers. The formative assessment agenda therefore aligned more closely with government policy in relation to social inclusion and raising attainment, than did the summative one. Teachers who were developing their formative assessment practice through the programme, reported benefits to teaching and learning enthusiastically through the Programme newsletters and at conferences. It was clear from teacher involvement in the programme, disseminated through the website, newsletters and conferences, that the link being developed between formative assessment and assessment for pupil learning was dominating the national assessment discourse. The external evaluation of Project 1 also provided evidence of this.

The Programme Update, published in August 2003 acknowledged that a significant shift in understanding about the purpose of assessment had emerged.

“Over the life of the programme, the AifL team have come to see that the difference between the two purposes (for assessment) is more apparent than real, and that all stakeholders in assessment, from pupils and parents to teachers, school managers, and authority officers, to HMIE and the Executive, should consider improving learning as the main purpose of assessment, including monitoring.”

Assessment is for Learning Programme Update (2003) p.15

(www.ltscotland.org.uk/assess)

Thus assessment of learning was recognised as being subsumed under the more important purpose of assessment for learning. This shift had the potential to alter the relationships that existed between pedagogy, assessment and the curriculum. The field work for the study for this doctoral project was conducted in the academic year 2003-2004 and therefore had the potential to monitor understandings of those changing relationships in the teacher group represented in the study. The identified research questions reflect this opportunity.

In September 2004, when the fieldwork for this study was completed, many of the teacher action research projects sponsored by the Assessment is for Learning Programme were published on the website, as part of a 'toolkit' to support what was now described as the single aim of the AifL Programme.

inscribed into a version of a "learning triangle" between curriculum and pedagogy. This

“to provide a streamlined and coherent system of assessment that will ensure that pupils, parents and teachers and other professionals have the feedback they need about pupils' learning and development needs”

The work of the Assessment is for Learning (www.ltscotland.org.uk/assess)

web page: homepage>About the Assessment is for Learning Programme> Aims

The nature of knowledge is being construed as including knowledge of one's own

Thus the issue of feedback which had been identified by Sadler (1998) as the crucial feature of successful formative assessment had come to occupy a central role in Scottish assessment policymaking. The different audiences identified for assessment indicate that feedback of different sorts would be required to meet the differing needs of those audiences. At the same time, however, came a further visual conceptualisation of the purpose of assessment (Fig. 7), (www.ltscotland.org.uk) web page: homepage

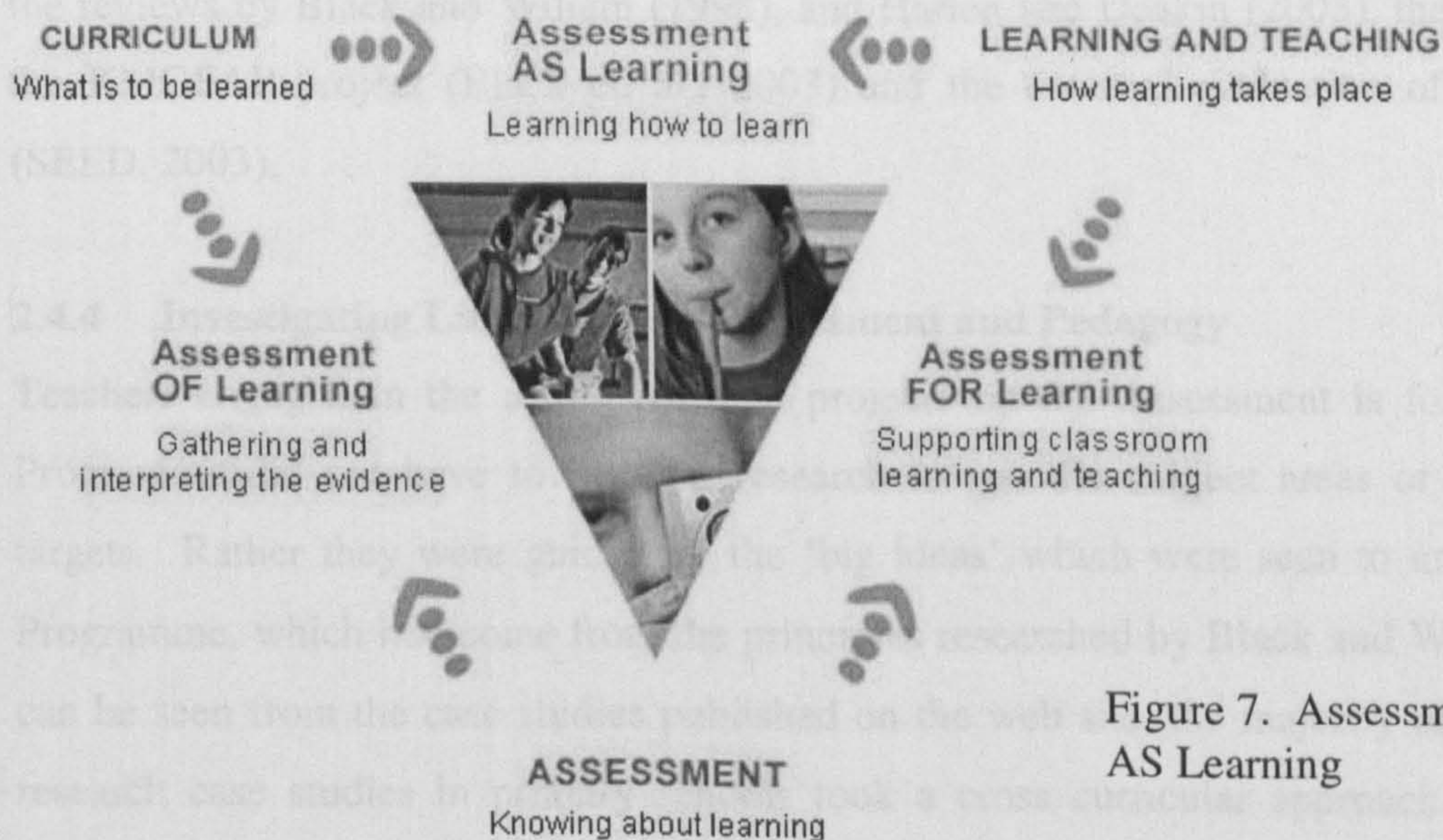


Figure 7. Assessment AS Learning

This suggested Assessment *as* Learning, along with Assessment *of* Learning and Assessment *for* Learning as three main 'concept areas' to structure thinking about the purpose of assessment. At the time of writing, the Assessment *as* Learning concept was poorly defined. It was described on the website visual as '*learning how to learn*' and inserted into a version of a 'learning triangle' between curriculum and pedagogy. This description indicates that the meta-cognitive issue identified in Chapter 1 has assumed increased importance in assessment discourse in Scotland, and is being perceived as a unifying factor for the different audiences and purposes served by assessment.

The work of the Assessment is for Learning programme in Scotland has therefore resulted in some progress in understanding about epistemology, cognition and learners. The nature of knowledge is being construed as including knowledge of one's own learning. More refined understandings about formative assessment are also emerging from the case study evidence supplied from schools participating in the Programme.

These developments, as has been demonstrated, have been influenced by the 'rise and fall' of the target setting political agenda and the social inclusion policies of government in Scotland. As well as the emerging case study evidence from the Scottish Assessment is for Learning Programme, they have also been guided by the research evidence from the reviews by Black and Wiliam (1998), and Harlen and Deakin (2003), the results of the KMOFAP project (Black et. al., 2003) and the external evaluation of Project 1 (SEED, 2003).

2.4.4 Investigating Links between Assessment and Pedagogy

Teachers engaged in the action research projects on the Assessment is for Learning Programme did not have to tie their research to specific subject areas or attainment targets. Rather they were guided by the 'big ideas' which were seen to underpin the Programme, which had come from the principles researched by Black and William. As can be seen from the case studies published on the web site, the majority of the action research case studies in primary schools took a cross curricular approach. Harlen's (1995, 1996) misgivings about this generic approach to assessment were not taken into account.

However, this generic approach allowed teachers to focus on supporting learning through the teaching strategies trialled in the KMOFAP project by the King's College team. In *Inside the Black Box* (1998), Black and Wiliam claimed that, for assessment to function formatively, the results had to be used to adapt the teaching work to meet the needs of the learners. Their definition of 'teaching work' seems to cover *both the planning and implementing* of learning opportunities for pupils. They suggested that improved questioning and improved feedback to pupils during learning helped the learning process. Teachers working on the Assessment for Learning Programme who worked on questioning and feedback strategies in their classrooms were therefore researching 'interactive' (Cowie & Bell, 1999) or 'divergent' (Torrance and Pryor, 1998) formative assessment. Sadler's research on feedback (1998), which was discussed in Chapter 1, could also inform analysis of the case studies. Black and Wiliam (1998) also presented evidence that increased involvement of pupils in the assessment process (through pupil awareness of learning purposes), would enable teachers to support learning more effectively. Scottish teachers trialling the sharing of learning intentions and related success criteria with pupils were therefore researching 'planned' formative assessment as described by Cowie and Bell. This variety of approaches gave the teachers involved the opportunity to resolve some of the difficulties related to the criterion referenced legacy. Teachers reported enthusiastically about the effect on learning of the increased focus on interactive questioning and feedback, as can be seen from the comments recorded in the Programme newsletters.

The research undertaken for this study aimed to explore systematically with the selected teacher group, the main planned and interactive strategies identified by Black et.al. (2002, 2003) as supportive of teaching and learning: sharing learning intentions and success criteria, improving questioning and feedback, and encouraging peer and self assessment. This systematic approach, linked to teachers existing practice, represents a response to evidence in the Project 1 evaluation (SEED, 2003). It was clear that some participating teachers found the increased pedagogical demands required for implementation of formative assessment strategies stressful. This was the case even though many teachers reported enthusiastically in the Programme newsletters about the

benefits of discrete strategy implementation, such as sharing learning intentions. The increased pedagogical demands reported by practising teachers during the early phases of Project 1, reflect similar concerns expressed earlier by Simpson (1999), Lambirth and Lines (2000), Cowie and Bell (1999) and Torrance and Pryor (2001). As discussed in Chapter 1, Sadler's solution to these pedagogical demands was for teachers to find ways of sharing their 'tacit professional knowledge', and evaluative skills gained through teaching experience, with their pupils. He suggested that this was the way in which relationships between curriculum, pedagogy and assessment could be harnessed for the benefit of pupil learning.

Evidence emerging from the Project 1 evaluation (SEED, 2003) suggests that, from their implementation of discrete strategies, or sometimes from combinations of formative assessment strategies, teachers' perceived immediate gains in terms of pupil confidence and motivation for learning. There were also indications that pupils were beginning to develop improved skills in evaluating their own work and some limited claims were made for improvements in pupil attainment. However, it is less clear at the time of writing whether the more comprehensive benefits envisaged by Sadler are being realised in Scottish classrooms. It is possible that given sufficient time, teachers will expand their use of discrete strategies to encompass the range suggested by Black and Wiliam (1998b). An alternative approach was adopted in this research project, which sought to enable teachers to integrate the full range of strategies recommended by Black and Wiliam in a systematic way with teachers' existing practice. This alternative was seen as potentially balancing existing approaches reported in the literature, in a complementary way. It also responds to the advice in the Review of Assessment 3-14 (SEED, 1998) that if teachers' assessment was to be fully effective to support learning, it would need to be more focused and better structured.

This chapter has argued that although assessment in Scottish policy had a criterion referenced legacy, that assessment was also envisaged by policy makers as an integral part of classroom learning since 1991. It has compared this to the English context which did not have the same policy commitment to formative assessment. The TGAT report (DES 1988) had recommended four basic principles for assessment, suggesting that it

should be criterion referenced, formative, moderated, and codify progression; but these were not fully implemented in national policy in England. Several possible reasons have been suggested why during the 1990s, the realisation of a coherent, formatively based assessment policy in Scotland was relatively unsuccessful. These reasons included the target setting and attainment raising agendas of the government. They also included the inadequate quality of the assessment advice offered to teachers about how to integrate assessment with children's learning. The collapsing of curriculum with the processes of teaching and learning in *Assessment 5-14*, and the generic curricular nature of the advice supplied in that document are cited examples of this. However, it has also been argued that the social inclusion agenda of the present government, coupled with the research reported by Black and Wiliam (1998), has reasserted a policy commitment to assessment as an integral part of learning, through the agency of the Assessment is for Learning Programme. Developments in the Programme have been linked to models of formative assessment resulting from research conducted by Black et al (2002) Cowie and Bell (1999), Torrance and Pryor (1998, 2001).

The variety of purposes and audiences for assessment discussed in this chapter all exert pressure on teachers in classrooms. The description of shifting understandings and interpretations of assessment offered, indicate that teachers are required to reconcile and balance the demands of interactive formative assessment, planned formative assessment and summative assessment in their classrooms to improve pupil learning. Recent developments (www.ltscotland.org.uk/assess) suggest that focusing on a new purpose for assessment (promoting pupils' metacognitive development), *may* help teachers resolve the tensions they perceive between previously identified formative and summative purposes. It is proposed that this may also help them implement the 'continuous intermingling' of the elements of planning, teaching, recording, reporting and evaluating recommended in *Assessment 5-14* (SOED, 1991). However, this suggestion does not appear to be a universal panacea for teachers; indeed there are indications that translating assessment *as* learning into practice places increased demands on teachers' skills. These demands seem particularly acute in relation to teachers' planning and observation skills. While acknowledging that other approaches

are equally valid, this study took an explicitly comprehensive approach in terms of aligning known formative assessment strategies with teachers' existing practice, as this approach seemed relatively under researched.

Recent policy developments (SEED, 2004) indicate a shift of emphasis away from a strictly criterion referenced curriculum. *The Curriculum for Excellence* proposes the fostering of four pupil 'capacities' as an underpinning rationale for the school curriculum. Pupils are to be encouraged as successful learners, confident individuals, responsible citizens and effective contributors. Many aspects of these four 'capacities' are facilitated by a formative assessment approach to assessment. The publication 'packaging' of the document concurrently with an extended commitment to the messages of the Assessment is for Learning Programme in *Assessment, Testing and Reporting* (SEED, 2004a) indicate that the two initiatives are linked at policy level. Pupils who have the capacity for successful learning are described as having enthusiasm, as being well motivated and able to make reasoned evaluations. Confident individuals are self aware and can communicate their own views. Effective contributors are portrayed as demonstrating resilience and self reliance, working in collaboratively and applying critical thinking. This view of learning goals determined by generic pupil capacities, rather than a ladder of performance descriptors, can be readily aligned with the 'assessment as learning' purpose of assessment, in that it encourages a reflective, analytical disposition in learners. From this perspective, assessment is seen as involving high quality interactions, based on thoughtful questioning and reflective responses.

At the time of writing, the *Curriculum for Excellence* has been presented as a template for a phased process of reform, which aims to address what are seen as deficiencies in the 5-14 curriculum in relation to what is currently learned, taught and assessed. This chapter has identified some of these deficiencies in its analysis of the relationships in the 'learning triangle' (Murphy, 1999). Chapter 3 sheds further light on these issues in respect to learning and teaching in the domain of writing. It builds on Harlen's suggestion (1995, 1996) that Scottish teachers would benefit from assessment guidance linked to specific curricular areas. It outlines why teachers' practice in the curricular area of writing provides an appropriate context for this study.

Chapter 3 Writing in School: Epistemology, Pedagogy and Assessment

3.1 Epistemology in Writing: Halliday's theory

3.2. Writing Pedagogy

3.2.1 Rationalising Composition and Transcription: Creativity and Structure

3.2.2 A Socio - Linguistic Perspective on Pedagogy

3.2.3 The Place of Grammar and Technical Skills in Writing Pedagogy

3.2.4 The Theory of Writing Process

3.2.5 Genre Theory

3.3 Translating Theory into Practice

3.3.1 Teacher issues

3.3.2 The Subject Knowledge Base of Literacy Teachers in Primary Schools in Scotland

3.3.3 Domain related factors

3.4 Scottish Approach to Writing Assessment: a Criterion Referenced Framework for Writing

3.5 Alternative Approaches to Writing Assessment: an International View

3.5.1 An English View of English Assessment

3.6 Identifying the gap: Defining the Research Questions

Chapter 3

Writing in the Primary school: Epistemology, Pedagogy and Assessment

One outcome of the research in the KMOFAP project, published in *Working Inside the Black Box*, was the indication that formative assessment might be differently construed in different subject areas. Further comments by Harlen (1995, 1996) and Ross (1993) add weight to this suggestion, yet it remains relatively under-researched. The approach taken by the Scottish Executive to funding the Assessment is for Learning Programme meant that many small scale projects were supported in individual schools. Some of these (www.ltscotland.org.uk/assess) explored aspects of formative assessment across the curriculum; some explored aspects in relation to a single curricular area. In most cases, the focus for change was either the generic assessment techniques or strategies, rather than how they align with different domain epistemologies. This doctoral study aims to complement that emerging body of evidence by looking holistically and systematically at the alignment of formative assessment strategies and techniques, with teachers' existing practice in one curricular area, namely writing within literacy. Guided by the identified research questions, the aim is to develop a more refined understanding of the interface between formative assessment and children's learning in writing.

Recent theoretical developments in writing assessment suggest that a goal oriented view of learning, with a clearly identified progression of knowledge and skills (Sadler, 1989), such as that which characterises mathematical enquiry, is an inadequate way of conceptualising learning in writing. (Marshall, 2004). Ross (1993) suggests that the writing should be classified as a creative endeavour, like drama, a language 'art', rather than a science. As such, he sees the role of assessment in the domain as the externalising of the internal conflict of the affective and cognitive aspects of the endeavour, and proposes that retrospective assessment 'conversations' can fulfil this externalising function.

Black and Wiliam's characterisation of assessment as formative, when 'the evidence is actually used to adapt the teaching to meet the needs' (Black and Wiliam, 1998b), and Cowie and Bell's 'interactive' approach are at odds with Ross's *retrospective* time frame

for evaluating pupils' work. However, many other aspects of the work of these authors on formative assessment such as sharing success criteria with learners, encouraging self evaluation and providing quality feedback have relevance for the domain of writing. The issue of underlying pedagogical philosophies of teachers of literacy affecting assessment practice is also one which appears to be significant in recent literature (Marshall, 2000a, 2000b, Wyatt Smith, 1997, 1999, 2004). Black and Wiliam (1998a) also foreground this issue as worthy of further investigation across the curriculum. This chapter therefore addresses these concerns; it provides an overview of the existing knowledge base in the domain of school writing, and considers how it is mediated through the educational practices of teaching and assessment.

3.1 Epistemology in Writing

Halliday's (1978) model of language communication as social semiotic provides a helpful framework to consider what is meant by subject knowledge in writing. Halliday sees language as a vehicle for communicating both propositional meanings (relating to facts and experiences of the world) and social meanings (relating to the speaker's evaluation of facts, attitudes and beliefs and social relationships with others). Halliday cites three types of functions as operating simultaneously during written communication: the *ideational* function, the *interpersonal* function and the *textual* function. The ideational function represents processes both in the external world and in the internal world of the writer; the bringing to the fore of content ideas for writing. The interpersonal function represents social interactions during text production and reception, and is underpinned by implicit assumptions about a relationship existing between writer and reader. The textual function situates the ideational and interpersonal in a recognisable text form. According to Halliday, these three functions operate simultaneously reflecting the variety of purposes that language is required to serve. The ideational component operates with the interpersonal, as choices are made by the writer about such things as text audience. The text form allows the writer's ideas and intentions to be communicated coherently within an accepted genre 'code' of practice.

3.2 Writing Pedagogy

Section 3.1 suggested a framework for thinking about 'ways of knowing' in writing. Different theorists assign differing emphases to the various constituent elements of text production, while recognising that as writers, children need access to a range of knowledge, skills and attitudes to enable them to cope with the duality inherent in the processes of composition and transcription. The following section considers the weightings given to knowledge, skills and attitudes by authors in the field of writing pedagogy. It does so by viewing their work in relation to the following issues:

- generation of writing content

- writing process
- understanding of themselves as authors

- knowledge of differing purposes for writing
- structure and organisation of written texts
- language characteristics of written texts
- command of technical skills of spelling, punctuation, syntax

The first of these elements can be seen as arising from Halliday's ideational function. The next two, can be understood as linking the ideational to the interpersonal. Knowledge and skills associated with writing process involve writers in embracing the concept of text provisionality; in being prepared to amend and adapt plans in a move towards a final product; in taking into account the needs of a reader. Finally, the remaining four aspects in the list above arise from the textual function of written communication.

Bearne (Bearne, 2002) has argued that the pedagogical practice of primary teachers in England, following the introduction of the National Literacy Strategy (www.dfes.gov.uk/literacy), emphasised Halliday's textual function at the expense of the ideational and personal functions. The imposition of the Literacy Strategy can be seen as a result of the narrowing of the curriculum which followed the selective uptake of the recommendations of the TGAT report (DES, 1998) by English politicians. Bearne claims that the prominence given to the completed written *product* results in a denial of the importance of writing *process*, as a vehicle for the development and expression of children's thinking. She sees social and cultural factors as being important in the shaping of texts, therefore understands texts as 'giving voice' to the writer's personal and social history.

3.2.1 Rationalising Composition and Transcription: Creativity and Structure

Bearne (2002) identifies two paradigms for writing pedagogy: one driven by a desire to develop creativity, the other by a wish to develop children's competence in manipulating writing structures. For Bearne the two paradigms are necessary complements, rather than exclusive opposites. Myhill (2001) also recognises the duality of the creating and crafting aspects of writing. She acknowledges the need to ensure focused learning in writing with respect to curricular goals, but also raises the need for teachers to be responsive to pupils *while* they are writing.

3.2.2 A Socio - Linguistic Perspective on Writing Pedagogy

An alternative analysis is provided by Ellis and Mills (2002). Ellis and Mills emphasise the agency of teachers in *connecting* the constituent elements of text production referred to above, for their pupils. Some of these connections relate to Bearne's structure paradigm in that they conjoin levels of language use such as word, sentence and whole text. Ellis and Mills also consider the importance of the connections teachers make between school writing and other aspects of children's lives, as being a significant element of their pedagogy. Ellis (2002) describes how teachers can develop pedagogical strategies that prompt children to tap into the social, emotional and intellectual energies

of their home communities, to ensure conducive opportunities for the social construction of learning. For Ellis, the *product* of the text produced by children is of secondary importance to the learning experienced during the *process* of text construction.

“the aim of any writing curriculum should not be to coax good bits of writing from children, but to produce independent writers.....

Too much teaching without opportunities for children to think independently, to practise, to try things out and talk to their friends and their family will produce wonderful stories but superficial learning....”

(Ellis, 2002 p. 49)

Ellis’s recommended pedagogy provides support for children (in the form of direct teaching input about writing process and craft techniques) while encouraging them to take responsibility for *thinking like writers*. Further support is also recommended from continuous quality feedback from the teacher and through peer evaluations. Her view of writing as a ‘knowledge transforming’ activity rather than a purely ‘knowledge telling’ activity has theoretical roots in the work of Bereiter and Scardamelia (1987) but is influenced by her socio-linguistic perspective. Bereiter and Scardamelia considered that the act of writing, which they saw as involving the reorganisation and synthesis of knowledge, resulted in the creation of new knowledge, rather than simply a retelling of the old.

Mills also acknowledges the importance of the social context of text production and recommends a pedagogy which is flexible in its response to this. However, he places more emphasis on the writing produced, than does Ellis. He calls for a pedagogy that ensures that children have many varied models of different texts and knowledge of the conventions of each, so that they can employ them in their own writing. Mills also acknowledges the importance of real audiences for children’s writing to allow them to develop an authorial sensibility or writer’s ‘voice’.

Ellis, Mills, Myhill and Bearne therefore all place differing emphases on the knowledge, skills and attitudes needed by writers. Myhill and Mills can be seen as focusing more

than the others on the knowledge required by writers; Ellis and Bearne more on the attitudes required. By contrast, the following section considers work which has a writing skills bias.

3.2.3 The Place of Grammar and Technical Skills in Writing Pedagogy

That grammar study should be an integral part of writing pedagogy, is a position that has been adopted by policy makers in England through the National Literacy Strategy. The Grammar for Writing Materials (DfEE, 2000) constitutes an attempt to provide a holistic rationale for the recommended sentence level teaching objectives. Hunt (2002) provides an innovative pedagogy for grammar teaching which fits with the cognitive/cultural/personal model that can be deduced from Ellis' and Mills' approach. His approach depends on analysis of media texts, and playful explorations and manipulations of language structure.

Pedagogical approaches to teaching syntax and the other 'technical' skills involved in writing such as spelling and punctuation, traditionally relied on a decontextualised approach. Text books usually presented grammatical teaching points through exercise lists of individual sentences which were semantically unrelated. Pupils may perform well on these exercises because of the instrumentalist nature of the associated success criteria, but transferability of skill is not guaranteed. Although many modern textbooks continue to adopt this decontextualised approach, many now embed the teaching of technical skills within a more holistic approach to the teaching of writing, and offer tasks for pupils related to reading models.

For many, Cowley's (2002) description of technical skills as 'basics' reflects a value position on the importance technical skills in relation to the other aspects of writing competence offered earlier in this chapter. Cowley equates 'good literacy' with what she refers to as 'the basics' of spelling, punctuation, grammar and handwriting. As Hunt (2002) explains, there exists a popular belief that drilling children in traditional grammar inculcates good habits of self discipline and correct behaviour. Although Hunt lampoons this view, he does give some credence to the related viewpoint that thoughtful analysis of language (rather than decontextualised rote learning of terminology) can

enable children to use and evaluate language in a more disciplined and critical way, by developing the transferable skills of reasoning, argument, problem solving and critical reflection.

Wilson (2000) distinguishes between implicit and explicit language knowledge and links this to implicit and explicit pedagogical approaches to the teaching of grammar. She acknowledges the value of an implicit approach but advises a more explicit approach, taught in context. Her view is that not all children can 'absorb' sufficient knowledge about language implicitly, simply through exposure to a variety of texts, to enable them to bring sufficient variety to the texts they themselves create. She also makes the case that teachers can only pass on knowledge about language systems if they themselves have a secure grasp of that knowledge base.

Clarke (2003) recommends that teachers of writing distinguish between 'skills' lessons and 'applications' lessons, and connect the two via a learning intentions and success criteria framework. A learning intention in a 'taught specifics skills' lesson becomes a success criterion in a subsequent 'applications' lesson. For example, a skills lesson on adjectives might have a learning intention of "*improve descriptions in sentences using adjectives*". This relatively decontextualised exercise is subsequently transferred into an 'applications' task which encourages the use of adjectives to create a 'spooky' atmosphere in a ghost story. The learning intention for this lesson might be "*write a complete ghost story*" with success criteria which included "*use adjectives to create a scary setting*".

The issue of transferability of learning in writing extends beyond the teaching of technical skills. Every writing context that a child is presented with requires them to orchestrate the constituent elements of text production. The child's ability to deploy the elements successfully depends heavily on motivational factors, which may in turn be influenced by the context provided for the writing. Feedback provided by the teacher for a story set in one context, may not be readily transferable to other contexts, even though the formative assessment 'feedback loop' has enhanced learning in the original writing context. This transferability issue in writing suggests that formative assessment

approaches may have to be differently construed for writing, where progression 'goals' from one context to another are a contested concept (Marshall, 2004).

The thinking of all the authors in this chapter so far is influenced by varying understandings of writing process theory and genre theory. Writing process theorists are more concerned with 'writing' as a verb; genre theorists are more concerned with the final product that evolves from the production process, with 'writing' as a noun. Writing process theorists foreground Halliday's interpersonal function of written communication; genre theorists emphasise the textual function. The alignment of writing process theory and genre theory with the formative assessment frameworks suggested by Black et al (2002) Cowie and Bell (1999), Torrance and Pryor (1998, 2001) is explored below.

3.2.4 The Theory of Writing Process

Writing process theorists such as Donald Graves (1983) attribute importance to a child's authorial identity and have had an international impact on 'formative' classroom writing. Writing process theory requires writers to engage in a staged approach to text production which comprises planning, drafting, revising, proofreading and presenting writing. These elements of writing process provide access points for teachers to incorporate formative assessment principles into their practice, as they 'stagger' text production, into the stages of process described above. Graves' approach involves structuring pupil / teacher discussions about the emerging text through the mechanism of 'conferencing'. This is similar to Ross's (1993) 'assessment conversations' in Expressive Arts. However, Ross's conversations are retrospective; the act of reflection is seen as a creative act in itself, and viewed as educative encounters in their own right. This is similar to Ellis' view of text production as 'social learning experience'. Graves' approach furnishes dynamic opportunities for teaching to be adapted in relation to the emerging needs of the learner, as recommended by Black and Wiliam (1998) and Cowie and Bell (1999). The emphasis here is on interactively improving the text product via the process of text production; these dynamic opportunities also provide possible points of divergence for individualised learning pathways (Torrance & Pryor, 1998, 2001). The

dialogic nature of teacher/pupil conferences can be viewed as 'coaching' sessions which enable the provision of individualised feedback (Sadler, 1989). They also link the final product with the formative process of production (Bearne, 2002).

The adoption of a process driven approach to the teaching of writing promotes the development of a meta-language for children, to allow them to talk about their own writing development. It allows them to harness their knowledge *about* language (Wilson, 2000) and apply it to their own text production. This then constitutes an additional (or alternative) pedagogical strategy for the acquisition of technical skills. Writing process theory is premised on Vygotskian understandings of the socially constructed nature of emerging understanding, and highlights the importance of dialogue in learning. As such, the conversations involved do not have to take place between teachers and pupils; they can also be constructed around peer support.

Wray and Medwell (1991) unpack the 'stages' of the writing process, presenting them as logical developments of an understanding of writing as both composition and transcription. They view composition as the creative moulding of ideas; the generating, evaluating and synthesising of content in line with Bereiter and Scardamalia's (1987) 'knowledge transforming'. Transcription for Wray and Medwell involves choosing an appropriate form and layout for the writing, and the accurate application of the technical skills of spelling, punctuation, grammar and handwriting. They make the valid point that composition and transcription may inhibit one another; even accomplished writers may make spelling, punctuation or grammatical mistakes if they are struggling with difficult content in writing.

Wray (1990) provides insight into the benefits of a writing process approach for children's writing development through his discussion of the concept of *provisionality*. He claims that if children are allowed to draft and redraft work, they are more likely to see it as provisional, and to change and improve it, thus developing skills of reflexive writing practice. Wray and Medwell (1991) also usefully distinguish between redrafting (a qualitative change of content, style or sequence) and editing which involves correcting the surface features of the text (spelling, punctuation or grammar). The distinction is an important one with regard to pedagogy and pupil motivation: redrafting

incorporates the concept of positive provisionality; editing is error based and involves the evaluator in the 'correction' of mistakes, rather than in the making of qualitative improvements. Both redrafting and editing elements of writing process are examples of the access points described earlier for formative assessment; both provide opportunities for the development of meta-linguistic competence and the development of technical skills.

An approach to the teaching of writing that was driven by writing process theory, with its emphasis on talk between teacher and pupil (or between pupils) and the integral concept of positive provisionality, would appear to offer 'natural' opportunities for interactive formative assessment. The process of learning through text creation in writing mirrors the generic learning identified by Torrance and Pryor (1998), when children engage in the processes of planned and interactive assessment. Furthermore, adopting the principle of text provisionality in a socially mediated text production process, creates natural opportunities for the dynamic learning opportunities that characterise Torrance and Pryor's interactive assessment.

Planned formative assessment opportunities, on the other hand, depend on teachers and pupils holding a shared understanding of learning goals and related success criteria. The following section indicates how genre theory can provide a vehicle to facilitate this 'sharing' between teachers and pupils.

3.2.5 Genre Theory.

The second major international influence on writing pedagogy in the last twenty years has been the work of the Australian genre theorists, notably Martin and Rothery (1986), then Derewianka (1996). These authors felt that insufficient attention was paid in the teaching of writing to the different forms and functions writing takes, and therefore focused again on written texts as 'products' (on Halliday's textual function) while still taking some account of the processes with which an author engages (Halliday's ideational and interpersonal functions). Genre theorists believe that children should be systematically inducted into ways of structuring written text (Barrs, 1994). They believe that there are 'powerful' genres that are socially important and that lack of proficiency in

them can result in social exclusion for children and adults. This view led to the explicit teaching of skill in relation to genre characteristics, as demanded by writing *purpose*. Indeed Derewianka (1996) has suggested that in order to distinguish between different genres, one can ask the question,

“What social purpose does this text serve?”

(Derewianka, 1996 p. 7)

She then explains that from the answer will flow knowledge of the overall structure of the text, a number of predictably organised elements and certain characteristic language features, such as particular sentence structures or vocabulary choices. The genre of a text is therefore culturally defined and purpose driven. Derewianka also gives an account of how, if a reader is aware of the register of a text (its field, tenor and mode) then that reader can predict the language features that generally characterise such a text. Field can be defined as ‘what the text is about’, tenor as ‘who is interacting’ and mode as ‘what medium is being used’. Martin and Rothery’s (1986) conducted an extensive survey in order to arrive at a short list of genres commonly employed in educational contexts. According to Derewianka (1996), the most commonly taught are procedures, recounts, stories, explanations, and persuasion, discussion and information reports. She suggests that although children will absorb genre knowledge through the written texts they are exposed to, this may not be a sufficiently overt pedagogical strategy. She indicates that explicit teaching of the overall structure and language characteristics of genre is likely to be necessary to enable most children to be sufficiently genre-aware. This level of awareness, it is argued can be developed through literacy practices which develop links between reading and writing.

Bearne (2003) interprets this almost twenty years after its publication as the shaping of meaning giving coherence to a written text. She explains that a writer’s ideas follow a logic intended to communicate something to someone (the purpose and audience of text) and explains that this in turn will mean that writers choose structural, organisational and language features which are linked to the intended audience and purpose.

However, understanding of genre theory has progressed in that twenty year period and, as Bearne goes on to describe, genre is no longer regarded as a stable concept, particularly if one is concerned with non fiction varieties. It is acknowledged that most of the 'real' texts children come across in the 'real' world as well as in educational contexts, will in fact be mixed genre, having more than one purpose. In England, the National Literacy Strategy took an explicit genre based approach to writing pedagogy. In Scotland the impact of genre theory in writing pedagogy is discernible but the approach has been less systematically adopted.

Research by Barrs and Cork (2001) indicates that children's understanding of reading and writing are linked. Corden (2000) also demonstrates that analysis of literary devices used by authors can help develop children's writing skills. One important pedagogical impact of developing genre theory has been the re-establishing of links by teachers between the reading and writing modes of language. A pedagogical approach which was influenced by genre theory would seem to offer planned formative assessment opportunities as the integral concept of text modelling provides a structure for overtly sharing learning goals and success criteria with pupils.

3.3 Translating theory into practice

This chapter has so far considered how the pedagogical issues identified in Chapter 1 relate to writing epistemology and thereby impact on learning. The additional purpose for assessment of developing learners' metacognitive capacities which emerged from the discussion of Scottish assessment policy in Chapter 2 has now been more fully explored in the domain of writing. The role of metacognition has been addressed by considering its place within writing process, genre and technical skills theories; it is now understood in the domain of writing to include a sense of self efficacy as a creative author. This involves having a clear understanding of writing purpose and audience in order to determine writing goals. It also includes having an understanding that those goals can be realised through the socially interactive process of text revision and improvement, which involves feedback on progress towards a variety of goals.

The next section of this chapter considers teacher-specific pedagogy issues within literacy. Black and Wiliam (1998a) claim that fundamental changes to classroom practice are involved if teachers are to make effective use of formative assessment theories. Furthermore they suggest that each teacher will need to align those changes with their practice in individual ways. It is therefore important to explore what is known about the factors that influence teachers' individual practice in literacy teaching and assessment.

3.3.1 Teacher issues

Schulman (1987) provides an account of how teaching skills are bound up with teachers' thinking, which draws upon their knowledge base as a foundation for judgement and action, within the competing demands of the social context of the classroom. That knowledge base is therefore an important factor in determining the quality of learning that occurs in the classroom. According to Schulman, this is not simply specific subject knowledge, but also includes the knowledge of which aspects of a subject cause pupils particular difficulties, and knowing the metaphors, contexts and analogies that pupils find helpful. Such 'ways of knowing' help teachers to prioritise what is important in learning episodes and exclude other less important factors from their pupil interactions. Cowie and Bell (1999) also indicate that teacher experience, a robust knowledge of the domain in question and individualised knowledge of pupils are all important factors affecting teachers ability to make effective use of formative assessment information to enhance the quality of learning in their classrooms.

It is clear from the theoretical discussions of epistemology and pedagogy in writing outlined earlier in this chapter, that the field is a complex one with many competing ideologies. Although a core list of the principal knowledge, skills and attitudes that are taught in the subject was suggested, it is also clear that the importance attached to the elements in the list varies widely between different theorists. Although Halliday's theory of communication in language is a useful overarching framework, against which to frame pedagogical approaches, there is no one way accepted as 'correct' for translating that theory into action in the classroom. This presents a very confusing subject

knowledge base for literacy teachers, particularly for primary school teachers who may not have the specialist domain knowledge of secondary teachers.

Marshall (2004) and Wyatt- Smith (1994, 2004) offer interpretations of the ways in which literacy teachers selectively assimilate theory, in order to develop their individual subject knowledge bases. Both suggest that teachers' choices are governed by underlying *value* positions related to subject epistemology and pedagogy. Marshall (2000) considers that competing perspectives are evidenced in the subject philosophies of secondary teachers of literacy in England. Her teacher 'types' can be seen as holding a polarised pedagogical position in relation to the knowledge, skills and attitudes that it has been established children need as writers. She lists these types as:

- *Old Grammarians* (valued imagination, creativity)
- *Technicians* (valued command of technical skill)
- *Liberals* (valued the exploration of thought and emotion)
- *Pragmatists* (valued political empowerment potential of English teaching)
- *Critical Dissenters* (valued their right to take an oppositional stance to current English government education policies)

Writing from the perspective of primary school literacy teachers in Queensland, Australia, Wyatt Smith (1999) considers that teachers have metaphorical subject 'knowledge files' available to them that they 'call upon' when teaching and assessing writing. She suggests that these 'knowledge files' are used as a foundation for judgement and action along with a number of other teacher resources. She (Wyatt-Smith, 2004) proposes a number of 'subject positions' which are 'open' to teacher-assessors. The research for this study uses concept mapping to explore the teachers' beliefs about factors that influence pupil achievement in writing. Wyatt- Smith describes these teacher subject positions as 'child centred', 'text centred' or 'pedagogy centred', which may be more appropriate ways to conceptualise the assessment philosophies of generalist primary school teachers of writing. Wyatt-Smith's 'text- centred' teachers can be seen as prioritising Halliday's textual communicative function. Her 'child-

centred' teachers prioritise the emerging literary identity of the child as a social being, and can therefore be aligned most closely to Halliday's 'interpersonal function'. Wyatt-Smith's pedagogy-centred teachers prioritise teaching, learning and curriculum issues. Wyatt-Smith herself sees the act of writing as highly interactive and context dependent, and the child's emerging literary identity as of primary importance. She is working in Queensland in Australia which has no state or national testing system. The teachers in her sample therefore are not subject to the same extent as Scottish or English teachers to external summative assessment pressures. It seems then that teachers' subject 'value positions' may be influenced by the 'knowledge files' that they have available to them and the teaching contexts that constitute their professional experience base. These can be seen as combining to influence their selective uptake of the theory base for teaching and assessing writing and the ways in which they are able to translate theory into practice.

It is therefore important to consider the possible 'knowledge files' that might be available to the Scottish Primary teachers in the study and the factors which might impinge upon their professional contexts as literacy teachers. This discussion will supplement the general assessment policy context outlined in Chapter 2, by situating it in the domain of literacy.

3.3.2 The Subject Knowledge Base of Literacy Teachers in Primary Schools in Scotland

What then is known about the literacy subject knowledge base of Scottish primary school teachers? Do they have the 'robust' knowledge of the domain considered necessary by Cowie and Bell (1999)? Does it include Schulman's understanding of which aspects of a subject cause pupils particular difficulties, and the analogies that pupils find helpful? The issue of the subject knowledge base of primary school teachers is a contentious one. Most primary teachers do not enter the profession with the specialist degree in English which is a requirement of secondary specialists. Their subject knowledge base is generally derived from their own school experience; any

personal interest in literacy, any subject based higher educational experiences and experiential, professional learning.

An aspect review of Initial Teacher Education in this subject area in Scottish universities (SEED, 2002) indicated a weakness in the language programmes offered by commenting that all student primary teachers required continuing explicit guidance on how to link theory and practice in writing. The inspectors recommended that this guidance should be offered in the form of continuing professional development (CPD) provision beyond graduation, implying that such help might not be available from qualified teachers in schools. The literature reviewed for the study has revealed a lack of available information about Scottish primary teachers' subject knowledge base in English, which the study may help address.

This section has reviewed literature pertaining to teacher issues which might impinge on the translation of theory into pedagogical action in the social context of the classroom. It suggests that teacher experience, subject domain knowledge and underlying teacher subject philosophy are all issues for further investigation in the study that follows.

The next section looks at factors relating to the subject domain of writing which might also affect this translation process. It does so by focusing on the particular context of Scottish primary schools at the time of this study, and how the theories of English teaching are represented in the national curricular guidelines.

3.3.3 Domain Issues: The Scottish Writing Curriculum

As discussed earlier, national curricular guidelines can be seen as representing what is currently valued by policy makers. Teachers' planning for writing in Scottish primary schools is based upon the *Language 5-14* national curricular guidelines for (SOED, 1991c). This section analyses those guidelines in the light of the epistemological theories discussed earlier, particularly those relating to genre and writing process. This analysis reveals that the Scottish guidelines are not consistent in their use of genre theory and that they do not take sufficient account of theories of writing process. It is suggested that these deficiencies will prove problematic for teachers attempting to integrate formative assessment principles with their practice in writing.

The authors of the *Language 5-14* document state that schools can best structure English language work by referring to the four outcomes of language- listening, talking, reading and writing. An integrated approach to teaching is recommended. A sense of purpose and of audience is seen as providing children with greater control over language and its effects. This focus on writing purpose suggests that the theoretical base of the national curricular guidelines lies in genre theory. However, the organisation of the attainment targets and the associated programmes of study into the discrete modes of listening, talking, reading and writing signal a lack of integration. The purposes identified for writing do not align closely with the range of purposes identified by the genre theorists (Martin & Rothery, 1986; Derewianka, 1996). Rather they are 'skewed' to personal and imaginative types of writing, with a third category of 'functional' writing less well described. Ellis (1997) claims that the definitions for 'types' of writing rest on the *activities* from which the writing arose, rather than a clear genre-based identification of what is essential and distinctive about each type of writing. Ellis considers that this did not provide teachers with sufficient information about the teaching content for each 'type' of writing, and assumed that teachers had a sufficiently developed subject knowledge base to supply this themselves. As stated earlier, there is a lack of evidence to support this assumption. Although the influence of all three of Halliday's 'functions' can be discerned in the theoretical base of the Scottish writing curriculum, the balance of the elements is not clearly articulated in the policy documents. The national guidelines therefore do not have a robust genre base, and are therefore deficient in terms of Halliday's textual 'function'. Arguably, this deficiency arose because they were derived from perceived 'best practice' which was observed in schools by policy makers, rather than being based on a consideration of available scholarship and research. The tenuous genre base of the writing curriculum may mean that teachers have difficulty harnessing the potential 'planned formative assessment' benefits of a genre driven approach to writing identified earlier.

Writing process theories are also poorly addressed in the curricular guidelines, with little explicit guidance given to teachers about their implementation. Given the formative

assessment potential for process driven pedagogy, this may also prove problematic for Scottish teachers attempting to embed formative assessment into their teaching.

It has been argued that the national curricular guidelines for writing do not offer Scottish teachers a coherent view of 'what is to be taught' nor of 'how it is to be taught'.

Pedagogical advice for writing from central government, based on observed best practice in schools, has continued until recently. As a support for teachers for the centrally driven attainment raising agenda, *Improving Writing* (SEED, 1999b) suggested a variety of strategies that might be adopted to improve the writing of pupils. Although the research evidence for these recommendations was not made explicit, they did reflect some of the issues that emerged from the review of literature discussed earlier in this chapter, such as pupil motivation, authorial sense, and technical accuracy in writing skill. As the recommendations were based on observation of what the inspectors deemed existing good practice in schools, this indicates that teachers had some awareness of research developments. Some local authorities had responded to the attainment raising agenda imposed by government, by producing local guidelines for writing to supplement the national ones. In at least one authority, these were much more prescriptive than the national guidelines (Wilson, 1997). The extensive uptake of these resources by teachers in other authorities indicated a desire for more advice than was available from national policy sources. Thus it can be argued that in the absence of a sound theoretical framework underpinning the national curriculum guidelines, writing pedagogy in schools became resource driven, rather than scholarship or research based. The 'knowledge files' (Wyatt-Smith, 1999) available to primary school teachers in the form of the curricular guidelines have been shown to be lacking in theoretical rigour.

A further publication, *National Statement for Improving Attainment in Literacy in Schools*, (SEED, HMIE, 2002), reiterates the guidance given in the curricular guidelines over a decade earlier (SOED, 1991b, 1991c) and in *Improving Writing* (SEED, 1999b). One development is the recommendation that pupils engage more consistently in the process of writing, but still little guidance is offered about how this might be achieved. The discourse of the Statement document makes it clear that HMIE continued to adopt a product oriented, 'traditional' skills based, attainment-focused approach to the teaching

of writing, which contrasted with the research-informed, learning oriented perspective being recommended by the Assessment is for Learning Programme at that time. These apparently differing messages emanating from central government about literacy teaching and assessment, combined with the target setting initiatives, may have been responsible schools seeking a resource based answer to literacy issues.

The next section argues that Scottish teachers used the assessment framework provided through the national testing process as an alternative 'knowledge file' (Wyatt-Smith, 1999) to compensate for lack of guidance in national policy documents.

3.4 The Scottish Approach to Assessing Writing: A Criterion Referenced Assessment Framework for Writing in Scotland

The section considers the theoretical underpinning of the writing assessment practice of Scottish primary teachers. Teachers' summative assessment practice in the domain of writing is constrained by school, local authority and national assessment policies. Influences on their formative assessment practice may be more closely aligned to personal subject philosophies, as the locus of formative assessment practice is the interactive classroom. In order to address Research Question 3 of this study (see page 3), it is necessary to explore the relationship between teachers' formative and summative assessment understanding in the domain of writing.

Since the introduction of National Tests in writing, in Scottish primary schools in 1992, teachers have used a criterion referenced framework to summatively assess children's writing. This practice can be seen as an example of experiential learning which has contributed to Scottish teachers' subject knowledge base. The framework was originally designed as a marking code to be used by teachers for National Tests in writing and, as such, it codified a progression of skill for different types of writing. It has been argued that the 5-14 Language Curricular guidelines were deficient in the support that they offered to teachers in respect of describing progression of pupils' knowledge, attitudes and skills in respect of writing; it was suggested that they gave insufficient detail about genre development, writing process, technical skill progression and authorial sense.

They did not therefore allow teachers to make holistic judgements about pupils' writing development.

Teachers made use instead of the structured support provided by the national testing criteria framework to enable them to make consistent judgements about texts produced by pupils as part of ongoing class work. They collected portfolios of marked and graded pupil scripts to justify the teachers' decisions about pupil 'readiness' for national testing. The criteria were organised in the form of a grid (Appendix 2), with bullet points aggregated using a formula to determine the grade of a script. The qualitative judgements involved in interpreting the bald criterion statements and applying those interpretations to individual pupil scripts became an important professional skill. (Harlen, 1995, 1996)

This focus on textual analysis was driven by summative assessment considerations, although it was possible to use the individual criteria to make diagnostic judgements about the strengths and weaknesses of individual text 'products'. The systematic gathering of written textual evidence to determine 'testing readiness' came to be seen as a mark of professionalism, but the evidence collected was very narrow in focus and took no account of a child as a writer, or of his/her engagement with writing process. Thus, Halliday's textual function gained most prominence in the assessment practice of teachers, even though Scottish teachers were poorly equipped, in terms of curricular guidance, to teach and assess writing from this text based perspective.

According to Barrs (1990), in criterion referenced systems, there is a tendency to specify in the criteria chosen, that which is easily specifiable, and possibly to omit less easily specified, though equally important criteria. This may be one reason for the omission in the Scottish national testing criteria framework of criteria relating to writing process or authorial 'sense'. Barrs (1990) also suggests that criterion referenced systems of assessment can enable holistic assessment by including higher level 'integrating' objectives. The Scottish National Test criteria framework achieving this aim as its implementation operates on a principle of 'sufficient strength', in an attempt to balance the assessment of the elements of composition and transcription (Appendix 2).

The adoption of the National Test assessment framework can therefore be seen as furnishing both benefits and drawbacks for Scottish teachers' assessment practice. While suffering from the limitations of any criterion based system, in some ways the framework has compensated for the lack of sound, research based advice in policy documents. It offers a mechanism for arriving at a global judgement about a child's writing, yet the atomistic criteria can be used in a diagnostic way to analyse strengths and weaknesses. It offers a codified progression of skill framed in terms of performance criteria, but does not cover all aspects of a writer's development. The exclusion of criteria relating to writing process and authorial sense, mitigate against teachers' ability to develop pupils' metacognitive awareness. However, the codified framework has provided teachers with an accessible way of sharing success criteria with pupils, and thereby structuring self and peer assessment. The framework has also provided a common 'knowledge file' (Wyatt-Smith, 1999) for teachers to access which has contributed to their subject knowledge base. Thus the framework has offered some resolution of the tension between teachers' summative and formative assessment practice, in that it *can* help furnish diagnostic information that can be used to adapt future teaching for the benefit of the pupils. However, the large number of criteria specified for each task and the inadequate genre base of tasks has made the integration of assessment and learning difficult to achieve in practice. Recent changes to the National Testing process in writing (Appendix 2), endorsed in Assessment, Testing and Reporting (SEED, 2004a) can be seen as reinforcing confidence in teachers' professional judgements and mitigating the drawbacks of a strictly criterion referenced system. They rely rather upon teachers' 'guild knowledge' (Sadler, 1989) and construct referencing (William, 1998). As this study took place at a time when teachers were coping with these changes for the first time, it may provide some insight as to their impact on practice.

3.5 Alternative Approaches to Writing Assessment: an International View

It has been argued that the introspective nature of national policy making contributed to the lack of theoretical rigour in curricular advice for writing available to Scottish teachers. The emphasis on spreading existing good practice among schools, did not

actively encourage the uptake of new research developments but encouraged rather, an over reliance on commercially published resources. Meanwhile, it would seem that outside Scotland, particularly in the United States, Australia and New Zealand, developments in writing epistemology and pedagogy were informed by more robust, research informed, genre, writing process and sociocultural perspectives. These resulted in alternative approaches to writing assessment being developed, and these are detailed in the following section.

In the aforementioned Australian context in the state of Queensland, for example, there is no external examination system in secondary schools and limited testing in primaries. Consequently, teachers in Queensland are not subject to summative assessment pressures in the same way as Scottish teachers. More status is therefore attached to the professional judgements of teachers in relation to grading pupil writing. This allows more emphasis to be given in assessment procedures to the emerging authorial identity of pupils and the importance of both genre theory and writing process theory (Wyatt Smith, 2004).

Similarly New Zealand relies entirely upon a system of national attainment monitoring by survey sampling, similar to the Scottish AAP survey. It does not have an accompanying national testing system. Again increased status is therefore attached to the professional classroom based judgements of teachers in relation to grading pupil writing, which allows the 'less easily measured elements' of text production to be taken into account.

Nelson (in Tchudi, 1997) uses a metaphor of 'growth based assessment' to characterise what he describes as an integrated, interactive, individualised approach, in a project based in the USA. Nelson emphasises the agency of the child- writer in recognising areas for improvement in his/her writing and in acting on advice given. He emphasises the affective dimensions of ego-involving feedback. Nelson includes 'effort expended' as an important factor for pupil feedback within his 'growth' paradigm. Another American author, Bencich (in Tchudi, 1997) offers further insight into the feedback issue. She supplies suggestions to help teachers and parents respond to pupil writing which focus on the child as a writer rather than text based analysis. These two authors

adopt a similar position to Wyatt Smith's child-centred teachers and appear to be downgrading in importance Halliday's textual function of communication, in contrast to the current Scottish summative assessment practice.

3.5.1 An English view of English Assessment

Despite working in the rigid system of national testing in England, Marshall (2004) has developed a theoretical framework for assessing and improving learning in the subject of English, and has set a new agenda for thinking about assessment in the domain. Her perspective is heavily influenced by her research involvement in the KMOFAP project (Black *et al.* 2002). Her view gives emphasis to teacher agency as well as pupil agency; she stresses the importance of teacher planning in order to create or 'engineer' learning opportunities. Marshall develops the notion of 'shared constructs of quality', 'guild knowledge' and 'horizon models' of writing in her theoretical framework, which goes some way to integrating Halliday's ideational, interpersonal and textual functions of communication for written communication.

In relation to developing shared constructs of quality between pupils and teachers, Marshall places much emphasis on the reciprocal reader/writer relationship in English and the development of a 'writerly' disposition with audience awareness. Her analysis is helpful in resolving the product/ process debate considered earlier. She considers a purely genre driven pedagogical approach to writing to be deficient as a vehicle for developing formative assessment practice in writing. This she attributes to the fact that it develops pupils' ability to recognise and deploy textual conventions with little reference to the all important communicative purpose of the author. Marshall also links this communicative purpose of 'children as authors' to their prior experiences in and out of school, thus bridging some of the gaps between the ideational, interpersonal and textual functions of written language in a way that is reminiscent of Ellis (2003). She advocates that an awareness of the writer/reader relationship enables pupils to be actively and explicitly involved in constructing an understanding of quality in writing. With reference to the product/ process debate, she offers the view that any adoption of literary devices should be subordinate to the 'greater aim' of the writing. She considers

the whole text created by the writer to be greater than the sum of its parts, thus emphasising achievement of communicative purpose over individual criteria. She also acknowledges that the questioning employed by the teacher during a lesson must draw upon a child's understanding of authorial purpose. Otherwise, she claims, the learning becomes more reliant on recall of conventions, rather than the development of creative thought and active experimentation within an ever increasing repertoire.

Marshall examines the notion of progression in English and the articulation of that progression through a criterion referenced framework (such as the Scottish one). She characterises two models of progression, the 'goal model' and the 'horizon model'. She illustrates how the complexity of authorial choices in a 'strong' piece of writing and the interrelationships between them mean that the effects are less neatly attributable to a set of clearly defined criteria. Assessment of quality in writing for Marshall then becomes more dependent on the reader's holistic judgement than an analysis of parts of a whole. Marshall acknowledges that genre theory offers a model of progression, as the identified elements of each genre can be codified as specific criteria. However, she uses her argument about the deficiencies of criterion referencing and students' creative engagement, to caution against it as a stand-alone pedagogical approach. She recognises that her 'whole bigger than the sum of its parts' description of writing means it becomes problematic as a domain for the application of formative assessment driven pedagogy.

Marshall's solution is to construe progression in writing in metaphorical terms as a pupil heading for a horizon, rather than a fixed goal. She refers to work by Sadler on 'configurational assessment' to support her theory (Sadler, 1989). Sadler describes configurational assessment as being premised on operational interdependence of a myriad of criteria. He implies that it is undesirable to try to specify all possible relevant criteria in advance; some may emerge during text production, others will depend on interrelationships for their relevance. Sadler's theory depends upon teachers being able to call into play those criteria which seem *most pertinent* for individual pupil performances. Sadler goes further to suggest the desirability of sharing constructs of quality with pupils, an essential principle of formative assessment, in subjects like English. He wants teachers to give the construct of quality work that they hold in their

heads, some external formulation so that it is transparently understood by pupils. A concern has been raised in this chapter that Scottish teachers may not have 'in their heads' the 'guild knowledge' that Sadler wishes them to share. However, this recent agenda set by Marshall (2004), which takes account of research into the positive benefits of formative assessment for pupil learning and takes a view of writing epistemology and pedagogy underpinned by Halliday's theory of language communication, is an appropriate way to conclude the literature and policy review for this study. It brings together many of the issues which the research questions for the study were devised to address.

3.6 Identifying the Gap: Defining the Research Questions

It is useful at this juncture to consider how the literature reviewed in the preceding four chapters has helped the author define the following research questions for the project.

1. To what extent can teachers use formative assessment to enhance pupil learning in writing?
2. What is the nature of the benefit perceived by pupils of the embedding of formative assessment principles into their experience of the writing curriculum?
3. To what degree does the current criteria framework used for assessing children's writing match teachers' perceived demands of the task?

The first of these questions addresses many issues that have emerged from the literature reviewed. The second is intended to give a pupil perspective on some of the same issues. The third acknowledges the Scottish policy and practice context of the study from the perspective of the teachers involved.

The following issues emerged from Chapter 1:

- relationship between learning process and learning goals
- importance of appropriate, well focused feedback
- development of pupil metacognition
- observational skills demanded of teachers for effective use of assessment information
- formative and summative assessment tensions

The literacy focus of the study addresses a perceived neglect of studies in this domain. Furthermore, the literature review suggested that there may be an advantage to be gained from an investigation which looked at learning as bounded by the triangle of relationships formed between a specific domain's curriculum, pedagogy and assessment. The assessment issues were further investigated in the consideration of the Scottish assessment policy context in Chapter 2. This explained the criterion referenced basis of

the Scottish curriculum and its link to learning goals. It gave some reasons why summative and formative assessment purposes seemed to exist in a state of tension for Scottish teachers. It identified a third purpose, 'Assessment as Learning' as a new concept area which was structuring thinking in the Scottish assessment community and indicated that it might help shed light on the issue of pupils' metacognitive development. The focus on learning evident in the research questions, rather than attainment was also clarified. Research Question 2 directly addresses the need identified by Black and Wiliam (1998b) for more classroom-based research in the area of formative assessment and learning. Finally, Chapter 2 made reference to a recent shift in policy (SEED, 2004a) away from a strictly criterion referenced curriculum, towards broader definitions of learning goals in terms of pupil capacities.

The analysis of epistemology and pedagogy in the domain of writing outlined in Chapter 3 conveyed a picture of a subject beset by competing ideologies and suggested that this made it extremely difficult for primary school teachers to develop a holistic subject knowledge base. It suggested that the Scottish curricular guidelines for writing did little to alleviate this situation. The nature of that knowledge base therefore emerged as a further issue for the study. Furthermore, the resolution of the affective and cognitive demands of writing emerged as an area that was likely to be problematic in assessment of the domain and the accompanying problem of transferability of learning across writing contexts.

To the issues listed above, therefore, the following were added:

- Importance of teachers' subject domain knowledge base for effective learning
- Resolution of affective and cognitive demands of tasks for pupils
- Transferability of learning across contexts

The project therefore addressed pertinent assessment issues of current importance in Scottish education. It did so with a specific curricular focus of writing because there is an identified lack research in formative assessment tied to this specific domain.

Chapter 4 Project Design and Methodology

4.1 Philosophical base of Project

4.2 Ethics and protocol

4.3 Research Design

4.3.1 Sample Selection

4.3.2 Action Research Design

4.4. Data Collection

4.5. Data Analysis

4.5.1 Developing a Coding Framework for Descriptive Data Analysis

4.5.2 Extending the Data Analysis Coding Framework: Developing Themes using 'Rich Data Set' Analysis

4.5.3 Explanatory Analysis Using Pattern Coding and Explanatory Displays

4.5.4 Using NVivo for Data Management

Chapter 4 Project Design and Methodology

This chapter explains the rationale behind the design of the research project which was devised to address the research questions discussed in Chapter 3. It also explains the philosophical base of the project and the methodology adopted.

4.1 Philosophical Base of Project

In this study, the aims of enquiry are viewed as a continuum ranging from the normative paradigm of logical positivism to the interpretive paradigm of phenomenology and grounded theory, with critical theory centered between the two extremes. This study is aligned with a critical theory stance, but weighted towards the interpretive pole.

For this researcher, both the normative and interpretive paradigms fail to take adequate account of the political and ideological context within which she operates. Although a critical theory stance is adopted, such as that proposed by the philosopher Habermass (1972); this stance is influenced by both normative and interpretive considerations. Habermass analysed the nature and purpose of enquiry as a political one of empowerment; he viewed the purpose of research as the emancipation of individuals and groups in an egalitarian society. The process of enquiry for him involves transforming situations, rather than simply understanding them. A substantive agenda for critical theorists working in educational research is to interrogate the relationship between school and society. This interrogation can involve examining the social construction of knowledge and curricula. Critical theorists may ask who defines the knowledge that 'counts' as important and whose ideological interests it serves.

The political drive to validate the educational attainment benefits of formative assessment could have exerted a normative influence on the project. However, in adopting a critical theory stance, the investigation sought to interrogate the way in which the Scottish writing curriculum has been characterised. Measuring attainment in terms of a narrow curricular definition was rejected in favour of considering pupil progress in *learning* in relation to wider educational aims than those specified in the 5-14 curriculum. The desire to give voice to the views of teacher and pupil stakeholders draws the investigation towards an emancipatory, interpretive, philosophical foundation.

The critical theory base of the enquiry is therefore moderated by professional and political tensions.

This enquiry is also underpinned by Wenger's (1998) social theory of learning as applied to teachers' experience of schools as professional learning communities in the particular context of implementing change in assessment practice in the writing curriculum. Wenger (1998) proposed three dimensions of communities of practice which involve participants being involved in the following processes:

- evolving forms of mutual engagement
- understanding and tuning their joint enterprise
- developing their repertoire, styles and discourses.

The remainder of this chapter outlines how the project design and research methods and techniques chosen reflect the philosophical position described above and are informed by Wenger's social theory of learning.

4.2 Research Ethics and Protocol.

The principles of ethical guidelines produced by The British Education Research Association (revised 2004) were followed to ensure that the research was conducted with an ethic of respect for the person, knowledge pursued and democratic values. The project was granted ethical approval by the University of Strathclyde, Doctorate in Education course team.

Voluntary, informed consent was sought from participating practitioner researchers in the following way:

Local Authority Assessment Coordinators were asked to nominate schools where staff had identified formative assessment and writing pedagogy as action points on school development plans. Head teachers were visited and the outline of the project discussed with them. Head teachers then invited interested staff to participate in the project, explaining that teaching cover would be provided for interview sessions and research team meetings considered as professional development activity. This ensured that the bureaucratic burden of participation for staff was minimised. A whole school staff development session was led by the university researcher outlining the project to staff,

who were subsequently invited to volunteer to participate. The aims of the project, the methods of data collection and the proposed uses of data were shared with staff, with time provided for reading (Appendix 3). All staff were given the opportunity to withdraw participation in the project at any point. Signed consent was obtained from local authority assessment coordinators, head teachers and class teachers.

Ethical issues relating to the collection of data from pupils were discussed fully with head teachers and class teachers and a non-intrusive method of data collection was devised. This consisted of teachers recording oral pupil comments, generated and shared as a normal part of class work. Approval for the collection of this data was granted by head teachers and the local authority. All participant teachers were supplied with written transcripts of their own interviews for approval or amendment before analysis of interview data was conducted. Confidentiality and anonymity was preserved in reporting the project.

4.3 Research Design

As with the philosophical stance adopted, the chosen research design was determined by the 'practical' purpose of the research: to investigate teachers' experience of using formative assessment to enhance pupil learning in writing. For the reasons outlined in the following sections, a mentored action research approach provided an appropriate design framework to adopt for the study. Although the project was set up as mentored action research, it can also be seen as evaluative in nature, in that it is designed to evaluate the impact of embedding formative assessment principles into the writing curriculum. It therefore combines a continuing professional development intervention (through the teacher mentoring process), with a practice intervention (implementing the formative assessment strategies and techniques).

4.3.1 Sample Selection

Gorard (2001) draws attention to the difficulty in educational research of conducting large scale field trials; this is certainly outside the scope of a project of this size. Alternative methods have to be found for evaluating educational innovations, for

bringing together, 'big research' with 'little research' (Bassegy, 2003). Action research celebrates teacher agency resulting from the relatively unpredictable social context of the classroom (Cohen, Manion & Morrison, 2000) and is therefore congruent with the interpretive weighting of the project.

Bassegy (2003) describes the case study as an effective strategy for developing educational theory which illuminates educational policy and enhances educational practice, two principles underpinning the project aims. An underlying assumption of the study is that practitioners in schools are well placed to evaluate the effectiveness of the implementation of formative assessment in their own classrooms. Although initially case study coupled with action research seemed an attractive choice of research design, it was felt, on further reflection, that 'contextualised studies' provided a better description of the research design. This arose partly from the restrictions imposed by the research design on the data collected from individual schools and partly from a desire on the part of the researcher to seek meanings *across* the school data sets. The 'richest' data collected was focused on teachers' views of the planning and implementation of writing lessons, enabling some generalisation of findings in relation to these particular issues. More limited data was collected on individual school and class factors, restricting a case study-type analysis.

The researcher aimed to gather data from a variety of school contexts. The three sample schools were therefore chosen because they offered contextual variation in terms of local authority, local environment, size, affluence of catchment area, religious denomination and policy for writing. Although they cannot be taken as representative of Scottish primary schools in general, they can however be taken as exemplifying some of the diversity of contexts that exist for schools in the primary sector in Scotland. All schools were led by experienced head teachers and all had identified development of the writing curriculum and formative assessment as desirable areas for whole school development, through the collaborative development planning process. The choice of three sample schools allows for some comparisons between teachers' views in relation to contextual issues but also consideration of replication of data across schools to be made. The inclusion of commonalities across schools determined this as a multi-site, contextualised

study, rather than a case study. The dual perspective of seeking meanings, both within individual contexts and across the three school contexts, assisted theory building during interpretational analysis.

As has been explained earlier, teacher participation in the project was voluntary. Attributes related to individual teachers, such as teaching style, subject knowledge base or professional background were variables likely to impact on teachers' views. These variables were outwith the sampling control of the researcher, which could result in some attributes being unevenly represented in the study teacher group. However, it was acknowledged that variation of attributes within the teacher group could also contribute to the richness of the data set collected. The structure of the interview schedules was flexible enough for some data relating to these attributes to be gathered. Analysis of data sought influential factors across the teacher group, rather than the development of individual teacher profiles, in keeping with the multi-site contextualised study structure of the project.

Figures collected for session 2003-2004

School 1 had a role of 281 pupils and is located in a major Scottish city, in an area of urban deprivation. It is a non-denominational, integrated community school. Many children come from disadvantaged home backgrounds.

Free school meals entitlement: 34.2% (National Average 20.5%)

This school has positive discrimination status.

School 2 had a role of 192 pupils and is located in an isolated rural setting and is a non-denominational, integrated community school. Housing in the village is mostly council owned and although there is a local library and sports centre, access to other community facilities is limited.

Free school meals entitlement: 33.3%

School 3 had a role of 303 pupils and is located in a relatively affluent, suburban setting in a small town. It is a denominational school (Roman Catholic). Housing around the school is predominately owner-occupied and some parents have professional occupations. Free school meals entitlement: 23.3%

Following a whole school staff development session delivered by the university researcher, three teachers from the upper primary school (P4-7) were recruited. The rationale for this upper primary stage focus was explained in chapter 2. All stages from P4 to P7 were represented in the project, with the following spread.

School A:	P6	P6/7	P7
School B:	P5	P7	P7
School C	P4	P4/5	P7

Therefore a total of 9 classes, including 2 composites were identified for inclusion in the study. All members of teaching staff in school were also invited to attend all the action research cycle review meetings in school, with the agreement of participating teachers.

Consideration of literature and policy documents, discussed in chapters 1, 2, and 3 indicates that a number of factors may have a bearing on how teachers perceive their assessment roles. It is hoped that evidence from the sample schools selected will complement other evidence currently emerging from schools associated with the Assessment is for Learning Programme in Scotland, to influence the ‘professional discourse’ as described by Bassey (1999). Bassey suggests that evidence from small scale studies can lead to ‘fuzzy propositions’ because of the singularity status of individual cases. In this study, the individual case is seen as the combined teacher group in the study. Bassey further contends that accumulations of fuzzy propositional evidence can become ‘fuzzy generalizations’ which may then gradually enter the professional discourse with authenticity and credibility. These can subsequently feed into policy making, in such a way as to allow for the complexity of an educational system comprised of a huge number of schools, each of which represents a unique social context. This basic mechanism recommended by Bassey for communicating the results of small scale studies to interested parties would seem an appropriate way to bring new knowledge emerging from national interest in formative assessment into professional educational discourse.

4.3.2 Action Research Design

Burns’ (2000) descriptions and definitions of action research make this choice of method advisable because of the link between social context and agency of participants

“Action Research is the application of fact- finding to practical problem solving in a social situation with a view of improving quality of action within it.”
(Burns 2000, p443)

In this case, the social context is the school situation and the ‘problem’ to explore is teachers’ experience of attempting to embed formative assessment principles into the teaching and learning cycle for the writing curriculum. The ‘information’ to be gathered is represented by the views of teachers, pupils and school management about their

engagement in the process. The time scale of the project and the longitudinal nature of the study, with its cycles of reflection and action, have validity implications; they allowed teachers' 'emerging understandings' to be translated into pedagogical action. Those actions or adjustments to practice can be viewed as evidence of teachers' developing understanding. The longitudinal nature of the study, tied to one academic year, was devised to allow teachers time to embed ideas into practice with one class of children. According to Burns (2000 p. 443), action research is a "total process" because

"it is both an approach to problem solving and a problem solving process".

(Burns, 2000, p443)

The investigation of teachers' experience of embedding formative assessment principles into the writing curriculum met Burns' four characteristics for action research, but the mentoring role adopted by the university researcher also impacted on the research dynamic.

- The action research was *situational* as the problems were identified in the specific contexts of the sample schools.
- It was *collaborative* as it involved teachers working together to develop school policy, as well as teachers working with the mentoring researcher. Collaborative meetings were scheduled after school as part of teachers' CPD.
- They were *participatory* as the teachers took part directly in implementing the research.
- It was *self evaluative* as teachers continuously evaluated the ongoing situation to improve practice, using structures provided by the university researcher.

When interrogating the role of research in relation to practice, Munn and Ozga (2003) call for closer relationships between researchers and practitioners through action research projects. They cite a lack of critical engagement with the philosophy of action research by the education community in Scotland as contributing to what they perceive

as the currently deficient situation. More recently, the establishment of the Applied Educational Research Scheme (2003) which proposes research into the feasibility of developing 'communities of enquiry' in Scottish education indicates that more systematic attention is being paid to developing relationships between researchers and teachers. It is hoped that the mentored action research design and methodology of this project might contribute to the new knowledge base emerging in this area.

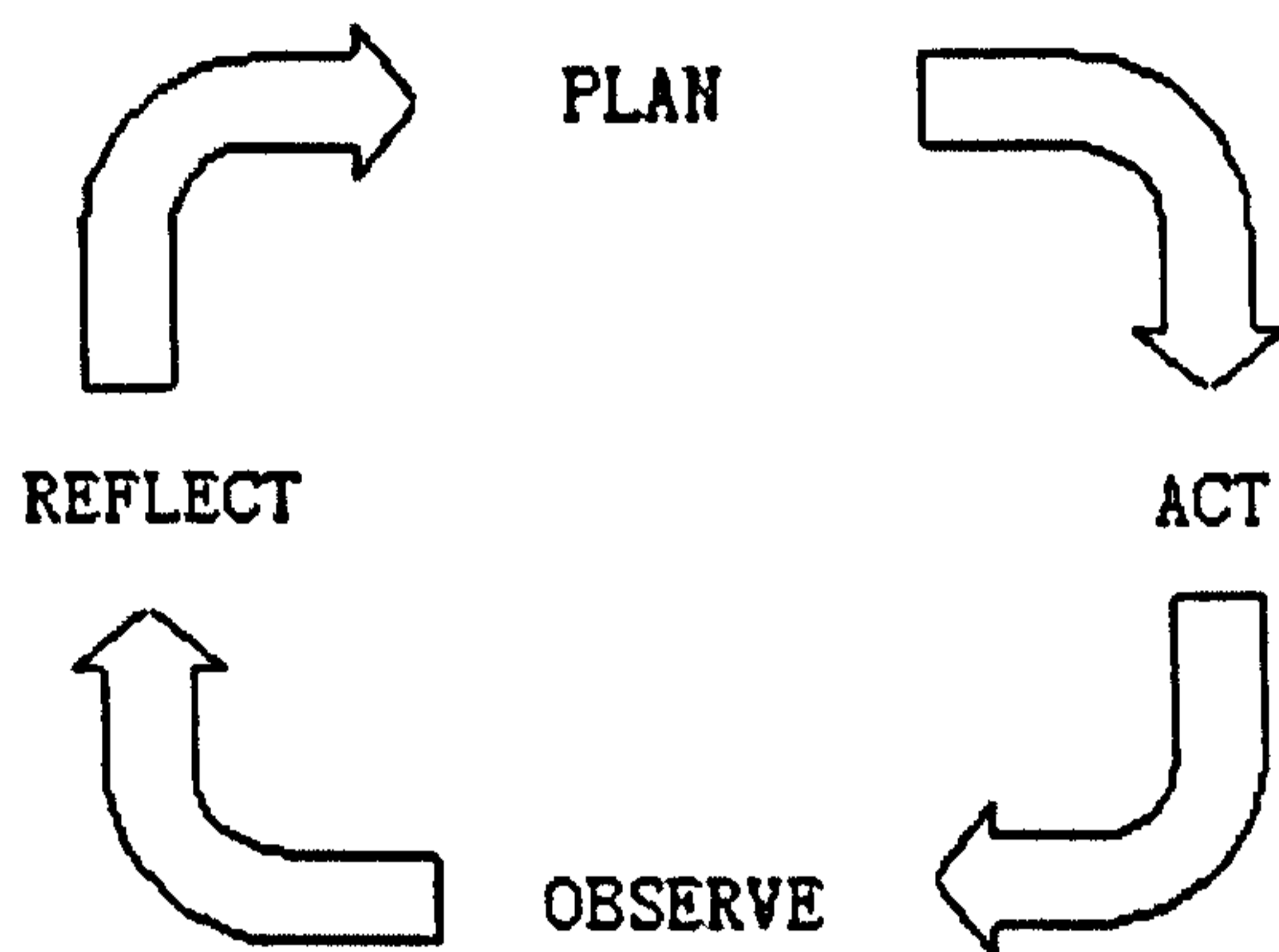


Figure 8. The Action Research Cycle

The strong self evaluative aspect of this project for teachers was achieved through participant engagement in the cyclic sequence which comprises the action research model as first proposed by Kurt Lewin (1948). In this model (Fig. 8) research goals are variables, rather than constants, which change over time. Hypotheses are generated and tested for

congruity with evidence gathered, and subsequent courses of action then decided upon. In order to facilitate this self evaluation process, the research design incorporated interview meetings between the researcher and the teachers at critical points in the year of the teacher's planning and teaching cycle, as well as collaborative team meetings. Thus, each new planning point in the year represents an opportunity for reflection on progress and modifications of teaching and assessment to be decided upon, then implemented. It was recognized that considerable variation was likely to exist in the teachers' abilities with regard to self evaluation skills. Great care was taken to support teachers in this process and support structures put in place to ensure that teachers' self evaluations were of high quality; these structures are explained in section 4.3.2.2.

One of the drawbacks of an action research approach can be that the participants are so over-involved in the local context, that they are unable to place the investigation in a wider framework. The collaborative role of the researcher was designed to lessen this potential influence of local context upon participating teachers.

4.3.2.1 Mentored Action Research

Black and Wiliam (1998a) identify the need for external researchers to support teachers in developing formative assessment practice. Their own research on the KMOFAP project (Black *et al.*, 2002, 2003) suggested one way of offering this support. They established a staff development project, focused on developing pupil self assessment. The researchers initiated work with teachers by distilling previous research findings for them. This project incorporated a similar way of supporting teachers, but the 'distillation' process was differently construed. The relationship devised between the university researcher and the participant action researchers is therefore relevant to current debates about knowledge generation in educational research and also to debates about the actual process of enquiry in educational research.

The current epistemological debate around knowledge generation in educational research develops the relationship between 'big research' and 'practitioner research' (Bassegy, 2003) and echoes the concerns of Furlong (2003). This research is conducted within the interpretive paradigm, with the researcher working alongside practitioners feeding research and scholarship expertise into professional practice, in order to evaluate both policy and practice. Furlong sees evaluative research of this nature as essentially politically driven by New Labour's twin objectives of raising attainment and increasing equality of opportunity achieved through a 'what works?' mind set, which legitimises a utilitarian approach. Although Furlong supports this approach, as a welcome development, in so doing he also highlights a potential pitfall of the research design as it is potentially premised upon political expediency; the Scottish Executive has invested heavily in the Assessment Development Programme.

The research design is however driven by a genuine desire to seek teachers' views of their experience of implementing formative assessment, rather than setting out to measure success in empirical terms. The longitudinal design of the project, gathering data over the course of a whole academic year was aligned with each teacher's annual professional forward planning cycle. The timetable of researcher visits to schools was also planned to coincide with practitioner curriculum forward planning cycles. In this

way, the researcher extended and formalised pre-existing 'reflection on practice' opportunities, rather than imposed artificial ones. Practitioners were also encouraged to incorporate formative assessment strategies and techniques with existing pedagogical practice, particularly with regard to school writing policy resource management. Pupils' views of formative assessment strategies and techniques were also sought and triangulated with those of teachers and managers to help ensure validity of results.

The relationship between mentor researcher and practitioner researcher is similar to that established by Torrance and Pryor (2001) in that the researcher (in the role of mentor) provided teachers with an 'intellectual resource' in the form of an assessment model and a staged structure against which to analyse classroom practice. Torrance and Pryor described this as '*brokering educational theory with practitioners*'. The formative assessment model adopted by Torrance and Pryor was a comparative convergent/divergent one. The one adopted by the mentor/researcher on this project was a hierarchical one, as outlined in the following section (Fig 9). It was influenced by evidence emerging from early evaluations of the Assessment is for Learning Programme (SEED, 2003).

This evidence indicated an enthusiastic response from teachers to discrete formative assessment techniques which they had chosen to implement in their classrooms. Autonomy of choice over formative assessment techniques for schools participating in the programme (www.ltscotland.org.uk/assess) ensured motivated participants and depended on the large number of schools participating for a more coherent view. This particular study was intended to supplement emerging evidence by providing a more comprehensive formative assessment model with a staged implementation structure.

An international review of research literature on Collaborative Continuing Professional Development for teachers of the 5-16 age range (Cordingly *et al.*, 2003) has indicated that practitioners value research studies that include information considering both the impact on pupils and on the teachers' engagement with the CPD process; this is one such study.

4.3.2.2 Supporting Teacher Self Evaluation through Research Design

Teachers' uptake of formative assessment ideas, as described in the interim report of the evaluation of Assessment is for Learning Project 1, *Support for Professional Practice in Formative Assessment*, (SEED, 2003a) ranged in depth of application. Sixteen different types of strategy were listed as having been adopted by teachers. Some of these described longer term approaches adopted by teachers (e.g. adopting more inclusive pedagogical strategies, promotion of thinking skills, discussions, peer assessment); others shorter term, implementation 'tools' or techniques (e.g. traffic lighting, wait time).

Evidence from the evaluation of project 1 (SEED, 2003a) suggested that although most teachers found the discrete formative assessment techniques easy to implement, that for some staff the implementation of the strategies required a fundamental change in pedagogical practice which they found stressful. These results from Project 1 indicated that a more comprehensive, structured approach to strategy implementation merited investigation.

Tensions were also reported between the development and implementation of formative assessment strategies and the demands of summative assessment, with the relationship between the two poorly articulated. This indicated that the relationship between the two might fruitfully be explored in depth, in the context of a single curricular area, through detailed investigation of the role of assessment with the teaching and learning cycle (SOED, 1991a), which forms the basis of curriculum implementation in Scottish primary schools.

A hierarchical model of assessment principles, strategies and techniques was developed by the researcher in order to facilitate a process of selective, staged integration by teachers. In this model (Fig. 9) the formative assessment principles outlined by William (1998) were presented as 'big ideas' underpinning the project. These were identified as follows:

Learners learn best when...

- *they understand clearly what they are trying to learn, and what is expected of them.*
- *they are given feedback about the quality of their work and what they can do to make it better.*
- *they are involved in deciding what needs to be done next.*

www.ltscotland.org.uk/assess/for/intro/index.asp

Hierarchical Cognitive Resource

WALT

Rubrics

Traffic
Lighting

2 Stars
and a
Wish

Fat and
Skinny
Questions

TECHNIQUES

Sharing
Learning
Intentions

Negotiating
Success
Criteria

Self- and
Peer-
Assessment

Improving
Feedback

Extending
Questioning

STRATEGIES

Learners learn best when they understand clearly what they are trying to learn and what is expected of them

Learners learn best when they are given feedback about the quality of their work and how they can improve it

Learners learn best when they are involved in deciding what needs to be done next

PRINCIPLES

Figure 9. Hierarchical Cognitive Resource

It was suggested to teachers that these principles could be integrated with practice through long term planning aims. Five long-term planning aim strategies were selected for this purpose: Sharing Learning Intentions, Negotiating Success Criteria, Encouraging Peer and Self Assessment, Improving Feedback and Developing Questioning. Each long term planning aim was paired with a shorter term formative assessment technique. The range of techniques considered came from the KMOFAP project (Black et al, 2002), publications for practitioners on the subject (Clarke, 2001) and from case study evidence from the Assessment is for Learning Programme (www.ltscotland.org.uk/assess). Each strategy was linked to a particular technique and tied into the five planned action research cycles (Table 1).

Action Research Cycle	Strategy	Technique
Cycle 1	Sharing Learning Intentions	WALT
Cycle 2	Negotiating Success Criteria	Critical skills rubrics
Cycle 3	Encouraging Peer and Self Assessment	Traffic lighting
Cycle 4	Improving Feedback	Two stars and a wish
Cycle 5	Developing Questioning	Fat and skinny questions

Table 1. Linking strategies with techniques

The pairing was not seen as exclusive but as a framework for advice and negotiation with teachers. It was envisaged that the strategies and technique framework would operate cumulatively to develop enhanced understanding of the principles outlined by William (1998), and that some resolution of the tension between formative and summative assessment demands for teachers might result.

A brief explanation of the pedagogical implementation techniques is provided below. A fuller account of their origins and how they were used in the investigation (with examples) appears in the description of each action research cycle outlined in Chapter 5. The acronym WALT (We Are Learning To) is a cartoon character used by teachers to articulate the learning intention for a lesson. Critical skills rubrics are assessment grids

which display success criteria for pupils. Traffic lighting is a way of pupils self evaluating levels of confidence in their work. (A green traffic light means, 'I am very confident'). 'Two stars and a wish' is a technique used to provide written feedback to pupils that makes reference to two strengths and one development need. Fat questions are designed to promote higher order thinking; skinny questions are more 'closed' and elicit lower order thinking responses.

Building on the success of the KMOFAP project (Black *et al*, 2002) and Torrance and Pryor (1998), of presenting teachers involved in action research with a cognitive resource, the model was presented in steps, linked to the action research review meetings. Thus, every mentor/ practitioner meeting served multiple purposes:

- reflection on previous series of lessons,
- development of action points for next lesson series
- support for forward planning of writing curriculum
- introduction of next strategy and technique for implementation.

However in this Scottish project, particular strategies were linked by the mentor/ researcher to particular classroom techniques, in order to progress understanding of formative assessment principles identified by Black and William (1998). This structure is outlined in Table 1 and an account of the progress of the action research outlined in Chapter 5.

Furthermore, the process of reflection for teachers was supported by an analytical framework which encouraged teachers to record individual lessons using a SWOT analysis framework. This aid to reflective thinking is now used extensively to help teachers in the Chartered Teacher programme in Scotland evaluate their own experiential learning. It is recognised as being useful in progressing thinking which leads to change in practice (Moon, 1999). Practitioner reflections were recorded in writing under the acronym headings of strengths, weaknesses, opportunities, threats; these 'lesson log' sheets helped focus the mentor/ practitioner interviews, along with samples of pupils' writing. In addition, teachers recorded pupil views from lesson plenaries on the lesson logs (Appendix 4). Interviews were conducted with head

teachers on the first and last cycle visits, to provide data triangulation. A transcription of one of the final interviews with head teachers is included in Appendix 10.

The aim of the researcher was to provide the cognitive resource of the hierarchical model of formative assessment, but to encourage teachers to draw upon this resource in a flexible way which allowed them to integrate it with their existing practice, and adapt its elements to fit the individual social contexts of each of the nine classes in the study.

The decision to offer structured support to teachers, to aid their processes of reflection and evaluation, in the novel ways described above, was influenced by Wenger's (1998) three dimensions for the development of communities of practice. Forms of mutual engagement were arrived at; these facilitated understanding of the joint enterprise and resulted in the teachers developing their pedagogical repertoires and discourses.

The research design described above also took account of the findings of the review by Cordingly *et al.* (2003) in that it proposed arrangements for developing peer support for teachers, complemented by specialist external inputs (from the mentor/ researcher). The arrangements allowed for sustained learning over time so that the new approaches could be adapted, experimented with and integrated incrementally with existing approaches, as recommended by the review findings. Differentiated support was offered by the mentor to take account of individual teacher's needs. The research design consciously built on what teachers knew, believed or could do already, by integrating the hierarchical cognitive resource with existing teacher practice in relation to planning, teaching and assessment.

4.4 Data Collection

Data sources consisted of

- interview transcripts from each of the 3 teachers involved for each of the 5 cycle review meetings in schools (c. 45 interviews)
- interview transcripts of initial and final meetings with head teachers (6 interviews)
- written SWOT analyses for each of the lessons chosen by teachers (approximately 125 lessons)

- teacher transcriptions of pupil comments from lesson plenaries (125 lessons)
- examples of pupil writing (3 pupils from each class selected by each teacher, writing samples collected for each SWOT lesson- to track progression over the year- 15 texts per pupil – approximately 135 texts in total)

The pupil texts were collected as exemplification of teaching and learning approaches, rather than as primary data sources for analysis. Their purpose was to give teachers a sense of autonomy in the project and provide a focus for them during the interviews. Teachers were asked to select three children representative of the ability range in the class, but excluding children with specific learning difficulties.

Semi- structured interviewing was selected as a data collection technique because of its flexibility and the high quality of data it offers (Drever, 1995). Individual interviews allowed opportunities for teachers to reflect upon their own practice and were jointly structured by the writer and the teachers. After action points from the previous cycle had been discussed, teachers talked about the three lessons they had selected for 'logging' in relation to the focus strategy and technique. The lesson logs and interview schedule acted as prompting and probing aids and teachers referred to the pupil work exemplars throughout. The interview concluded with action points for the next cycle and a discussion about forward planning. Thus the interviews allowed in-depth discussion of teaching and learning episodes. The interviews were all conducted on school premises, where teachers felt at ease; this also gave the researcher an appreciation of factors governing the background context of the schools. At the team meetings at the end of the day, teachers shared experiences with the group and the researcher introduced a suggested 'strategy and technique pair' for the focus of the next cycle.

Transcription of interview data was used as an opportunity by the researcher to make notes on emerging themes which contributed to coding categories devised for analysis.

The researcher was aware of the pitfall of biased transcribing and aimed to transcribe as faithfully as possible the actual interview as it happened. Bias was further eliminated through the teachers approving the veracity of all transcriptions, prior to further analysis.

Following each cycle review meeting, the university researcher made notes of issues which emerged from the data collected and used these notes to construct flexible interview schedules for subsequent visits.

The data collection instruments used, therefore, have strengths as well as weaknesses. Allowing teachers to select particular lessons (using SWOT analyses) on which to focus lessons helped teachers feel more confident and autonomous. However, it did mean that they tended to discuss lessons they considered successful, rather than the converse. The researcher was sensitive to this limitation during interviews and ensured that the flexible interview schedule enabled probing of difficulties encountered by teachers. The restriction of the duration of the project to one academic year meant that national testing data of attainment as a component 'measure' of learning was not tracked. Pupils are expected to 'work at' particular levels of attainment for longer than one year (www.scotland.gov.uk). As teachers administer tests when they feel children are 'ready', this means there is no common baseline starting date for attainment levels. Data on pupil learning was therefore collected in a way that was consistent with the philosophical aim of the project, through participant teacher views, expressed during interview. The literature review suggested that the current system of assessing writing (using the national testing framework) employed by teachers is not comprehensive enough to describe all aspects of pupil learning in the domain. The project therefore took a more holistic view of pupil learning to compensate for this.

4.5 Data Analysis

The approach taken to data analysis in the project was informed by the account by Jupp and Norris (1993) of traditions in documentary analysis. In this article, the authors claim that decisions about data analysis methodology (in relation to any social inquiry) are linked inextricably to the theoretical underpinnings of the inquiry. They view the three general research paradigms of logical positivism, critical theory and the interpretive stance as aligned naturally with the documentary analysis traditions of positivist content analysis, critical discourse analysis and interactional, interpretive analysis. They claim

that this alignment is driven by built-in assumptions about the nature of the social order and how it can be captured or explained.

Although this view of research paradigms, invites polarised understandings of the 'theory – method interchange' in research, it nevertheless offers a helpful framework to explain the approaches taken in the project to data analysis. It is acknowledged however that writers such as Krippendorf (1980) on Content Analysis explain their methodologies in much more expansive inclusive ways than those characterised by Jupp and Norris (1993). Krippendorf for example, defines content analysis as

“a research technique for making replicable and valid inferences from data to their context”
(Krippendorf, 1980, p21)

Krippendorf's linking of reliability to replicability indicates that content analysis is a less suitable technique for these in-depth case studies than more interactional, interpretive techniques. Although content analysis can be qualitatively based and linked to semantic interpretations, it remains a shift of emphasis within the positivist tradition (Titscher *et al.*, 2000), rather than an independent qualitative method suitable for investigating the research questions of this project.

Similarly, although some aspects of discourse analysis, such as the concern with social and cultural processes made this an attractive data analysis technique, other aspects mitigated against this choice. The emphasis in discourse analysis on the strong relationship between linguistic and social structures, on language as social practice, and on the creation and maintenance of ideologically driven power relations are examples of these.

Tesch's (1990) view of the issue of validity in interpretive qualitative research was helpful in determining the choice of approach for data analysis.

“Qualitative analysis is to a large degree an art. The question of its validity does not depend on replicable outcomes. It depends on the employment of a data reduction process that leads to a result that others can accept as representing the

data. The result of the analysis is in fact a representation in the same sense that an artist can, with a few strokes of the pen, create an image of a face that we would recognise, if we saw the original in a crowd. The details are lacking but a good reduction not only selects and emphasises the original features, it retains the vividness of the personality in the rendition of the face. A good 'reduction' while removing us from the freshness of the original, presents us instead with an image that we can grasp as the 'essence', where we would have been flooded with detail and left with hardly a perception of the phenomenon at all."

(Tesch, 1990, p. 304)

Thus, although the philosophical base of the project aligned with a critical theory stance, it was acknowledged earlier that it 'leans' towards an interpretive pole rather than a positivist one. The interactional, interpretive method of analysis chosen reflects this positioning of the researcher. The interactional, interpretive analysis used in the study arose out of a desire to put emphasis on action and problem solving in real situations. According to Titscher (2000), the Chicago research school of Strauss emphasised the necessity for grasping the actor's viewpoint for understanding interaction, process and social change. This form of analysis therefore accords well with the critical theory/interpretive stance of the researcher. The validity of the data set produced is strengthened by the in-depth nature of dialogic interviews and team meetings. It is also enhanced by the in-built post-transcription participant checks and the iterative nature of the research design.

Interactional, interpretive data analysis was conducted in the following ways:

1. school context charts drawn
2. descriptive, dendritic coding framework developed at three 'levels'
3. data ascribed to descriptive codes for each cycle
4. analytic open coding developed and recorded in 'free nodes' (Gibbs, 2002) for emerging themes:
5. team discussions held
6. pragmatic conclusions drawn about sharing learning goals with pupils

7. explanatory displays drawn
8. explanatory conclusions drawn
9. metaphors constructed to aid communication of conclusions
10. theory building extended.

More detailed explanation of these processes is provided below.

4.5.1 Developing a Coding Framework for Descriptive Data Analysis

The technique of 'coding' allowed the researcher to translate interview question responses and written lesson log data to specific categories for the purpose of analysis. In so doing, she employed the approaches and tactics list outlined by Miles and Huberman (1994) (Appendix 6). These facilitated the necessary shift in data analysis from the 'specifics' of the transcribed teacher and pupil utterances and written accounts to the 'generalities' of the interpretive analysis. The tactics relating to 'making metaphor' and 'theory building' were found to be more useful after the data collection period was complete, while all others were used both during the reflective action research cycles and in the post data collection period. The account supplied below illustrates how the various tactics were employed during the process of data analysis.

In general terms, the selection of first level codes was driven by the structured, practical, evaluative research design; this reflects the critical theory stance of the researcher and the political and ideological context within which she operates. The highly structured nature of the project design linked to timed action research cycles meant that coding of data could be initiated after the first cycle of interviews and developed as the project progressed.

The second level codes were derived from emerging data, and sought to extend, the predominant national discourse relating to formative assessment at the time of data analysis. They were derived by reading the interview text reflectively, inductively generating categories for coding purposes. In the early stages this process was similar to the 'open coding' advocated by grounded theorist such as Strauss and Corbin (1990). However, the second level codes also selectively incorporated the framework used by the team of external researchers working on the evaluation of Project 1 of the

Assessment is for Learning Programme. Again this acknowledges the ideological context of the project and the tension inherent in the drive to validate the educational benefits of formative assessment, while at the same time, giving voice to the views of teachers, school managers and pupil stakeholders.

The third level codes extended the framework to include multiple perspectives from background literature and sought to bring existing epistemologies to bear on the topics under consideration.

This method of using sources for developing an organising system for the purpose of descriptive interpretational analysis follows that suggested by Tesch (1990). Here she recommends that research questions, sub questions, research instruments, concepts or categories used by other authors in previous related studies and the data themselves can all provide all fruitful sources for categories in the system.

The resulting coding framework used for descriptive data analysis is shown in Fig 10 (parts a & b). Further detail about definition of the codes is supplied in Appendix 5. This framework was applied to interviews from each of the lesson cycles. Use of a standard coding framework for each action research cycle facilitated methodical data analysis. It was felt that this level of analysis was be sufficient to provide some insight into the more limited data set generated in relation to '*pupils talking about pupil learning*' .

LEVEL 1 CODES

LEVEL 2 CODES

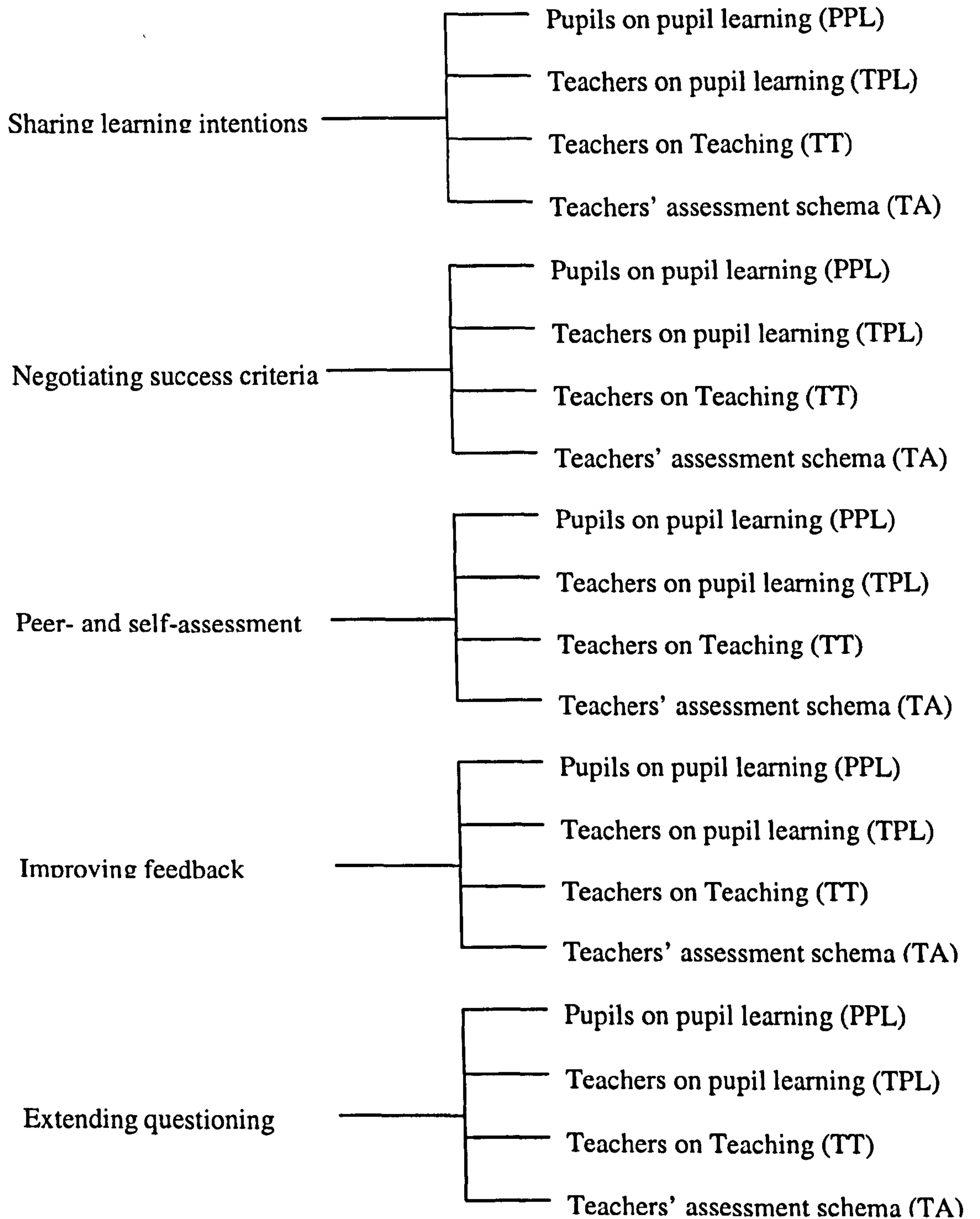


Figure 10a . Visual Map of Data Analysis Coding Structure

LEVEL 1 CODE

LEVEL 2 CODES

LEVEL 3 CODES

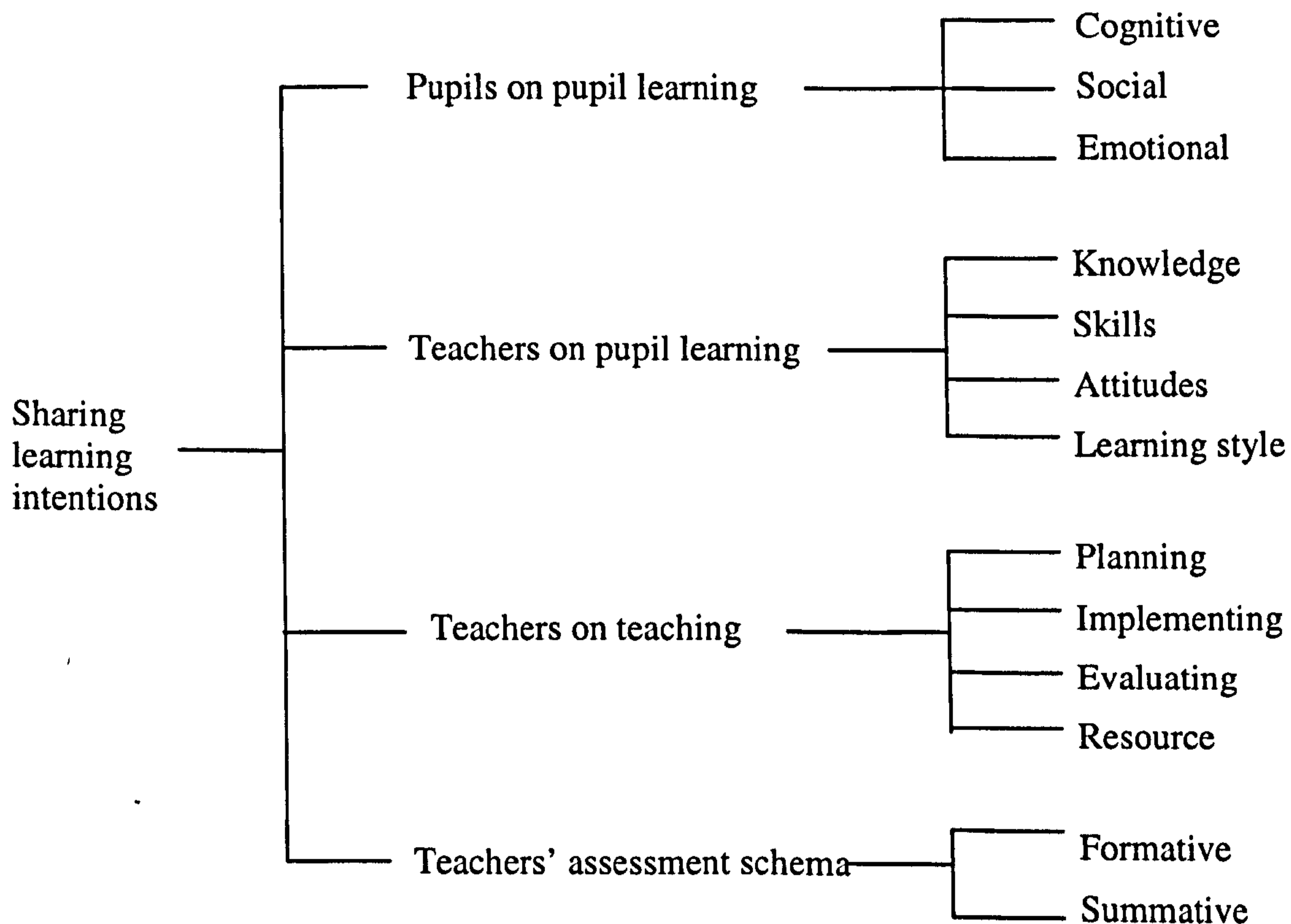


Fig 10b. Visual Map of Data Analysis Coding Structure.
This coding structure was applied to all level 1 codes

4.5.2 Extending the Data Analysis Coding Framework:

Developing Themes using ‘Rich Data Set’ Analysis

The data sets relating to *‘teacher’s talking about teaching’*, *‘teachers talking about pupil learning’* and *‘teachers’ views of assessment’* were richer and more complex for a variety of reasons. Teachers’ views of pedagogical and assessment issues changed over the course of the project as the action research cycles facilitated reflection and evaluation. Alterations made to teaching approaches impacted on teachers’ views of assessment and conversely, teachers changing views of assessment led to changes in teaching approaches. In order to illuminate these relationships across action research cycles, a ‘Rich Data Set’ analysis linking the ideas was conducted.

A selection of Miles’ and Huberman’s data analysis ‘tactics’ was applied to *explanatory* data displays to generate research ‘outcomes’ from the action research cycles. This was done in order to illuminate more complex relationships between *teachers’ writing pedagogy, children’s learning and teachers’ assessment understandings*, than those which arose from the descriptive coding process. A diagrammatic overview of the approach recommended by Miles and Huberman (1994) can be found in Appendix 6 (Miles & Huberman, 2000, p. 308). The application of this process to the project is represented diagrammatically in Figs. 11 and 12.

For the purposes of analysis, the three school sites were regarded as requiring a single ‘within case’ analysis as data from all 3 schools had been combined in the coding process. As Miles and Huberman suggest, the process of moving between descriptive analysis and conclusion drawing was an iterative one. This process was facilitated by the opportunities for collaborative reflection during interviews and school team meetings built into project design. These also provided occasions for verification of conclusions which support their validity. The researcher’s memos and field notes for each meeting also provide a record of these events. The team meetings therefore provided a forum for teachers contributing to the data analysis process.

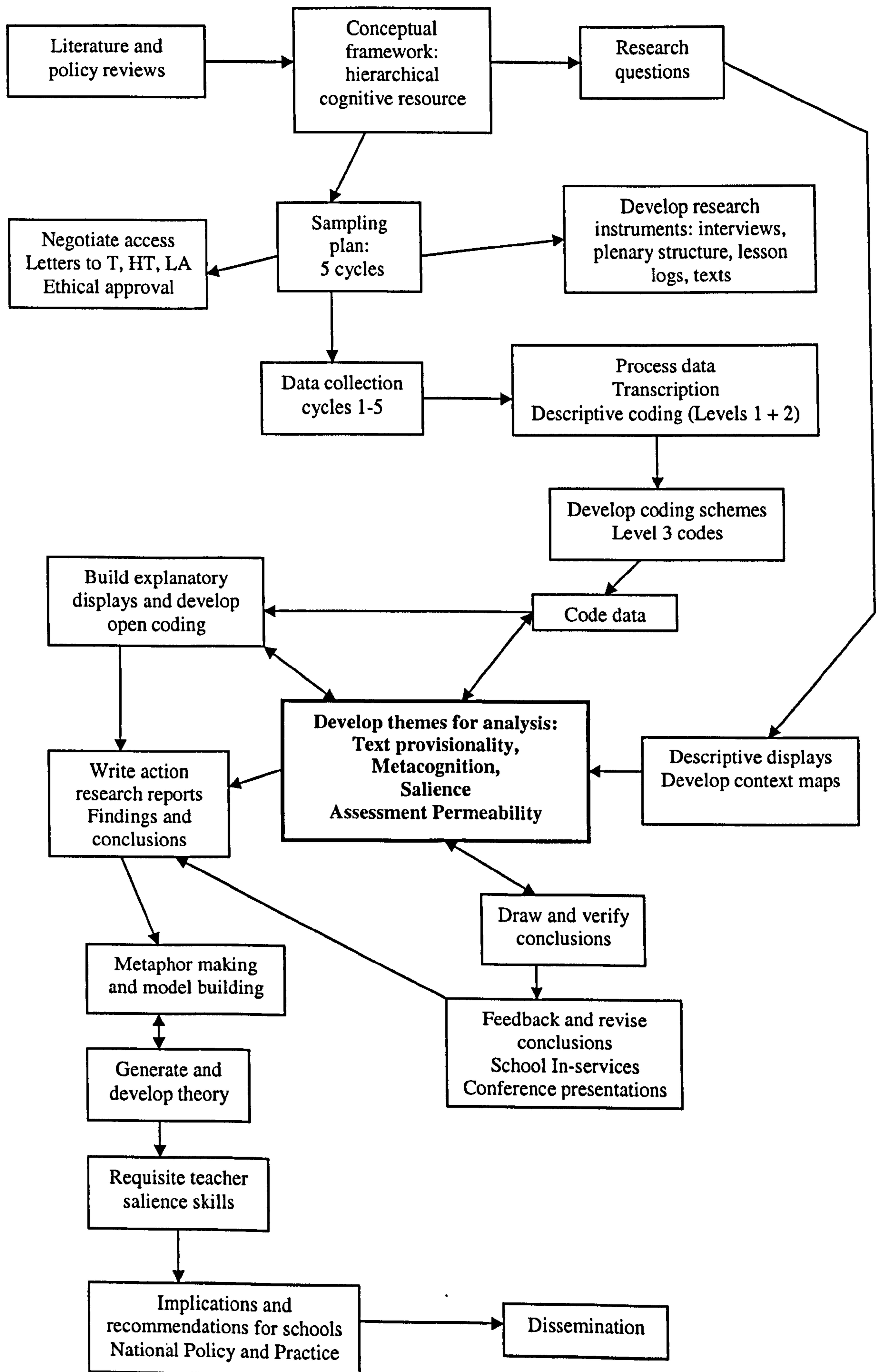


Figure 11: Overview of Data Analysis Process

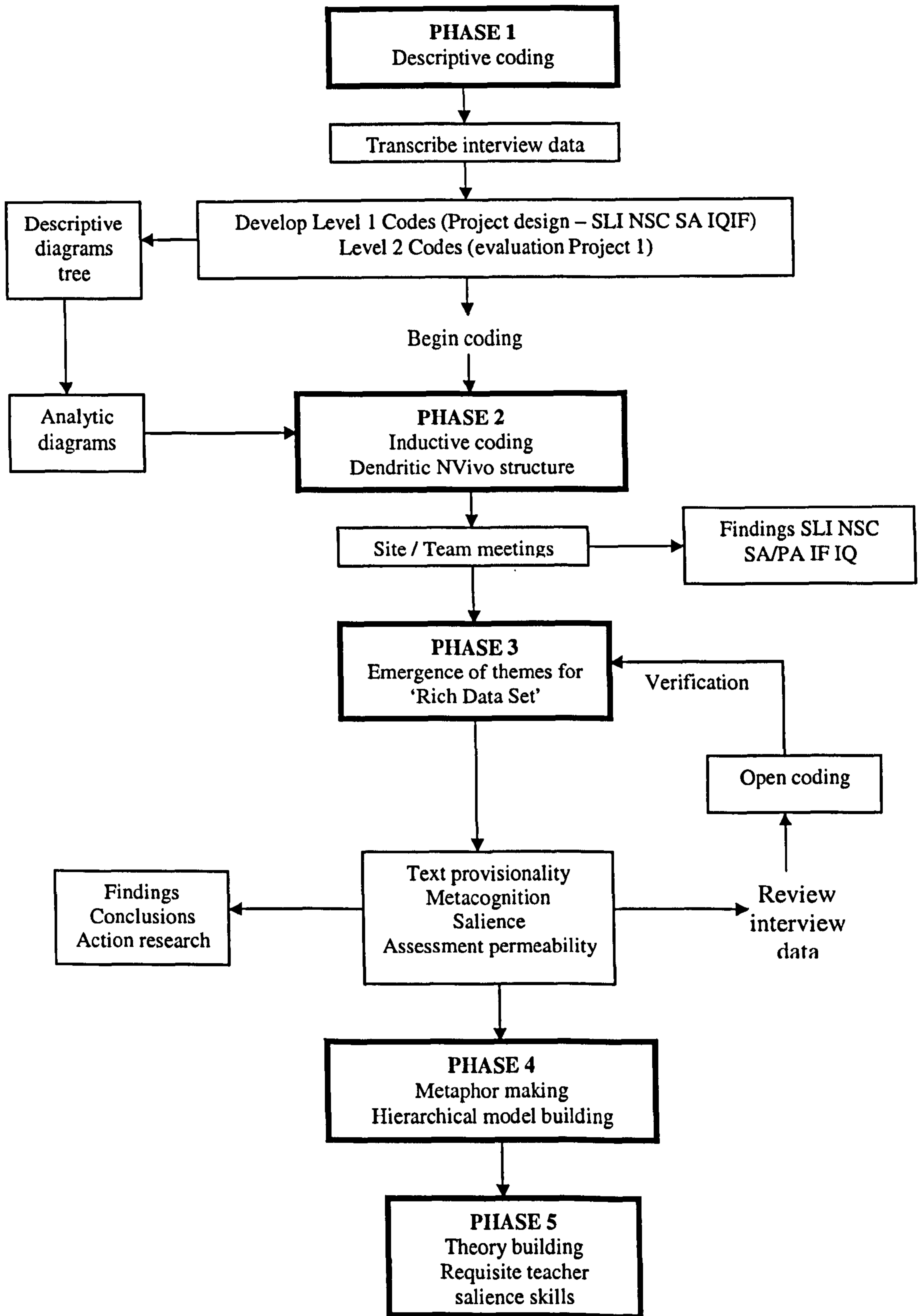


Figure 12: Data Analysis – 5 Phase Process

In order to make the transition from descriptive data analysis to conclusion drawing, Miles and Huberman (1994, p. 10, fig. 1.3, p12, fig. 1.4)) recommend building explanatory displays and deriving patterning codes. This process is also illustrated in Carney's *Ladder of Analytical Abstraction*, cited in Miles and Huberman, 1994, p. 94 (Appendix, 6).

4.5.3 Explanatory Analysis using Patterning Codes and Explanatory Displays

This approach was adopted as follows:

Early 'context charts' (Miles and Huberman, 1994) were devised for each school, with details recorded relating to school policies and planning procedures, resource availability and use, class characteristics and teacher background (Appendix 7). Mind mapping was found to be a useful format for recording the context charts. These were augmented during the data collection year and used to inform the patterning and clustering of information that aided conclusion drawing. As themes emerged, data relating to them was coded in NVivo, using the 'free node' facility; these were discussed with teachers individually and during team meetings. Using Miles and Huberman's tactics list referred to above, conclusions relating to them were arrived at, and shared across the team. These conclusions were pragmatic in nature and suggested workable ways to align new understandings about formative assessment strategies with existing practice. The development of these findings is tracked in Chapter 5, in the inter-cycle reports.

The display technique of mind mapping continued to be helpful in subsequent analysis; a mind map was developed which related the other formative assessment strategies trialled by teachers (Appendix 8). These narratively driven data display techniques were preferred by the researcher over the matrix type of display also recommended by Miles and Huberman. Matrix-driven displays lead to variable-oriented analysis; networked mindmaps to a narrative recreation of the plot of events over time, which was deemed more appropriate for this study.

A number of the 'tactics' recommended by Miles and Huberman for drawing conclusions were therefore used. 'Noting patterns' in emerging data, 'seeing

plausibility' and 'clustering' were effective in moving from describing data to generating meaning, particularly in relation to sharing learning intentions and success criteria with pupils. Together, they allowed a logical chain of evidence to be presented. The aim of the rich data set analysis, in the interpretive documentary analysis tradition, was to show how the teachers in the study responded to the social and professional restraints imposed upon them. It shows how they utilised the cognitive resource provided by the researcher, to actively developed new understandings of pedagogy and assessment, through the medium of reflexive practice, in order to enhance pupil learning. The practical 'workability' of the research design meant that teachers implemented new strategies and techniques into practice in each action research cycle, while at the same time adjusting their practice to take account of reflections on previous cycles. The tactic of 'getting feedback from informants' provided a measure of validity. The 5 action research cycles thus provided a measure of reliability of findings. The inter-cycle reports and action points describe the accumulating effect of these procedures on practice over time, through the sequential narratives of the dialogic interviews and lesson logs.

As well as arriving at pragmatic conclusions collaboratively with the teachers, the researcher also worked independently making further use of the open coding facility in NVivo to cluster data around further themes emerging from the interview data, in an inductive way. At the conclusion of data gathering, data was clustered around a number of further themes which ranged across the action research cycles and related to formative assessment principles. The researcher re-examined the interview data iteratively to check the plausibility of these themes and was then able to draw conclusions relating to them. These conclusions are presented at the end of Chapter 5.

Deeper understandings were reached through theory building analysis, which explicitly sought, in a retrospective way, connections between the findings reported in Chapter 5 and the theoretical and policy base described in Chapters 1, 2 and 3. At this stage of analysis, the tactic of 'making metaphor' was found to be a useful way of making sense of the experiences of the teachers during the study. These 'deeper understandings' arrived at via 'making metaphor' are described in more detail in Chapter 6. The various

phases of qualitative data analysis and the techniques used are summarised in Figures 11 and 12.

Further support for the validity of these findings was gained through the early dissemination of project findings. At the end of the project, whole school staff development sessions were conducted by the researcher in each of the three sample schools. At these meetings, findings were debated with the staff in each of the schools. Final interviews with promoted staff were conducted after these sessions, and were therefore informed by the debate amongst staff. At the end of the data collection year, these findings were also presented at an international literacy conference (United Kingdom Literacy Association, annual conference, Manchester, 2004). Feedback from participants informed the final phase of data analysis. A paper on the methodology of the project was also presented at the Scottish Educational Research Association annual conference, (Perth, 2004) and feedback from this informed the reflections on project design, reported in Chapter 6.

4.5.4 Using NVivo for Data Management

It is appropriate at this point to discuss the contribution of NVivo software to the data analysis process. The use of NVivo software greatly facilitated systematic data management and organisation in respect of data storage, retrieval and manipulation. The tree structure of NVivo coding was helpful in that it allows named codes within a framework to be systematically organised and displayed visually in hierarchical form.

The process followed by the researcher is congruent with Gibbs (2002) description of the process of qualitative data analysis as iterative, recursive and dynamic and occurring during data collection, as well as afterwards as a separate stage of the research process. It is particularly necessary for action research, with its cyclical structure.

The use of CAQDAS (Computer assisted qualitative data analysis software) meant that a link between the code and the text was maintained, because by retrieving the code, the original words of the interview and its context could be displayed. In this qualitative analysis, the researcher constantly cycled around and between the original data, codes, diagrammatic representations of data, memos and annotations that had been constructed.

Use of CAQDAS also meant that data management and storage was efficient, systematic and consistent. The systematic use of the qualitative software during the data collection phase of the project to produce a coded database of information gives easy access to data so that texts could be easily searched and extracted 'chunks' retrieved stored and manipulated at will.

However there are also dangers in using CAQDAS, which the researcher was aware of and took steps to avoid. It is possible for the researcher to become disconnected from the original data, though NVivo makes the ability to examine the context of any coded data segment very quick and easy. The use of NVivo can encourage over-reliance on the part of the researcher on code and retrieve approaches. One way of avoiding this is to code from a variety of perspectives; some prospectively (e.g. using the AifL evaluation codings and background reading); some while data collecting (e.g. using the evaluation structure built in to the action research cycle); some retrospectively (e.g. after all data collected). These procedures were adopted for the descriptive coding process. Maintaining meaning links with all coding sources was therefore an important safety feature of this analysis stage. However those linking facilities are not as well developed in NVivo as the facilities that support node construction and coding, so linking of this nature was augmented by the mind mapped data displays and researcher memos. NVivo was therefore particularly useful during the data collection period and for descriptive coding purposes. The organised, descriptively coded database, which was assembled during the data collection year, was a valuable resource for the researcher to draw upon when inductively generating themes, and theory building during the second year of analysis. With the mindmapped diagrammatic displays (Appendix 8) described in section 4.5.3, and the metaphor making described above, it greatly facilitated the conclusion drawing, tracked in Chapter 5, and the consideration of findings in relation to theory, described in Chapter 6.

The researcher was aware of validity concerns of ensuring that the explanations derived from the data correctly captured what was actually happening. The reiterative nature of action research; the in-depth nature of interviewing as a means of data gathering; the

sharing of transcripts with practitioner researchers; the decision making school team meetings all provided some safeguards in this respect.

It is accepted that the operation of assigning codes involves inescapably the exercise of selectivity on the part of the researcher, with implications for reliability. The coding practice used was subjected to a process of peer review and checking, to mitigate the effect of this. The use of NVivo provides some measure of protection also against this potential bias by virtue of its ability to remove some of the more tedious aspects of hard copy coding with paper, scissors and coloured pens. However it is recognised that this is not in itself a guarantee of validity and reliability of the veracity of interpretations of data. It was intended that the transparency of the procedures adopted and the systematic approach adopted, should help in the process of assuring validity and reliability.

The next chapter combines a description of the activities undertaken by the teachers in the study with the findings as they emerged. This is necessary because of the cyclical nature of the action research process, involving as it does planning, action, observation and reflection during each cycle (Lewin, 1948). Findings from each cycle impacted on following cycles, within the research structure resulting from the implementation of the strategy/ technique pairings.

Chapter 5 Findings and Conclusions

5.1 Cycle 1

5.2 Cycle 2

5.3 Cycle 3

5.4 Cycle 4

5.5 Cycle 5

5.6 Findings from Interviews with Promoted Staff

5.7 Conclusions from Findings

Chapter 5 Findings and Conclusions

Presentation of Results

This report of the results of the action research project is presented cycle by cycle in chronological order, as the results from each cycle cumulatively affected the foci of the cycles that followed. The hierarchical cognitive resource of principles, strategies and techniques presented to teachers at the initial in-service session, which structured the research design, also provides an organisational structure for the presentation of results. The formative assessment principles were identified by Black and Wiliam (1998a, b). An explanation of the pedagogical strategies and techniques selected to enable the embedding of the principles into practice, is provided prior to the results for each cycle. A third organising structure is provided by the identified research questions. Coding categories used at levels 1, 2 and 3 are defined in Appendix 5. Data sources for each research question are detailed below:

Research Question 1

What is the nature of the benefit perceived by pupils of the embedding of formative assessment principles into their experience of the writing curriculum?

Data for this question were derived from pupil comments gathered by teachers during lesson plenary sessions. It was coded under the Level 2 code: *pupils talking about pupil learning*.

Research Question 2

To what extent can teachers use formative assessment to enhance pupil learning in writing?

Data for this question were derived from teacher interviews and written lesson SWOT analyses. It was coded under the Level 2 codes: *teachers talking about pupil learning* and *teachers talking about teaching*. This reflects the purpose of the research described in the Introduction, to make a contribution to existing knowledge about formative

assessment, teaching and learning. Using data coded under both these categories to inform the answer to this question also reflects the philosophical stance of the researcher, who sees teaching, learning and assessment as part of a repeating cycle. (SOED, 1991a)

Further data relating to Question 2 were derived from interviews with promoted staff. This is reported separately, after the description of results relating to the action research cycles. An example of the transcript of one of these interviews is included in Appendix 10. These interviews were also useful for triangulating data for research question 3.

Research Question 3

To what degree does the current criteria framework used for assessing children's writing match teachers' perceived demands of the task?

Data for this question were derived from teacher interviews and written lesson SWOT analyses. They were coded under *teachers talking about assessment*.

Teacher comments are attributed by school (1, 2 or 3) and teachers by an assigned letter (Z, L, S, M, J, O, D, A, J, M) to preserve anonymity. For example, a comment labelled (2D) was made by teacher D in school 2. Pupil comments are not attributed, as no analysis was done linking individual pupils to comments.

Action points for individual teachers were negotiated during individual interviews. Action points for the project team were discussed and agreed at the after school CPD meetings. These inter-cycle project action points derived from teachers' reflections during interviews and team meetings are described between cycle results reports. This allowed the action research cyclical process of action and reflection to be tracked.

The numbers of comments coded by researcher under each node branch is supplied, in Appendix 11, as this is an indication of the weighting of pupils' and teachers' views, and a transparent way of showing the evidence base for conclusions drawn. It is acknowledged that the process of coding comments may be subject to researcher bias, but an effort was made to represent with integrity the views of both teachers and pupils.

The researcher's decisions in this respect were informed by the collaborative decision making engaged in during interviews and team meetings. The coding framework and rationale for decision making were shared informally with several colleagues, outside the project team. The comments selected for reporting are not intended to be comprehensive, but rather to illustrate either a typical response or to highlight responses that seemed to offer particular insights. A selection of comments is presented in the text of Chapter 5, with a more extensive selection presented in Appendix 11. Comments by pupils and teachers are presented in italic font, alongside the findings. This method of presentation places teacher and pupil 'voices' alongside those of the researcher and is appropriate for the interpretively weighted, critical theory foundations of the project.

5.1 Action Research Cycle 1

PRINCIPLE: Learners learn best when they understand clearly what they are trying to learn
STRATEGY: Sharing Learning Intentions
TECHNIQUE: WALT

According to Clarke (2001), the strategy of sharing learning intentions with pupils involves informing children of the learning objective or 'mastery goals' (Ames, 1992, Black 2001) of a task. The technique of **WALT** (Clarke, 2001) is an acronym for **We Are Learning To...** which is presented to children as a named cartoon 'character' (Figure 13) who articulates the learning intention in a written speech bubble. This visual representation of the learning intention is displayed pictorially in the classroom, during the lesson, and the teacher verbally focuses the

children's attention on it. Pupils were encouraged to create cartoon characters to represent WALT, as exemplified in Fig. 13, in order to tap into the cultural life of children outside school. Lessons were structured by the introduction of a learning intention introduced early in the lesson. A plenary session was held towards the end of the lesson to encourage children to verbally review the learning that had occurred.

We Are Learning to

W.A.L.T.



Figure 13. WALT

Teachers were advised to encourage pupils to review their learning in small discussion groups and feedback their deliberations verbally to the rest of the class.

5.1.2 Cycle 1: Research Question 1

What is the nature of the benefit perceived by pupils of the embedding of formative assessment principles into their experience of the writing curriculum?

Pupils were positive about the process of sharing learning intentions via the 'WALT' cartoon technique.

Seeing WALT is fun. It helped me that I liked what I was doing. WALT's Cool!

The technique helped children with general cognitive tasks such as concentration on task and depth of thinking

WALT helps you think more.

He makes you think of better ideas.

'WALT' also helped with more narrowly focused aspects of writing such as vocabulary choice or scene setting. The technique facilitated the development of metalanguage as its use in the classroom, provided opportunities for children to engage in metacognitive reflection about their writing.

I learned how to use powerful verbs to create atmosphere.

Pupils enjoyed the collaborative working and opportunities for discussion with peers during the lesson plenary sessions enjoyable. However this was tempered by a desire for quieter times to write in other lesson phases.

I enjoyed working with a partner, she helped me with ideas.

It was easier to think when it was quieter- It's hard to concentrate when everybody starts talking.

5.1.1 Cycle 1: Research Question 2

To what extent can teachers use formative assessment to enhance pupil learning in writing?

Teachers' comments reinforced the view that the visual representation of WALT was helpful to children. Teachers developed this support, in response to pupil enthusiasm, by 'fleshing out' the character of WALT with personality attributes, linked to writing purpose. This led to increased writing confidence.

When we were doing the diary work, I chose a secretive looking WALT, one who looked as if he could keep secrets. They liked that idea. (1S)

The children really liked seeing the learning intention on the board; we made a giant WALT. One of the children made one that had a book as his hat and a sharpener as his face and pencils for his arms; coloured pens were the legs. The kids were really impressed by the drawing first of all, life size and I really thought they got a lot out of seeing it on the board, even though they hear the learning intention, to actually be able to see it and read it was good too. Walt gives them a buzz! There is less of a feeling of panic about their writing. It's easier to get it right now. It gives them more confidence to go on.

(2J)

Sharing learning intentions made it easier for teachers to teach in a responsive, interactive way and promoted teacher/ pupil dialogue.

I do always try to let the children feel I value their opinions. I don't usually do it in such a formal way but it fitted with the way I work normally to listen to their views.

It's quite a good idea to say to them, 'What is important today?'

So to actually get them to give the learning intention, get it from them seemed to work.

(1Z)

The increased emphasis on teacher / pupil dialogue which resulted from the sharing of learning intentions, led to improved on-task behaviour for pupils, and a sense of satisfaction for teachers about their teaching. Teachers as well as pupils reported the development of a shared discourse about writing, a metalanguage, between teacher and pupil.

In the plenary session, they did often use the wording that we had used in the learning intention, when they were talking, it was quite interesting how much they were using those words. They would not normally use that language so clearly. (1L)

Teachers found the requirement to share learning intentions with pupils, difficult to relate to their existing forward planning procedures for writing. Their comments about how broad or narrow the learning intention should be illustrates this confusion.

It's trying to say, what in this lesson do I really want the children to learn?

It did focus me. I found it difficult to decide what was going to be the single most important thing in this lesson. I see now that that learning intention is too broad, and I'm not focusing enough, I haven't said why we're doing it. I need to relate the learning intention to the actual piece of work more. I'm not really expanding on the learning intention, I'm making it very simple. I'll have to be sure I give them the reasons why. We have been thinking clearly about having a specific audience for writing like fairy tales for P2. That might have helped, if you had linked the audience to the learning intention. (2D)

Part of the confusion seemed to arise from the variety of lesson types that could be planned under the generic term, 'writing lesson'. Learning Intentions for lessons focused on the development of a single aspect of writer's craft, such as the use of adjectives, was more straightforward. More complex writing lessons where children were orchestrating a number of skills involving both composition and transcription in

more extended writing tasks, proved more difficult to link to a single learning intention. One teacher who linked the learning intention to lesson planning, driven by an 'aims and objectives' approach, found defining learning intentions more straightforward.

There was uncertainty among teachers about the distinction between writing task, learning intention and success criteria. This was compounded by a confusion about teachers' understanding of the 'purpose' of the writing tasks they set. Some linked the purpose to the audience, rather than the underlying communicative purpose of the writing task.

We were writing a fairy story for primary 2s (2D).

I felt the lesson lacked purpose so I made it into a competition, the older children voted for the best poster. (2O)

Initially teachers tended to consider the learning intention as a short term planning task, (when they were thinking about a context for the writing), rather than something to be considered at the stage of long term planning. Longer term planning for writing was generally focused on genre related considerations, as teachers complied with school planning formats which required coverage of a 'range' of writing genres over the year.

I'm not thinking about the learning intention until I think about the actual lesson.(2D)

One teacher became aware during interactive teaching that the genre related purpose of the task demanded particular language features. The following comment provides evidence of this reflection on practice occurring during interactive teaching.

This seems ridiculous but see when I was doing this lesson at first, I really couldn't think why, until it came to this bit. The lesson got easier as it went on, really for me, because I started to use examples from their work, and it dawned on me when somebody put, 'it can be friendly'. I realised that was why they should be using the present tense, in a

personal letter, so that it sounds friendly. Present tense somehow sounds more positive, it is friendly. I'll be able to use that next time. It seems an obvious thing now but I didn't realise it before the lesson. (20)

Teachers felt that providing reading models helped elicit learning intentions from pupils. They expressed the view that sharing learning intentions was a 'common sense' approach that fitted with existing practice.

Cycle 1 Research Question 3

To what degree does the current criteria framework used for assessing children's writing match teachers' perceived demands of the task?

The teaching and assessment focus that resulted from sharing learning intentions helped teachers cope with the complexity of teaching this curricular area. However, they were not always happy with the compromises they were making in this process.

You put a lot of things down to not having time. It has been difficult because I always say you must do this and watch your spelling and your handwriting and everything else but now I am just saying other things are important but this is what we're doing today.(2D)

Teachers felt that they were including pupils more in the assessment process, and that this was the case, even for pupils who were normally reluctant to contribute to classroom dialogues. The plenary session seemed to be a particularly helpful mechanism to facilitate this interactive engagement. However, teachers reported difficulty in allocating time for plenary sessions.

I found time management of plenaries very difficult. We are so timetabled it's unbelievable. I have a dedicated writing slot which I do every week, but if we've prefect

duty that goes away, so at 12 o'clock I'm left with half my class. We're also timetabled to computer and music and maths setting. You are cutting your lessons right down.(1L)

Sharing learning intentions meant that teachers could improve the focus of their feedback to children. They also provided a focus for peer and self assessment.

I reread all the stories in our class book and asked why they were good. I highlight good phrases to show what I'm looking for- that's what my learning outcome in my plan was for. I used Anna's piece from last week on the overhead and highlighted the best bits.

It has shown a benefit- the majority of children did give me what I was looking for.

They could check later to see if they had attained their learning intention.

Children could swap jotters and comment on each others work, concentrating on the learning intention. (3J)

There were indications that the explicit stating of learning intentions might force unrealistic expectations on children and lead to stress for them.

Teachers expressed concerns about the tension they experienced between breadth of curricular coverage as opposed to depth of coverage. They felt a pressure to show that children could perform in lots of different types of writing, yet felt this did not give them sufficient time to develop competence within the 'types' in sufficient depth.

There was also a tension identified between teaching the compositional skills and the transcription skills of spelling, grammar and punctuation. Finding time to integrate writing process development was particularly difficult.

There was a need expressed to relate the learning intention to a bigger picture of what teachers were 'looking for' in children's writing, but uncertainty about how to achieve this. Concern was voiced that although learning intentions allowed for focused teaching, this might restrict the attainment of more able children.

5.1.4 Summary of Progress and Action Points resulting from Cycle 1

Teacher reflections during the collaborative professional discussions after school indicated that learning intentions, linked to short term lesson objectives, 'worked' for focused skills lessons, but were problematic in more extended tasks which required orchestration of knowledge and skill.

Teachers discussed purpose as relating to underlying communicative purpose, rather than audience. They wanted to build on the shared language about writing (metalinguage) that was developing with their pupils.

Action points:

- Focus on more 'complex' writing lessons for purpose of project, rather than discrete tasks.
- Link learning intention to communicative purpose of task, while acknowledging that context and audience have a part to play.
- Continue to use WALT visual stimulus, with verbal reinforcement. Develop the 'personality' of WALT (see Appendix 4).
- Develop the use of reading models to exemplify success criteria and further develop the shared language for writing.

5.2 Action Research Cycle 2

PRINCIPLE	Learners learn best when they understand what is expected of them
STRATEGY	Sharing Success Criteria
TECHNIQUE	Using Assessment Rubrics

According to Clarke (2001), the purpose of sharing success criteria with pupils is to make sure that children understand what are in the teacher's mind as the criteria for judging their work. She recommends involving pupils in creating the success criteria, in order that they might be further involved in their own learning. She sees this as a way of children linking learning intention with task instructions.

The technique of assessment rubrics, used in this cycle, originate in Critical Skills methodology (Weatherley *et al.*, 2003). A rubric is a grid which shows success criteria and a progression of skill devised by pupils and teachers working together in order to develop next steps. A reading model can be used first by the teacher to give the pupils an example of the type of writing the children will produce. The teacher uses this 'expert model text' to elicit success criteria from the pupils. (*i.e. by asking, 'How did the author achieve the desired effect on his readers'?*) The criteria are negotiated with pupils at three 'levels' and codified into a grid (Fig.14). 'Child-friendly' language is used in the grid in the performance criteria that teachers elicit from pupils. Pupils keep an individual copy of the rubric beside them as they are composing their texts, using it as a 'scaffold' both during and after writing. The teacher provides additional 'conferencing' support during writing, using the rubric as focus. The use of rubrics was investigated with other teachers in a previous research project by this author (Reid, 2004). The criteria emerge from the interactive discussion between teacher and pupil, rather than being prespecified in advance. Rubrics therefore, are a technique grounded in social constructivist approach (Tunstall and Gipps, 1996), rather than a behaviourist one. They provide a way of teachers sharing their tacit professional knowledge (Sadler, 1998) in language that is familiar to pupils. The structure of rubrics also helps pupils overcome

the limitation of lack of experience in self evaluation by offering a supportive structure for that process.

Rubric for Story Writing - A Haunted House

Beginner	Quite Good	Expert
Story includes a description of scene <input type="radio"/>	Story includes adjectives when describing the scene. <input type="radio"/>	Story includes good adjectives when describing the scene. <input type="radio"/>
Story has main event <input type="radio"/>	Story has a main event and ending. <input type="radio"/>	Story has a main event and ending with a twist. <input type="radio"/>
Uses capital letters and full stops. <input type="radio"/>	Uses capital letters, full stops and commas. <input type="radio"/>	Uses capital letters, full stops, commas and speech marks. <input type="radio"/>

Figure 14. Sample Rubric

5.2.1 Cycle 2: Research Question 1

What is the nature of the benefit perceived by pupils of the embedding of formative assessment principles into their experience of the writing curriculum?

Pupil comments centered mostly on cognitive benefits derived from the use of the reading model or the rubric. Some comments indicated that the rubric acted as a reminder prompt for pupils, supporting them during writing, taking the place of a supportive interlocutor. There was clear evidence that pupils used the technical assessment terminology in their responses, indicating further development of a shared language for talking about writing and increased metacognitive awareness.

The rubrics helped pupils understand the concept of *provisionality* in their writing, and increased their reader awareness, contributing to their sense of self efficacy as authors. Pupils showed awareness that rubrics could be used as self assessment tools.

It made me think about how people who were reading my writing would think about it- I hoped they would like it. It's trying to get you to where you want to go... it helps!

The highlighting of the technical skill of punctuation as one of the criteria in the rubric allowed children to make links with previous 'decontextualised' skills lessons.

We have done a lot about speech marks in Basic Rules of Grammar.

Pupils also recognised the motivational benefits of the rubric.

It gives yourself a challenge because you know where to go. It kind of makes me work harder.

Cycle 2: Research Question 2

To what extent can teachers use formative assessment to enhance pupil learning in writing?

Developing the personality of WALT in Cycle 2 meant that the pupils continued to find the use of this technique stimulating and helpful.

I asked about his clothes- the boys were especially enthusiastic about this- he would wear rapper pants and tat on his jeans, he was going to be a rapper. (1J)

Teachers comments referred mostly to the effect rubrics had either on pupil skill or attitude. Teachers chose to introduce rubrics to their classes in a variety of ways. Some introduced them in curricular areas other than writing. Those teachers who introduced rubrics through practical activities in other areas of the curriculum, such as PE or

technology, felt that this meant that children readily understood how to use them. (see appendix x) If teachers introduced rubrics initially through a contextualised writing activity, this proved difficult for children. Alternatively, introducing rubrics through a straightforward technical skills writing lesson was less problematic.

We did a practical rubric first so we could get into it. They were doing Game On Enterprise, technology making a game, a square of wood, so we used that carpenter, apprentice, beginner were the headings they chose. They really got it because they had actually done it for real. (1J)

Less able pupils found the skill of using the rubric a difficult one to master.

They had real difficulty understanding the rubric, but then maybe that's why their writing is so poor. Maybe that's why they are not able to improve, because they can't see what we're getting at. It's like a vicious circle- in a way. They do need to understand, to develop more awareness of what they are trying to do. (2S)

Conversely, able children found it easy to work with rubrics and they were a means of offering cognitive challenge to those children. Teachers recognised the potential for pupils to use the rubric as a self assessment tool. Their comments indicated that the use of the rubric led to improved writing performance by those who *were* able to use it. As children gained experience in using rubrics, their proficiency with them improved. Combining learning intention with success criteria made it easier for teachers to define learning intentions for lessons. It took practice for teachers to clarify the relationship between the learning intention and the success criteria. Teachers linked the use of success criteria to *planning* consistently in their comments. For some teachers, using a reading model as a stimulus for teaching writing seemed to involve a significant shift in practice. They were unaccustomed to linking reading and writing in this way. However, they could see potential benefits in this approach, once they gained experience of implementing it in the classroom. The interactive discussion to elicit the success criteria

from the reading model was thought to be particularly helpful to less able children in the class.

I don't know if that would work for me. Usually when I am doing my forward plans, my writing emerges from my project or my grammar work. It's like art, I know in my head, what I want to do- to be given a piece of reading, a good reading model and to think, right, what writing am I going to try and get out of this.... I don't know. I'm not used to thinking of reading and writing in that way but maybe I should try that. (2L)

I had thought the reading model was a small part of the lesson and that the rubric was the main part, but no, it was the reading material that really got us started on the lesson; the rubric was part of the lesson as we moved on but I will do that as part of my writing teaching. I will look for something to show them that's relevant. I think using rubrics made me a more inspired teacher of writing because I found the reading model gave me good ideas.(2L)

Teachers devised different ways of managing and organising the whole class interactive discussion, using overhead projector displays or highlighting transparent acetates over enlarged texts. Some teachers felt that their subject knowledge base was not robust enough to allow them to critically analyse a text to determine effective language use. This meant that they could not readily identify model texts or elicit success criteria easily from model texts. School 1 used a resource that both provided model texts and critically analysed them, identifying key teaching points. Teachers in School 1 found they could adopt the rubrics technique with this resourcing support. It seemed to be harder to find model texts for personal writing tasks, and even experienced teachers found it difficult to determine success criteria for this type of writing. This ability to analyse texts then, did not seem related to teaching experience, but to subject expertise. Of the two teachers who found it relatively straightforward, one was very experienced and the other, a probationer.

Despite these difficulties, teachers felt rubrics were worthwhile because they helped them with the curricular 'breadth versus depth' dilemma that had been uppermost in their minds at the start of the project.

With a rubric we can take into account all of that. You maybe have one new thing you're bringing in but you have to mention all the rest as well; the rubric gives you that opportunity. (3G)

Rubrics helped teachers structure interactions with pupils and led to a more responsive , interactive style of teaching during the writing lesson.

It helped me focus both my teaching and my assessment and feedback as they were writing. The children did gain from it. (1J)

For one primary seven teacher, the timing of teacher/ pupil interaction changed significantly. After, discussing the reading model, she shifted to *responding* to pupil writing through interactive feedback, as a *coaching* strategy for older more independent writers, rather than specifying all content in advance. The following comments indicate that teacher engagement in reflection during the researcher/teacher interview led to new understandings for the teacher.

What has happened in their writing is that there is less input in the beginning from me, and more input towards the end of the lesson. For the last story, I gave them a group of titles to chose from, then I said, let's write the rubric for it... what do we need to do? , Afterwards, they went away and wrote the story without more input. When they came back to me, that's when my input was on a more individual basis. It has become more feedback than input because of where they are in writing. I didn't realise that's what I was doing until I talked to you about it! (3G)

5.2.3 Cycle 2 Research Question 3

To what degree does the current criteria framework used for assessing children's writing match teachers' perceived demands of the task.

One teacher, who was not accustomed to using the national testing criteria for any work other than tests, felt that marking using the rubrics was very onerous.

Some able children in primary seven saw rubrics as something that would help them with summative assessment tasks.

I had a request from one boy; 'Can I write a rubric before I do my National Test?' (3G)

5.2.4 Summary of Progress and Action Points resulting from Cycle 2

As a result of reviewing their use of the learning intentions and rubrics, in after-school collaborative professional discussions, teachers wanted to refine their use of both learning intentions and success criteria, in order to embed them into practice. The learning intentions and success criteria selected by teachers in the first two cycles were reviewed in the school group meetings and commonalities sought. This involved the researcher in collaboratively engaging teachers in the use of clustering and patterning tactics (Miles and Huberman, 1994). Teachers felt that the learning intention had to be more global for an 'authentic' writing lesson than the narrower learning intentions they had specified for lessons focused on 'practising' skills. They felt that 3 criteria were a 'manageable' number for children to focus on in any one lesson. They were clear that they wanted one of those criteria to have a technical skills focus, such as punctuation or sentence structure. Teachers were therefore also involved in making plausibility judgements about the inferences they were drawing. Although teachers recognised that some learning could be done in these areas during the editing stage of text production, they still wanted one emphasised in the pre-selected success criteria. This acknowledgement of teacher experience ensured that teachers began to assume more responsibility for decisions that were being taken about project direction. They felt it improved the interactive quality of their discussions with children if they could respond,

during text production to a content or stylistic feature of text, so this became a category for inclusion in the rubric. Dialogue focused on these areas was seen to promote a relationship between the child as an author and the teacher as the audience of the text. They also helped teacher 'bring children back' to the learning intention. The inclusion of a criterion related to language use also seemed to meet the teachers' desire to encourage creativity in writing and avoid stultifying children by over-specifying a desired response. Teachers described the category of overall text structure as helping children with the 'shape' of the text. They were also clear that in extended writing tasks, pupils needed some support with the overall structure of the writing, hence the 'structure' criterion. It was seen as necessary for meeting summative assessment demands, so that children would be able to write 'whole stories' and 'complete reports' It was therefore agreed that in Cycle 3, teachers would:

- Structure learning intentions to include: communicative purpose, genre and context e.g. we are learning to write sad stories about old people
- Structure rubrics to include: one criterion relating to content or language use, one relating to overall structure, one to a technical skill (punctuation or syntax)
- Try to realise the self assessment potential of rubrics.

In collaboration with the teacher researchers, a number of themes were identified by the researcher as emerging from the project at this point. These included:

- Pupils' acceptance of the provisionality of text production
- Developing pupil metacognition
- Pupils' sense of self efficacy as authors
- Links between language modes of reading, writing, talking and listening.

'Text provisionality' arose from views expressed on the emerging relationship between learning intentions and success criteria. Both teachers' and pupils' comments from cycles 1 and 2 suggested that implementing the strategies of sharing learning intentions and success criteria, through the use of WALT and rubric techniques, helped pupils view their texts in a more provisional way. A limited range of clearly delineated success criteria enabled pupils to review their writing during production and amend it, without

the need for constant teacher intervention. Pupils were therefore engaging more readily with a writing process approach. The articulation of learning goals and success criteria facilitated the development of a common metalanguage and promoted metacognitive development. Teachers found the use of rubrics with model reading texts challenging, but worthwhile to implement. They questioned the robustness of their own subject knowledge and sought resourcing solutions to help them cope with this. Pragmatic conclusions about criteria types and ways of stating learning aims suggested 'workable' ways to share learning intentions and success criteria with pupils.

5.3 Action Research Cycle 3

PRINCIPLE: Learners learn best when they are involved in
Deciding what needs to be done next

STRATEGY: Self and Peer assessment

TECHNIQUE: Traffic Lighting

According to Jones (2001), self assessment is a way of children controlling their own learning; she outlines a variety of practical ways of building self assessment into classroom routines. She feels that children need to understand what is required of them in tasks and 'fix' that understanding in memory. Traffic lighting is one technique used to help children fix understanding and thus structure self evaluation. (www.ltscotland.org.uk/assess/glossary) Traffic lighting can be used in combination with criteria lists and grids. After writing, the child codes green the criteria they feel they have fully achieved; codes amber criteria they have partially achieved and codes red any criteria they feel they have not achieved. Teachers in the study combined traffic lighting with the use of rubrics. After cooperatively devising a rubric for a writing task, pupils identified individual targets from themselves from the rubric grid. These were used as a support during writing. After writing, the pupils self assessed their texts by 'traffic- lighting' their selected criteria.

5.3.1 Cycle 3: Research Question 1

What is the nature of the benefit perceived by pupils of the embedding of formative assessment principles into their experience of the writing curriculum?

Pupils continued to appreciate the support offered by reading models. Their comments about refining the use of rubrics to include self assessment via traffic lighting clustered around cognitive and affective issues. Pupils generally enjoyed using the felt pens for traffic lighting but as rubrics lost their novelty, the physical management of bits of paper became a 'nuisance' to pupils. Positive affective comments indicated that the supportive structures of rubrics and traffic lighting led to increased confidence and feelings of self

efficacy and improved motivation. They meant that children participated enthusiastically in the self regulation of learning. They were recruited in this way to the teacher's agenda for learning, which thus became a shared learning agenda. Opportunities arose naturally for peer assessment as well as self assessment. Pupil comments relating to aspects of writing process indicated that pupils were reinforcing an understanding of the concept of provisionality.

It made me read over my writing and make changes so that I could give myself a green traffic light.

The comments relating to general learning aims indicated increasing self awareness and meta-cognitive development.

The rubric means we know what we are learning.

Pupils gained an understanding of progression linked to longer time scales. There was an awareness of learning transfer in one writing lesson, benefiting performance on future tasks.

5.2.2 Cycle 3: Research Question 2

To what extent can teachers use formative assessment to enhance pupil learning in writing?

Teachers reported that pupils had increased knowledge of the teachers' agenda for learning and that the rubric and traffic lighting techniques enabled them to articulate their own achievements.

I think for some of them it is making them look to see what they want to achieve. One girl told me that because she realised that she hadn't achieved what she had ticked, she then went back to change bits of it . Another one said that although she hadn't achieved

it this time when she did her traffic lights, it would help to stick in her mind what she was trying to do the next time. (3A)

Although the structured supports provided by both the rubric and traffic lighting were helpful, like pupils, teachers found there were some problems associated with their implementation. Teachers found pragmatic solutions to some of these difficulties, such as displaying the rubric on the blackboard, or folding the paper rubric to simplify it. The skills of self evaluation did not come naturally to all pupils. These were particularly marked for low achieving children, and were complicated by affective considerations.

Generally the poorer writers they have low self esteem or low confidence in their writing anyway, so they are not benefiting. You see they have been grading themselves good or expert, they mark themselves too highly to begin with. It may be that they don't have the self assessment skills but also they don't want to be seen as marked down, so that's lack of self esteem. (2Z)

However, one teacher said that, although it had taken them longer to learn to use the rubrics and that they were using them in a more limited way, she was beginning to see some benefit to less able pupils.

Teachers felt that although the rubrics were very helpful, they indicated that the approach felt rather cumbersome and formulaic at times. They did not want every writing lesson to be a rubric supported lesson.

Although opportunities for peer assessment arose naturally, this seemed to be a more threatening experience for pupils, than self assessment. One teacher indicated that the learning achieved through the interactive discussion which was structured by the rubric and traffic lighting, was distinct from the learning that had occurred during text production, that the self and peer assessment processes constituted valuable learning themselves.

The learning experience is the discussion about the writing, sometimes more than the writing of the story. They know how to move forward. (3G)

Structuring the spread of criteria across a range of 'types' which included content, as well as technical skill and structure allowed for the emergence of pupil 'voice'.

She likes to write about feelings, she has a lot of empathy, so the criterion about content suited her. She feels her views are being valued because one of the criteria allows her to concentrate on giving detailed description- she is an emotionally literate child. (2M)

With practice teachers gained confidence in the use of the formative assessment techniques used, and valued the improved dialogue between teachers and pupils that ensued.

The use of rubrics feels like a natural part of my practice now. (3J)

I feel I've been able to see this through the children's eyes this time. (2S)

There was evidence that teachers were still 'working through' the ideas explored in team discussions about the relationship between learning intentions and success criteria, particularly with reference to their planning for pupil learning. As teachers became more experienced at using reading models in combination with learning intentions, success criteria and rubrics, they saw the potential for teaching technical skills such as sentence structure and punctuation through this integrated approach.

Your reading model can give you a model for sentence structure. Our grammar books don't give a lot of help with this. They just do conjunctions. (2Z)

Some resolution was achieved of the 'breadth versus depth' issue that had troubled teachers at the beginning of the project.

I have changed. I did have a worry about fitting everything in at once before. Not now. I think it is still all happening. The punctuation is still there. I don't need to make issues of everything. It is all going to fit into place. It's confidence and practice. Before I felt really drained trying to teach writing because I was trying to do too much, all at once.(1D)

Teachers felt the need to build into their planning a new context lesson, where children were able to try out the skills they had been practising in a task which was the same genre but a different context from the focussed 'coaching' lesson.

I want the children to be more confident. They know: 'Right I've done that one, now I know what to do next.' I think it builds on their confidence to have another try at the same type of writing. (1D)

Teachers began to use rubrics as a planning tool for themselves, to note key teaching points. Using this approach, teachers were able to plan lessons which were driven by a common genre purpose, but had different writing contexts. The distinctions between context, genre and format were therefore clarified in teachers' understanding. The rubric helped them make this shift in thinking. The rubric also helped teachers structure their feedback to children. In the busy context of the classroom they were able to give swift verbal feedback focussed on the range of criteria in the rubric. In team discussions teachers reported that previously they could only supply this immediate feedback in relation to spelling or punctuation errors, because these are easy to 'home in on' in class.

I can see for a good core of the class that they are getting the hang of it and that they are getting something from it. It gives me something to focus on when I am giving them their feedback because I know what they have been trying to achieve, so if they haven't quite achieved it, then I can say well, you haven't quite achieved it because....so that would be their next steps.

When you are conferencing children, time is very limited and it is quite hard to do the thinking task of analysing next steps, so anything that structures it for teachers makes it a bit easier. (3A)

5.3.3 Cycle 3 Research Question 3

To what degree does the current criteria framework used for assessing children's writing match teachers' perceived demands of the task?

Teachers had had to make significant changes in practice to incorporate the strategies and techniques of the first three phases of the hierarchical cognitive resource. Although they commented, generally positively about the usefulness of the formative assessment techniques, few comments were elicited about the relationship between formative and summative assessment.

One teacher linked the criteria groups in the rubric to her summative assessment schema.

I've tried for a criterion about structure, one about content and one about technical skills like the other teachers. It is like 5-14 criteria- you are kind of working towards that anyway, without really thinking about it. (2Z)

Another realised that the National Testing framework was not wholly purpose driven, indicating an increasing understanding of purpose driven genre.

It's hard to categorise this in terms of National Tests. It depends on the children's slant on it- it could be factual, though some children were asking questions like, 'how did you feel', so that's not really factual, is it?

5.3.4 Summary of Progress and Action Points resulting from Cycle 3

The themes identified after cycle 2 were developed as outlined below. During school project team meetings, teachers said that the combination of 'big picture' learning intention (genre, communicative purpose, context, audience) with the 3 category rubric (content or language use, technical skill, structure) was enabling them to supply a better quality of feedback while the pupils were writing. Traffic lighting helped pupils self assess and made peer assessment possible. This improved the frequency of conferencing opportunities in the classroom, either between teacher and pupils or among pupils. However, it was still difficult for teachers to feel in touch with the writing of all pupils. Also, teachers were not connecting the formative assessment techniques readily with their summative assessment schema. The self- regulation benefits for pupils of strategies trialled to date and identified from cycle 2, were enhanced by the traffic lighting technique. Pupils were therefore providing some feedback for themselves, with improved metacognitive development opportunities. As well as better accommodation of a writing process approach, opportunities were identified for a more integrated approach for the teaching of technical skills. It was realised that although specification of success criteria was helpful to pupils, opportunities to apply the skills being developed in a less prescriptive way were also desirable.

The following action points were agreed

- Consolidate Learning Intentions according to communicative purpose, genre, context, audience format
- Consolidate rubric criteria set comprising content, technical skill and structure criteria
- Adapt planning to allow time for a variety of lesson types: technical skills lessons, focussed 'coaching lessons' from reading models, new context/ same genre lessons.
- Exploit peer assessment opportunities to encourage pupil/pupil dialogue
- Use learning intentions and associated rubrics as 'short hand' teacher planners
- Develop interactive feedback skills during text production, focused on success criteria in rubrics.

Action Research Cycle 4

PRINCIPLE: Learners learn best when they are given feedback on the quality of their work and know what they can do to make it better

STRATEGY: Improved feedback

TECHNIQUE: Two stars and a wish



Feedback is seen by Clarke (2003) as the central theme of formative assessment and an essential component in the shift from teacher control of learning to pupil responsibility for learning. Feedback can be verbal or written, or appear in more subtle forms. It can be realised between pupils themselves or between teacher and pupil. The project to date had considered verbal feedback. The structure provided by rubrics had facilitated an improved quality of verbal feedback from teachers to pupils during text production. The limited number of success criteria to focus on, meant that teachers could 'home in' on pupils' texts more readily, using the common discourse that had emerged from the process of criteria negotiation. During this cycle a technique for improving written feedback to pupils was considered. *'Two stars and a wish'* is a form of written feedback to pupils on their work that makes reference to two strengths and one area for improvement. This enables learners to build on prior learning and breaks the process of improvement into manageable steps (www.ltscotland.org.uk/assess/glossary). It is a technique that teachers can use to further share expectations of quality with pupils. Teachers used this technique after pupils had finished writing. They framed the 'wish' in the form of a question. For example, in a story about a nasty witch, the teacher might pose the question, *'Can you tell me more about what the witch looked like?'* The pupil responded by answering the question in writing later. This allowed for limited redrafting, in line with a writing process approach.

5.4.1 Cycle 4: Research Question 1

What is the nature of the benefit perceived by pupils of the embedding of formative assessment principles into their experience of the writing curriculum?

Pupils liked the 'two stars and a wish' technique and found the feedback helpful. They particularly liked the peer assessment opportunities it afforded. One teacher used cloud shaped 'post-it notes' to communicate their improvement wish to pupils, which was appreciated by them

'Two stars and a wish' is good. The wish means you know what to improve on. I read it and it helped me to find out what was wrong, so I changed it.

5.4.2 Cycle 4: Research Question 2

To what extent can teachers use formative assessment to enhance pupil learning in writing?

Most teachers' comments focused on the benefits to pupils' writing skills and improvement in pupils' attitude to writing that arose from the improved feedback achieved using two stars and a wish. Less able children were now benefiting from the formative assessment approach, though they had taken longer to adapt to the changes in pedagogy.

Teachers found that formulating learning intentions and preparing for teaching by critically analysing the model text in advance helped them with lesson planning. Their ability to spot suitable model texts improved with practice. They felt empowered, re-professionalised, because their teaching was less resource driven.

My writing is much more driven by the reading now and by what appeals to me more. I was doing as I used to do, years ago...I would think of my own writing, what I wanted to

do... when I wasn't being driven by a pack. They've all done well. I feel I have clearer understanding of my role as a teacher of writing. (1D)

The formulation of the wish in question form also encouraged children to embrace the concept of provisionality with regard to their writing, within a writing process approach. Sometimes, rubrics were felt to be over prescriptive, but this was mitigated by the individual quality of the response that the two stars and a wish enabled.

5.4.3 Cycle 4 Research Question 3

To what degree does the current criteria framework used for assessing children's writing match teachers' perceived demands of the task?

The combination of using rubrics with two stars and a wish allowed for a more individual response to pupils' work. Formative and summative assessment boundaries became more 'permeable'. Teachers felt that the formative assessment techniques helped make the process of assessment more manageable.

The rubric keeps them focused on my group teaching points but the wish is an individual reaction to each child's response. These individual wishes will help me with report writing as well. It is ongoing assessment. I can also use the wish to see if he is carrying forward an action point to the next piece of work. I feel it is making me better organised in my writing teaching with individuals. I realise now that I have been expecting too much of them when I look at the success criteria in the rubric and compare it to the national test criteria. (3G)

5.4.3 Summary of Progress and Action Points resulting from Cycle 4

Previous cycles had created opportunities for pupils to develop self regulatory feedback mechanisms. The focus on written feedback in this cycle re-established the feedback 'loop' between teacher and pupil. The shared meta-language that had developed in the previous cycles meant that the teachers found the 'two stars' easy to identify for pupils;

generally they related to previously negotiated success criteria. The wish could be used in the same way to indicate development needs in the writing, linked to prespecified success criteria. Alternatively, *'the wish'* could be used to develop a relationship between the teacher as a reader and the child as a writer. In this case, the teacher could respond to the content of the writing, requesting further information from the writer or suggesting other improvements, guided by writing purpose. The *'wish'* therefore, as a technique, addressed a concern of teachers that prespecified criteria could have a detrimental effect on creativity. The use of 'two stars and a wish' as a technique was perceived as promoting pupils' sense of self efficacy as authors.

The original project design had intended cycle 5 to focus on interactive questioning, during text production, and to use the technique of increased wait time to improve questioning. However, in the after school team meetings, teachers indicated that they saw open and closed questions as a way of consolidating the planned formative assessment approach they were adopting with children. They wanted to use it to consolidate the sharing of learning intentions and negotiating success criteria with pupils.

As the researcher was keen for teachers to take ownership of the project through the mentoring process, the project design was adapted to allow for this. Teachers saw 'open questions' as congruent with the global definition of learning intentions they had been working with and closed questions as congruent with the success criteria that they had been using in the rubrics. They planned to use these terms to reinforce the concepts with pupils. They decided to introduce the two types of questions through 'revamping' the cartoon character of WALT to ask 'fat' questions and WILF (What I'm Looking For; Clarke, 2001) to ask 'skinny' questions (Fig.15). Fat questions were to require more thought to answer and take more time. They would be achieved through achieving the purpose of an extended piece of writing. WILF's 'skinny' questions matched previous conceptions of success criteria.

The following action points were agreed:

- Use WALT to ask 'fat questions' to elicit learning intentions
- Use WILF to ask skinny questions to elicit success criteria



Figure 15. WALT and WILF.

5.5 Action Research Cycle 5

PRINCIPLE: Learners learn best when they are involved in decisions about their work

STRATEGY: Improved questioning

TECHNIQUE: Fat and skinny questions

Most of what has been written about improved questioning in relation to formative assessment methodology is concerned with teachers extending pupil thinking by framing appropriate questions and then providing immediate feedback. Improved questioning is therefore seen as a characteristic of interactive formative assessment, rather than planned formative assessment. (Cowie & Bell, 1999) As such, Black and Wiliam (2002, 2003) recommend that teachers spend time framing questions that are worth asking, and extending the response time (wait time) they allow children during interactive learning episodes. However, they also suggest that teachers need to focus their attention on the quality and the different functions that can be served by questions in the classroom. They suggest that ‘big questions’ that that are ‘open’, rather than ‘closed’, and that provoke problem solving, can set the scene for lessons by evoking discussion. Teacher collaboration to devise such questions in advance of teaching is advised. In effect, Black and Wiliam are construing the devising of key ‘big’ questions as part of teachers forward planning. This was the way questioning was perceived by the teachers in the study and it resulted from the work in preceding cycles on forward planning through sharing learning intentions and success criteria. Teachers had decided that formulating learning intentions and success criteria provided a valuable aid to them for their forward planning. Their desire to share this understanding of lesson aims and objectives with pupils through ‘fat’ and ‘skinny’ questions was testament to the fact that pupils were taking more responsibility for their own learning in the classroom, and that teachers felt comfortable with this shift of responsibility. In a recent publication (Black *et al.*, 2004) concerned with implementing formative assessment theory in the classroom, the King’s College group suggest that consideration of the criteria for success and ways of sharing

these with pupils should form an important part of the planning process for teachers. They do not, however, go as far as commenting on the possible link between ‘big questions’ and learning intentions. When considering the formative use of summative tests in the same publication, they do acknowledge that involvement in question setting can help pupils understand the assessment process and focus further efforts for improvement.

5.5.1 Cycle 5: Research Question 1

What is the nature of the benefit perceived by pupils of the embedding of formative assessment principles into their experience of the writing curriculum?

Pupils enjoyed WILF and found the structure provided by his questions useful. Their comments indicated that this technique helped consolidate the shared discourse for learning between pupils and teachers, which had developed during the project.

WILF gives you the opportunity to take things step by step.

5.5.2 Cycle 5: Research Question 2

To what extent can teachers use formative assessment to enhance pupil learning in writing?

Teachers commented on the transferability of learning from one context to another.

The children will be able to write these genres in the future because they know what's involved. 1M

The increased emphasis on writing purpose was seen as contributing to pupil motivation, and attainment.

All the pieces of writing that have been successful, really, because I think they have felt that there has been a purpose to it. I try to do that as much as possible. 1S

When children used WALT and WILF in this cycle, it seemed to help their peer assessment skills; they were able to comment on aspects of writing content as well as technical skills, in their writing partner's work.

Teachers still showed some ambivalence in their attitude to the extent to which formative assessment strategies and techniques benefited less able pupils. Teacher's views of the success of a lesson in terms of pupil learning were often coloured by one or two children who they felt had underachieved. Often teachers' reports of lessons were self contradictory in this respect. Structuring the interviews with the SWOT analysis sheets and pupil scripts helped them evaluate the lesson in a less biased way.

The teachers in School 2 used WILF's 'skinny' questions in a different way from Schools 1 and 3. They decided to use WILF to support pupil planning. They felt that pupil planning for writing had not been satisfactorily incorporated into the project approach. One of the resources they use in school offered structured planning sheets for pupils and they did not want to lose the benefits which they felt pupils were gaining from this support. They engineered lessons so that WILF asked WALT 'skinny' questions to guide pupil planning in the compositional stage of writing process. These skinny questions focused on literal content (e.g. *who* is in the story, *where* are they, *what* are they doing?) The planning page also gave support with the overall structure of the text. This meant that when pupils were involved in writing the story (at the transcription stage of writing process) they could concentrate on success criteria related to choice and use of language, and the technical skills of syntax and punctuation. The teachers therefore acted confidently to align the 'new' formative assessment approaches with existing successful pedagogical practices.

Teachers still commented consistently on the benefits they perceived for their forward planning from the formative assessment strategies they had used. There was evidence that teachers were using a more integrated approach to planning writing, instead of thinking of writing technical skills as a discrete area to teach separately from extended writing. Their comments indicated that they had come to see genre as demanding certain technical and linguistic features, which they then had to address in their teaching. The increased emphasis on writing purpose in the learning intention was perceived to improve pupil motivation, especially if it included a 'real' audience for the text. The link to pupils' sense of self efficacy as authors is clear from this. Formulating learning intentions was seen increasingly by the teachers as an aid to forward planning. As teachers gained more experience of using reading models to illustrate success criteria, they found the approach helpful in sharing a construct of 'good writing'. Developing the WALT and WILF characters helped pupils with peer assessment: they acted as intermediaries for pupils and made peer assessment less threatening.

By this stage in the project, teachers were expressing increased confidence in their own teaching. This meant that they could sometimes 'short circuit' some of the techniques from lesson to lesson. Sometimes, the sharing of learning intentions or success criteria could be done orally with children, on other occasions they would be written down. This flexibility prevented teaching from becoming over-formulaic.

Cycle 5: Research Question 3

To what degree does the current criteria framework used for assessing children's writing match teachers' perceived demands of the task?

By this final cycle, teachers were contributing more confident views of summative assessment and its relationship to the formative assessment strategies and techniques they had used during the year. There were indications that the tension between teachers' views of summative and formative assessment purposes was less keenly felt though most teachers expressed the view that they would like to consolidate their practice with formative assessment strategies for another year. Teachers who engaged in National

Testing with pupils during this cycle, towards the end of the year, used the formative assessment strategies of sharing learning intentions and success criteria with pupils as part of preparation for testing. The guidance that accompanies the materials provided for teachers is flexible enough to allow this. Pupils were able to use their rubrics to self evaluate their work, using traffic lighting before submission. Some also used WALT and WILF in the process. Teachers felt that the range of success criteria covered over the year had enabled them to reconcile breadth of curriculum coverage with depth of coverage. This was an important factor in the lessening of tension between formative and summative assessment. Teachers felt a need to 'tease out' learning intentions in terms of genre driven communicative purpose for pupils, from the tasks required in the tests as these were not always clearly articulated in the testing materials. Teachers who used the new Writer's Craft tests found that the reading model supplied with the tests was a useful aid to establishing clear learning intentions and success criteria with pupils. Experience with formative assessment techniques meant a shift of emphasis from product to process in assessment.

I think writing assessment now is right through from your planning and your mind mapping. The actual final result of the writing itself, the final product isn't all that much use, it's the process of the writing you're assessing. All the way through and the progress that there has been, all the way through.

At the conclusion of the project, 6 of the original 9 classes had undergone National Testing. Teachers discussed their views on the attainment of pupils selected for the collection of sample texts for the project and also the attainment of the classes as a whole. Of the 18 'selected' children formally tested, teachers considered that 16 had progressed to working on the 'next level' of the curriculum by the end of the project. This was in line with teachers' attainment expectations for these children, in accordance with the 'confirmatory approach' to testing. The remaining two children were slow learners and were described by their teachers as having made 'good progress' over the year. The teachers indicated that these two children were writing with increased

confidence, at greater length, were better motivated, and had an improved sense of themselves as authors. Teachers of the two classes not tested were positive about the improved attainment of the 6 selected pupils and confirmed that in their judgement, they had progressed to working on the 'next level', and were 'ready' for testing.

Increased teacher awareness of the development needs of these selected pupils resulting from text scrutiny and discussion during the interviews, may have resulted in attainment gains for these pupils but this suggestion is tentative because teachers tended to select pupils for the text sampling process who were hard working or generally cooperative.

No large attainment gains are attributed to the intervention of the project, rather teachers expressed the view that there were clear *learning* gains for pupils. In individual interviews and team discussions, they felt those gains could be expressed in terms of improved pupil motivation, metacognitive awareness expressed through a metalanguage, and sense of self efficacy as authors. Teachers felt therefore that, although both they and their pupils had benefited from participation in the project, that the gains were not necessarily valued in the national testing criteria framework. The value they attached to the wider learning gains described, indicated that the writing criteria framework therefore did not meet all their professional needs in relation to assessment in the curricular area of writing.

5.6 Findings from Interviews with Promoted Staff

In all schools staff had found the mentored action research process to be a beneficial form of staff development in relation to developing their understanding of writing assessment. Promoted staff felt that staff gained in confidence in relation to developing assessment as part of learning and teaching.

Teachers in School 2 reviewed the school approach to teachers' forward planning and resourcing during the project, as a direct result of project involvement. Teachers in the other two schools have expressed a desire to do the same. Teachers seemed re-professionalised with regard to their use of resources. They adopted a less resource driven approach to planning and began to use resources more selectively, to suit their teaching aims.

When the project started, teachers were experiencing difficulty in integrating different aspects of the writing curriculum. This was partly resource driven, but was also reinforced by school timetabling constraints such as setting arrangements for reading and learning support provision in school 1. As a result of the project, teachers wanted to plan and teach reading and writing in a more integrated way. They also wanted to integrate the teaching of technical skills more with other types of writing lessons. Setting mitigated against both of these desires.

Assessing writing using formative strategies and techniques became an integral part of their planning for learning and teaching. In school 2, when teachers were involved in National Testing, they met in a larger group than previously to undertake assessment moderation in order to arrive at common understandings of curricular levels. The 'critical mass' of this group size (4 teachers) was seen as important by the head teacher in enabling a change of approach in the school. It included a teacher not directly involved in the project and this was seen as important for sustainability of approach. The head teacher saw this focus on summative assessment as a result of teachers' increased confidence with formative assessment strategies. This is further evidence for a more 'permeable' relationship developing between teachers' attitudes between formative and summative assessment understandings.

5.7 Conclusions from Findings

By the end of the research project, the teachers and the researcher had jointly arrived at conclusions relating to ways in which the formative assessment interventions of *sharing learning intentions* and *negotiating success criteria* could aid pupil text production. Issues which emerged during the project included text provisionality; pupil metacognition; pupils' sense of self efficacy as writers; cross mode links in the teaching of writing and teachers' subject knowledge base. These themes inform the conclusions offered below and also guide the theoretical implications of the study which are discussed in Chapter 6.

Conclusions are offered in relation to each specified research question as follows:

1. What is the nature of the benefit perceived by pupils of the embedding of formative assessment principles into their experience of the writing curriculum?

Pupils found the formative assessment techniques employed by teachers useful, motivating and enjoyable. They found the specified foci of a limited range of success criteria particularly helpful during text production. Some found managing the physical organisation of rubrics problematic and 'over laboured'. They enjoyed opportunities to share their ideas about their writing in plenary sessions. Pupils found formative assessment strategies and techniques enabled them to embrace the concept of 'provisionality' with regard to their texts. This meant they made improvements to texts in relation to learning intentions and success criteria, both during text production and after an initial draft was produced. It also led to an increased sense of confidence in themselves as writers.

2. To what extent can teachers use formative assessment to enhance pupil learning in writing?

Planned formative assessment strategies and techniques helped the learning of pupils, but the benefits were slower to appear with less able pupils, who needed more time to master the new methodologies and ways of working. Sharing learning intentions through the use of WALT tapped into pupils' cultural capital and thereby enhanced motivation for learning. Giving pupils 'ownership' of the WALT character by encouraging them to 'create' their own character with a distinct personality brought increased benefit. Both WALT and WILF offered scaffolding support in the form of an imaginary interlocutors as well as harnessing out of school popular culture motivators.

Incorporating formative assessment strategies and techniques with a writing process approach meant that 'natural' opportunities arose for interactive formative assessment opportunities, during text production. The value of these opportunities was enhanced by the focussed structure provided by rubrics. This meant that feedback to pupils during short, interactive exchanges between teacher and pupil in the busy classroom were more productive and dynamic in relation to immediate text production. A shared discourse for learning in writing emerged during lessons as a result of rubric creation and use. This

discourse arose through discussion of reading models and the transfer of this learning into writing. The shared discourse, or metalanguage allowed pupils to engage in structured, focused, metacognitive reflection about their own learning in writing.

The techniques of traffic lighting and two stars and a wish were found useful in improving the quality of written feedback supplied to pupils, in relation to planned formative assessment. These techniques also provided structured support for pupil self and peer assessment. If the identified development need was related to the success criteria on the rubric, this made it manageable for pupils. If the identified development need was related to other aspects of the writing, such as a response to the content of the writing, this was empowering for pupils. It allowed for development of writer's voice, development of an 'authorly' disposition, and increased sense of self efficacy as an author.

Pupil learning was therefore enhanced in relation to

- skills of text production
- motivation
- meta-cognition
- sense of self efficacy in writing
- awareness of cross mode links

The alignment of the formative assessment strategies of the project with existing planning, implementation and evaluation practices, and the use of existing in-school resources, meant that many support structures were offered to pupils. These scaffolded pupil learning in relation to all the elements to be 'orchestrated' in successful writing, which were identified in Chapter 3.

Sharing learning intentions through an extended understanding of genre and communicative purpose gave pupils a knowledge of the differing purposes for writing.

Learning intentions were particularly helpful to pupils if they stated the following:

- communicative purpose of the writing
- the format,
- context
- audience

Initially teachers found this approach easier to adopt in functional writing tasks, but as they gained experience of formulating learning intentions, it became easier to base those for personal and imaginative tasks on this 'extended' genre notion of the communicative purpose of the task. The use of reading models, which consolidated reader/ writer links also facilitated this development in teachers' thinking. The use of text models was also found to be of value in giving pupils knowledge of the structure and organisation of written texts, experience of possible language characteristics and familiarity with syntax and punctuation, matched to genre.

Rubrics enabled pupils to engage with the concept of textual provisionality and provided a structure for focused intervention and meaningful feedback. Rubrics also facilitated peer and self assessment by limiting feedback variables. Traffic lighting combined with rubric criteria provided a short hand way of providing qualitative feedback comments.

Teachers agreed that the criteria for rubrics should include:

- one for choice and use of language,
- one for technical skills and
- one for overall structure.

An increased emphasis on pupil planning at an early stage of the writing process meant that the 'overall structure' criteria could be considered by pupils at this stage. If this approach was adopted, this allowed greater flexibility in criteria choice at the drafting stage of writing process.

The structure of the various formative assessment strategies and techniques therefore aided both planned and interactive formative assessment in the classroom.

3. To what degree does the current criteria framework used for assessing children's writing match teachers' perceived demands of the task?

Teachers continued to find the national testing criteria framework a helpful structure for evaluating children's writing both summatively and diagnostically. Furthermore, its diagnostic potential to identify pupils' textual strengths and weaknesses meant that it could be used to elicit evidence that could be used to adapt future planning for learning in accordance with formative assessment theory.

However, the genre base of the writing criteria framework was perceived to be lacking in rigour, and to provide an insufficient basis for formulating global learning intentions, linked to the communicative purpose of tasks. It was also considered to be overly detailed to share with pupils for the purpose of self assessment, for specific writing tasks. Teachers considered a selective approach to the use of success criteria to be more helpful to pupils. They generally selected three criteria from the framework for guiding writing tasks. However, teachers' previous experience of using the 'principle of sufficient strength' embodied in the criteria framework was helpful to them; it enabled them to select a 'workable' range of criteria types for their rubrics. This range satisfied their desire for breadth and depth of curriculum coverage, over the period of the project. It allowed them to meet a need to address both the skills of composition and transcription in their teaching. The technique of 'fat and skinny questions' allowed them to communicate this view effectively to pupils.

Teachers' valued the links between reading and writing that emerged through using model texts to elicit success criteria; the new writer's craft tests were seen as a positive move in acknowledging the importance of links between reading and writing. Teachers also valued the opportunities for increased dialogue about writing that were a necessary part of implementing the formative assessment strategies and techniques.

Teachers perceived demands of the task of assessing writing expanded to include implementing formative assessment principles as an integral part of teaching and learning. They valued the development in pupil meta-cognition that resulted from the embedding of formative assessment principles, into the writing curriculum. They found that the process of formulating learning intentions and success criteria was a useful aid

for their own lesson planning purposes, indicating that it helped them develop closer connections between teaching, learning and assessment.

Teachers' views of assessment in writing changed during the project to a more holistic one of considering pupils as *writers*, as well as evaluating their *writing*. At the end of the project, they valued pupils' ability to engage in writing process with an understanding of text provisionality. They also valued pupils' ability to understand the genre driven communicative purpose of tasks as an important factor to consider, in relation to children as writers, alongside text based assessment of pupils' writing.

Chapter 6 Discussion of Findings: Recommendations for Policy and Practice

6.1 Reconsidering Formative Assessment Principles

6.2 Developing an Awareness of Saliency

6.3 Opening the Black Box?

Permeable relationships between Formative and Summative Assessment

6.4 Recommendations for Practice

6.5 Implications for School Policies

6.6 Implications for National Policy

6.7 Further Assessment Considerations

6.8 Reflections on Methodology Approach and Limitations of Study

Chapter 6 Discussion of Findings: Recommendations for Policy and Practice

This chapter considers the findings of the action research study in relation to the theoretical base and policy context outlined earlier. Some recommendations are then made for both practice and policy.

6.1 Reconsidering Formative Assessment Principles

The formative assessment theory base of this project is underpinned by the principles established by Black and Wiliam as a result of their review in 1998. These were used to ground the hierarchical cognitive resource presented to teachers as part of the mentoring process. These state that:

Learners learn best when

- They understand clearly what they are trying to learn, and what is expected of them
- They are given feedback about the quality of their work and what they can do to make it better
- They are involved in deciding what needs to be done next

These principles were translated into practice by teachers through the use of formative assessment strategies and techniques. The principles were distilled by Black and Wiliam through consideration of research evidence on formative assessment and learning. They therefore provide an appropriate focus for the discussion of the findings of this study. These principles encompass the issues about pupil learning identified in Chapter 1 for further investigation. However additional pedagogical issues emerged in the literature review for this study which are also included in the discussion of the findings of the project. These were concerned with the increased demands on teachers involved in implementing formative assessment principles, relating to forward planning, observational and interactive, dialogic skills. The overview of the Scottish policy background in Chapter 2 suggested that these increased demands would be particularly acute for the teachers in the study because they were operating in a context which provided inadequate curricular guidance in the domain of writing. In addition, the

literature reviewed in Chapter 3 suggested that current practice in assessing children's writing was dominated by a text based approach, which took little account of theories of writing process or the affective demands of writing tasks. The issue of transferability of learning in the domain also seemed problematic. Furthermore, it was suggested that the quality of Scottish teachers' subject knowledge base might limit their ability to use formative assessment to enhance pupil learning.

The findings of the study indicated that this was not the case. Using the structured approach devised for the project design, the teachers were able to call upon prior knowledge and experience of teaching and assessing writing to use formative assessment strategies and techniques with positive benefits for the learning of their pupils. Subsequent sections of this chapter use the Black and Wiliam principles to structure a discussion of issues emerging from project findings in relation to the literature and policy base.

6.1.1 Learners learn best when they understand clearly what they are trying to learn, and what is expected of them

This principle relates to the issues of learning goals and learning process identified in Chapter 1. Chapter 3 clarified how these are understood in the subject domain of writing.

Black and Wiliam's principles build on Sadler's (1989) views of the conscious agency of the learner within a behaviourist, goal oriented model of 'mastery' learning. In 1989, Sadler was already suggesting that this model, which characterised progression by pre-specifying success criteria, was an inadequate way of conceptualising successful learning. By 1998, Sadler was stressing that for successful leaning to occur, teachers needed to have some awareness of the criteria necessary for the 'internal cohesiveness' of a successful learner performance. This implies that tasks devised by teachers should in themselves represent learning in a 'transparent' way. For this to be the case, teachers need to be clear themselves about the purpose of the tasks they devise and communicate this purpose clearly to pupils.

An approach to writing pedagogy premised on purpose driven, genre theory helped to create this clarity for both teachers and pupils in the study. When teachers used the notion of genre- based *communicative purpose* to help them formulate learning intentions for writing tasks, this brought increased clarity for both parties. The tasks seemed more 'internally coherent' in Sadler's terms. The inclusion in stated learning intentions of *format*, *context* and *audience* as well as communicative purpose further helped make tasks more internally coherent. For a written text to 'work' as a successful communication, account needs to be taken of each of these variables, and the ways in which they exert influence on the compositional choices that are made by the writer.

For Marshall (2004), fixed relationships between genre purpose and success criteria in the teaching of writing can result in mechanistic writing, with accompanying lack of creativity. The *extended* genre 'communicative purpose' approach adopted by teachers in the study seemed to avoid this. Although this term is cumbersome, it nevertheless provides a clear description of the approach developed. It is seen as a way of extending the limited genre list commonly taught in educational contexts (Derewianka 1996). The benefits gained from adopting this approach were particularly evident in imaginative and personal writing tasks, but teachers also found it useful for functional writing tasks. 'Unpacking' the idea of communicative purpose in imaginative or personal writing tasks meant talking about how the writer wanted the reader to *feel* about the events and characters in stories, then articulating this feeling within the stated learning intention for the task. This accords with Marshall's view of the development of a 'writerly disposition' and the need for increased awareness of the relationship between writer and reader. Teachers commented on the motivational benefits of giving children 'real contexts' for writing which link to their experiences in and out of school. These were combined with this 'communicative purpose approach' through the strategy of sharing learning intentions. This combination helped therefore to bridge gaps for teachers between Halliday's (1978) ideational, textual and interpersonal functions of written communication.

It remains uncertain whether the adoption by teachers of the 'extended communicative purpose approach' enabled them to understand progression in writing in terms of

Marshall's 'horizon' model, rather than the more usual goal oriented mastery model. It is clear that the interpretation of sharing learning intentions and success criteria arrived at by teachers in the study was helpful to them. It enabled them to view accomplishment in writing as to do with the interrelatedness of the elements at work, rather than as achievement of individual, neatly delineated criteria. Furthermore, the legacy of a criterion referenced framework of assessing writing was helpful to teachers in this shift of thinking, rather than a hindrance to them. The easy accommodation by the teachers in the study of the new writer's craft tests indicates that they were moving in the direction of a horizon model. The new tests allow teachers to adopt a 'best fit' approach with specified criteria, enabling a more flexible response to pupils' writing which is more in keeping with Marshall's horizon theory.

The criterion referenced legacy also brought benefits in enabling them to share success criteria effectively with pupils. The experience of devising writing 'targets' for pupils in writing, based on the national testing criteria framework was common practice in schools. The rubrics allowed teachers to build readily on this experience, so that children knew *'what was expected of them'*, in accordance with Black and Wiliam's principles.

The criteria structure for rubrics, which was developed by teachers, indicated that their previous experience of the national testing framework, with its principle of 'sufficient strength', had been useful in developing their subject knowledge base. The success criteria 'types' specified, showed uniformity of approach across the teacher group and incorporated both the compositional and transcriptional elements of text production as described by various theorists (Wilson, 2000; Myhill, 2001; Mills, 2002; Bearne, 2004). Teachers seemed to develop a 'two layer' structure in relation to communicating learning aims to pupils. The bottom layer of success criteria was more 'in tune' with a goals-mastery approach and involved the elicitation of easily identified features of text. These were particularly helpful in short, closely defined writing tasks. The second layer of aims, expressed in the form of learning intentions, were higher order, more integrating aims. These acknowledged the effect of inter-relating the criteria in the base layer and were useful in more extended writing tasks.

This combination of an 'extended genre communicative purpose' approach to formulating learning intentions with structured rubrics to aid the negotiation of success criteria, allayed teacher concerns about curriculum coverage. Arguably, this was because they had accepted that pupils had assumed more responsibility for the work of learning and that teachers were therefore thinking less in terms of a transmission model of teaching and more in terms of a socially negotiated process of learning.

Consideration of the work of Ross (1993) suggested another way of clarifying learning aims for pupils. His post-production 'assessment conversations' with pupils were a way of externalising a creative process which resulted from the clash of the cognitive and affective demands of tasks. This may provide a solution to assessing pupil engagement with writing process, and acknowledging the increased value that teachers placed on pupils' engagement with the concept of text provisionality. Ross' post-production assessment conversations, helped reconcile the 'product versus process' focus of assessment in the creative arts. Ross sees retrospective contemplative reflection on product and process as a creative learning act in itself. The child's production becomes a focus for reflection and self learning. These assessment conversations would seem to be a beneficial 'further stage' to add to current writing process practice. This suggestion then situates writing as a creative language 'art' as well as a skill based subject. In writing then, metacognitive development, which is seen as such an important part of formative assessment learning, is realised through the fostering of writer's 'voice', as well as increasing proficiency in use of a metalanguage to self evaluate texts. This analysis suggests that it would be beneficial for teachers to communicate to children a third 'layer' of aims relating to metacognitive development to supplement the two layers already identified.

The recommendations of *Curriculum for Excellence* (SEED, 2004), in respect of developing pupil 'capacities', suggest that pupils' ability to engage in reflection about their own learning is increasingly valued by policy makers. They extend the emergence of the concept area of 'assessment as learning' within the Assessment is for Learning Programme. The teachers in the project came to value this metacognitive ability as an important part of assessment in writing. This provides further weight for Ross's

suggestion that retrospective contemplative reflection on product and process can be seen as a learning act in itself. Many of the broader learning purposes suggested in the *Curriculum for Excellence* document could provide a focus for that reflection. The 'new context / same genre' lessons trialled by teachers in the latter cycles, which complemented the more highly scaffolded coaching lessons, could be used for this self evaluation purpose. These lessons would also meet Ellis' recommendation (Ellis, 2002) for more independent writing opportunities that promote the development of writer's 'voice'. They would also allow pupils more freedom to construct mixed genre texts that reflect many of those they come across in the wider world.

This discussion about how teachers can share learning goals with pupils has led to an understanding of developing pupil metacognition in writing in terms of a three layer process. This process is modelled in the diagram below. The first layer promotes the development of a shared metalanguage through the negotiation of success criteria, based on mutual understanding of constructs of quality. This layer develops children's confidence and through achievement of short term goals. The second layer promotes metacognitive reflection on achievement of communicative purpose, through the sharing of learning intentions and builds links between writer and reader. This layer of the process therefore develops a child's sense of self as an author. The third layer develops metacognitive reflection on the wider aims of the child 'capacities' detailed in the *Curriculum for Excellence* (SEED, 2004). This model for developing pupil metacognition may help inform current debate about how to characterise 'assessment as learning' in the domain of writing. It is premised on the acceptance by pupils of the concept of text provisionality and depends for its effectiveness on the teachers' salience skills. Both these ideas are discussed in more depth later in this chapter. It could provide a structure to help teachers tackle personal learning planning with pupils in this curricular area. It builds on the structure of formative assessment principles, strategies and techniques which was derived from the work of Black and Wiliam (1998b, 2002) and reflects the hierarchical cognitive resource that was presented to teachers in the project (Fig. 16). The issue of feedback to pupils within this overall approach is discussed in the next section.

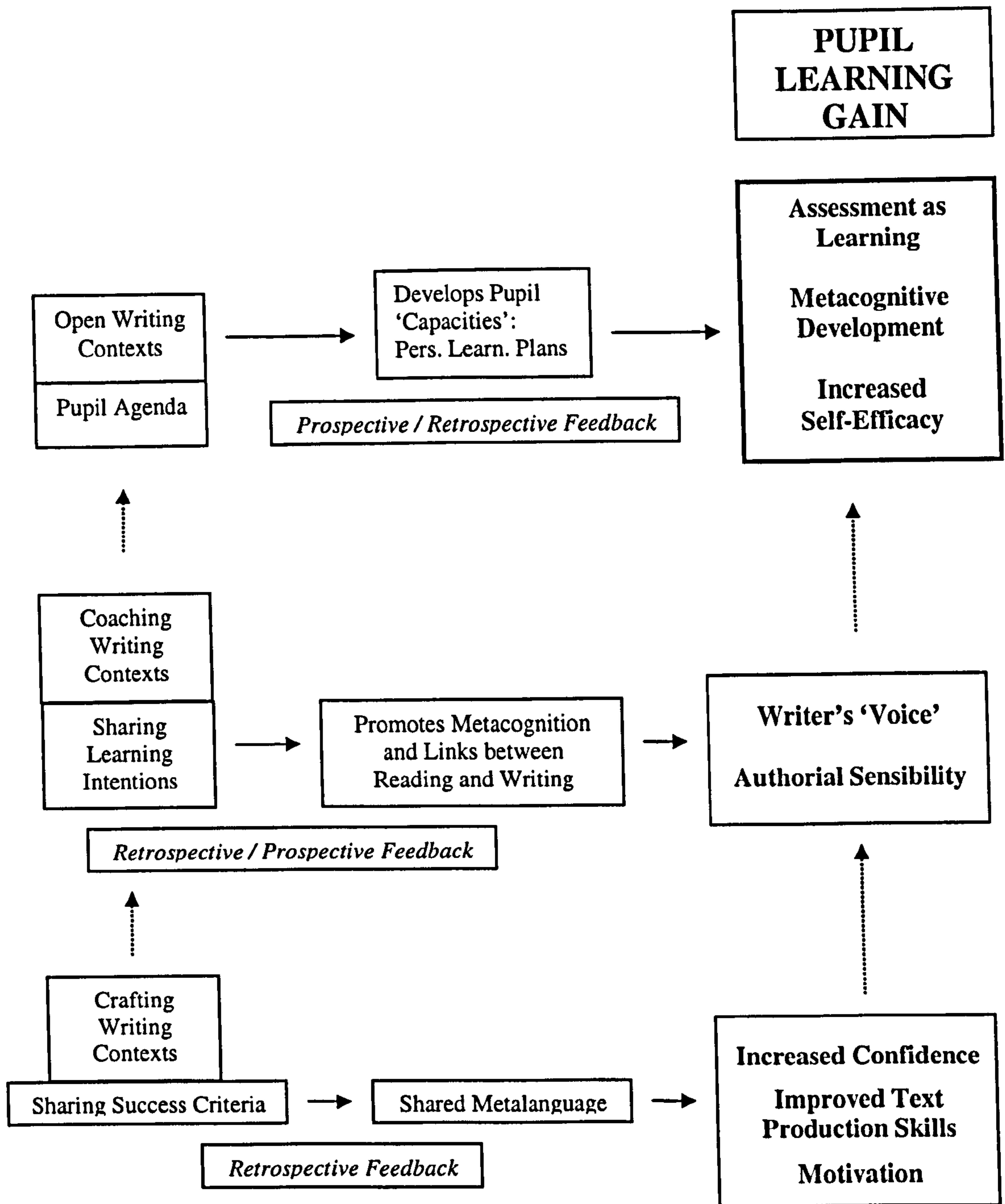


Figure 16. A Model for Embedding Formative Assessment Principles into Practice

6.1.2 Learners learn best when they are given feedback about the quality of their work and what they can do to make it better.

The combination of sharing learning intentions and negotiating success criteria enabled teachers to *elicit* assessment information in accordance with planned formative assessment theory (Cowie and Bell, 1999). However, Cowie and Bell's theory also requires that this information is *acted upon* for learning gains to accrue. This was achieved by the teachers in the study by providing pupils with both written and verbal feedback (Fig. 17).

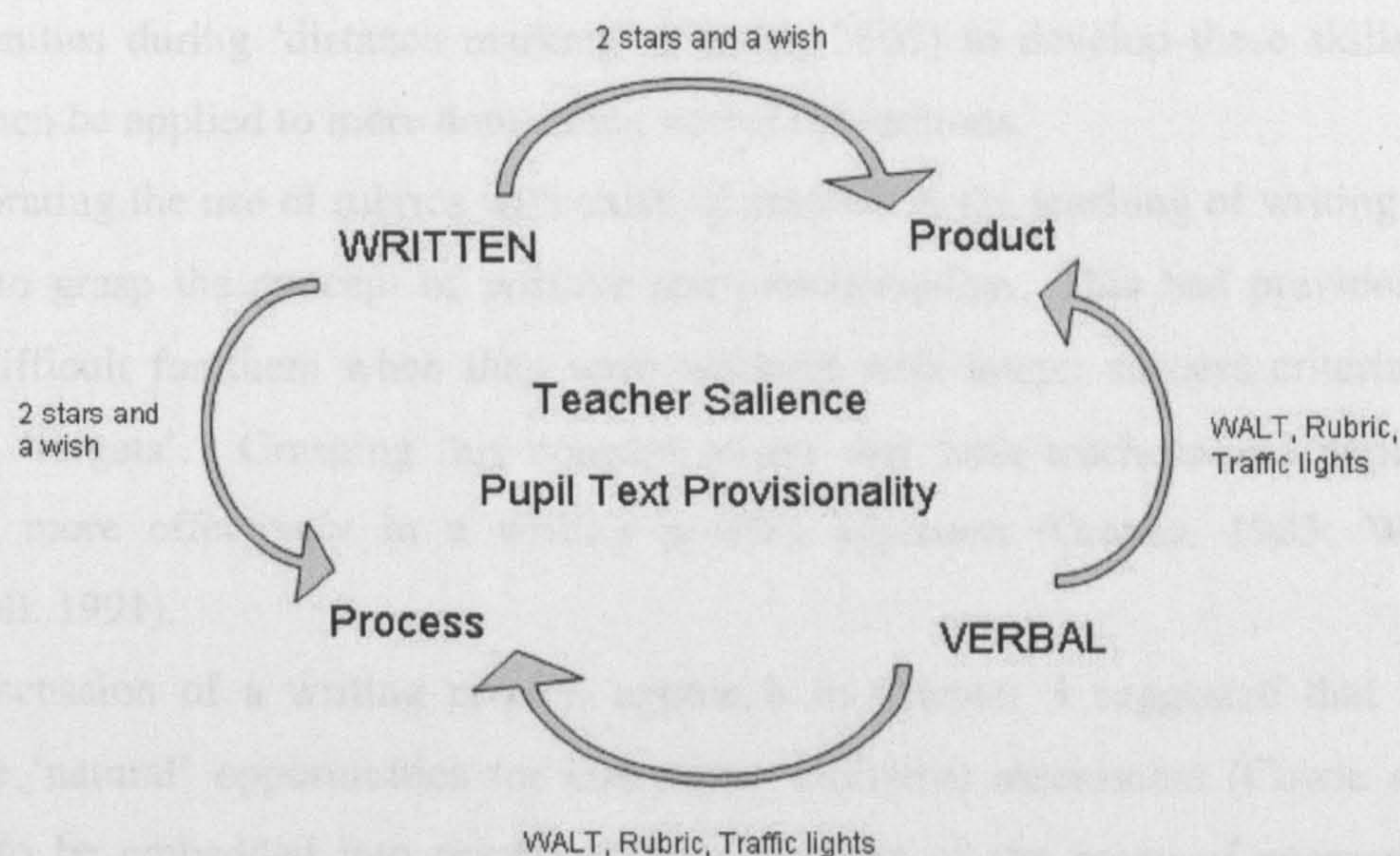


Figure 17. Improving Feedback in Writing

Support structures provided by formative assessment techniques helped teachers improve the quality of the feedback they provided to pupils on both product and process goals, and therefore cope with the demands of both planned and interactive formative assessment.

The written feedback technique of 'two stars and a wish' allowed teachers to comment on criteria that had already been negotiated as important. This technique was also

flexible enough to allow a more open ended response to pupils' work, so that teachers could comment on unexpected achievements. This consolidated the relationship between writer and reader which had been established through an 'extended genre communicative purpose' approach to learning intentions. It also avoided the stifling of creativity that might result from the prescriptive criteria in the rubric. The 'two stars and a wish' technique therefore allowed teachers to embed 'convergent assessment' (Torrance and Pryor, 2001) into practice. If used in the flexible way suggested, it also allowed teachers to move in the direction of a more divergent approach. Torrance and Pryor indicated that successful 'divergent assessment' required high level interactive questioning skills. 'Two stars and a wish' provides teachers with structured opportunities during 'distance marking' (Clarke, 2003) to develop these skills, which could then be applied to more demanding verbal interactions.

Incorporating the use of rubrics with existing practice in the teaching of writing enabled pupils to grasp the concept of *positive text provisionality*. This had previously been more difficult for them when they were working with longer success criteria lists of writing 'targets'. Grasping this concept meant that both teachers and pupils could engage more effectively in a writing process approach (Graves, 1983; Wray and Medwell, 1991).

The discussion of a writing process approach in Chapter 3 suggested that it would provide 'natural' opportunities for interactive formative assessment (Cowie and Bell, 1999) to be embedded into practice. The narrowing of the range of success criteria, through prior negotiation for the rubric, seemed to enhance the effectiveness of these opportunities. This provided one solution to the issue raised in Chapter 1 of increased pedagogical demands on teachers' observational and interactive dialogic skills. As the success criteria were clearly displayed (either individually on pupils' desks or communally on the blackboard), they provided a scaffolding focus for teacher/ pupil interactions. This allowed both teacher and pupil to structure dialogue succinctly around criteria which had previously been agreed as important. Previously, teachers had tended only to supply feedback on punctuation and spelling in this way. These generic success criteria for writing tasks are relatively easy to focus on without the benefit of the

structured support of the rubric. Scaffolding dialogue in this way meant that the nature of verbal feedback to pupils about their texts *during production* was enhanced, in accordance with Cowie and Bell's (1999) description of interactive formative assessment. The enhanced ability of teachers to provide verbal feedback to pupils during text production reinforced for pupils the concept of positive text provisionality and allowed text creation to become a more socially negotiated process, with teachers in the role of writing 'coaches' (Sadler, 1989). Cowie and Bell's teachers found the demands of *acting upon* assessment information more onerous than the demands of *eliciting* and *noticing* that information. The focusing structure of the rubric seemed to help the onerous nature of an interactive response by the teacher.

Furthermore, teachers found that familiarity with these support structures meant that pupils could engage in self and peer assessment activities, particularly if they were further structured by 'traffic lighting' techniques. The improved quality of focused feedback led to greater sense of self efficacy for pupils as writers. The combination of sharing model texts, specifying learning intentions in terms of communicative purpose and negotiating a limited range of success criteria brought further benefits. They allowed teachers to share constructs of quality in writing in ways that were accessible to pupils, as recommended by Sadler (1989). Thus teachers were able to share their 'guild knowledge' (Sadler, 1989) by giving it an external formulation, through the rubric and displayed learning intention.

Sadler (1989) indicates that criteria which *emerge* during learning, rather than those which are pre-specified, allow pupils to pursue the individualised learning pathways which he sees as desirable. The research suggests that experience in the use of the planned and convergent formative assessment strategies and techniques laid a foundation for the development of skills in more interactive, divergent forms of assessment. Sadler accepts that the 'coaching job' of teachers within a domain which accepts individual learning pathways and divergent outcomes is a challenging one. This investigation suggests that the focused support provided by the planned, convergent procedures outlined above were of benefit to both teachers and learners in the scaffolding support they provided.

6.1.3 Learners learn best when they are involved in deciding what needs to be done next

Sharing learning intentions and negotiating success criteria with pupils meant they were exposed to and appropriated the discourse used by teachers to talk *about* both writing process and writing product. This appropriation facilitated dialogue between teachers and pupils. The supportive, focusing structures provided by formative assessment strategies and techniques meant that pupils and teachers had a shared agenda for learning. The quality of dialogue about that agenda was enhanced by the use of an appropriate metalanguage by both teachers and pupils. However, because criteria were pre-specified, assessment conversations tended to be *retrospective*, evaluating the extent to which the pupil had used the success criteria to realise the learning intention. ‘Two stars and a wish’ enabled the discourse to become more *prospective* in nature during written feedback opportunities. The increased pedagogical demands of divergent, interactive formative assessment encounters during text production mitigated against the adoption of a prospective agenda during verbal feedback opportunities. The discussion of teachers’ salience skills in the next section sheds further light on this issue.

6.2 Developing an Awareness of Salience

The findings of the action research project have suggested that the notion of *salience* is an important one in the connection it fosters between individual pupil outcomes on specific tasks and wider educational aims. If teachers are able to judge the salience of elements of individual pupil outcomes in relation to those wider educational aims, then it is suggested that the quality of their feedback to pupils is likely to be enhanced. An understanding of salience in relation to writing aims seemed to an important factor in teachers’ ability to provide quality feedback. Black and Wiliam (1989a) noted that successful teachers were skilled at ‘monitoring understanding’. It is suggested that part of that ‘monitoring’ is having a clear understanding of which aspects of a pupil’s performance are potentially most significant for the development of learning. This in

turn depends upon secure subject knowledge and detailed knowledge of the individual child.

Cowie and Bell's description (1999) of teachers engaged in 'planned formative assessment' acknowledges the value of pedagogical experience in interpreting the evidence elicited from pupils. Their description of teachers engaged in 'interactive formative assessment' as 'mediating' in the learning of individual pupils, indicates that teachers were able to make connections between immediate learning needs and longer term needs of pupils. The research findings suggest that Cowie and Bell's teachers were calling into play 'salience' in order to achieve these connections. Furthermore, Cowie and Bell suggest that the teachers' ability to 'notice' opportunities for interactive formative assessment was also influenced by pedagogical experience. According to Schulman, knowing which are the important aspects of a topic to attend to, when they manifest themselves in pupils' responses, is a mark of effective teaching. The findings of this study suggest that this 'noticing' capacity is linked to the concept of salience. It is suggested that teachers' concept of salience in writing can be enhanced by developing teachers' understandings of the relationship between learning intentions and possible success criteria. These strategies helped clarify for pupils what they were trying to learn and what was expected of them. The findings of the project suggest that the *structures* provided by the trialled formative assessment strategies and techniques had the capacity to *focus* teachers' attention productively on 'significant' aspects of pupils' responses. As teachers gained experience in using these strategies and techniques, their salience skills improved, and they were able to use them more readily to enhance pupil learning. According to Torrance and Pryor (1998), teacher planning that would encourage 'divergent assessment' needs to be flexible and to move away from short term objectives. They indicate that this would enable pupils' 'underlying understanding' to be developed. They see the development of this 'underlying understanding' as essential, if teachers and pupils are to pursue a shared learning agenda. The findings of the project suggests that this 'underlying understanding' can be developed in writing, if teachers pursue a more sophisticated understanding of genre purpose and are able to share this in the form of learning intentions with pupils. Teachers are then able to interactively

evaluate pupil performances in relation to agreed learning intentions by calling salience into play. Negotiated success criteria thereafter can help structure teacher/ pupil interactions.

Based on the work described in this dissertation, it is suggested that when teachers call salience into play for feedback purposes, they selectively access their own subject knowledge base, their knowledge of how children learn and their knowledge of the individual pupil. Furthermore, the findings indicate that Wyatt-Smith's (2004) categories of text centred, child-centred and pedagogy-centred teachers provide a useful framework through which Scottish teachers might evaluate their own teaching and assessment practice if they wish to reflect on their own salience skills. The use teachers made in the study of their 'knowledge files' (Wyatt-Smith, 1999) gleaned from experience of assessing texts using the national testing criteria, suggests they held a text-centred philosophy. However, the adaptations they made to the formative assessment techniques show that they were also influenced by other 'knowledge files'. Those other knowledge files are about knowing which aspects of a subject might cause pupils difficulties and the sorts of analogies that pupils might find helpful (Schulman, 1987). This suggests the teachers were also guided by a pedagogy-weighted subject philosophy. The structures provided by the research design enabled teachers to adopt a more process oriented approach to writing pedagogy and balance the lack of sociolinguistic advice in the writing curricular guidelines. The feedback responses teachers offered to pupils were therefore enhanced in terms of being tailored to individual pupil need. Furthermore, the support structures of the formative assessment techniques used in the project improved the 'efficiency' of teacher/ pupil feedback encounters. It seems likely therefore that adopting a formative assessment approach enabled teachers to create 'knowledge files' linked to a more child-centred subject philosophy. Developing salience skills to allow teachers to selectively access text-centred, pedagogy-centred and child-centred 'knowledge files', as appropriate to individual pupil need, seems a worthwhile aim for teachers.

6.3 Opening the Black Box?

Permeable relationships between Formative and Summative Assessment

When Black and Wiliam used their systems engineering metaphor in 1998 to describe the classroom as a 'black box', they characterised it as a closed unit, with external inputs and measurable outputs. Action research studies in the intervening seven years, such as this project, have enabled greater understanding of the potential role of assessment in the learning triangle of teaching, curriculum and assessment (Murphy, 1999).

As the teachers in the study progressively implemented the formative assessment principles using the strategies and techniques, the initial tensions they voiced between their formative and summative assessment roles became less problematic for them. At the beginning of the project, assessment of learning dominated their understanding of writing assessment. The likely reasons for this were explored in Chapters 2 and 3. This led to anxiety on the part of teachers about breadth and depth of curriculum coverage and perceived tension between assessment of learning and assessment for learning. By the end of the project, teachers involved with summative assessment through the national testing process, indicated that it integrated easily with the approach they were adopting for the teaching of writing, particularly with regard to writer's craft tests. This lessening of tension between teachers' formative and summative assessment roles may have resulted from the accommodation of formative assessment principles with existing practice.

As discussed in Chapter 2, one outcome of the Assessment is for Learning Programme in Scotland has been the emergence of 'assessment as learning' as a new purpose for assessment, to stand alongside 'assessment of learning' and 'assessment for learning'. Although 'assessment as learning' was inadequately characterised at the start of the project, the teachers' experiences may help progress understanding of this assessment purpose. It may also help characterise more fully the impact of the concept of 'assessment as learning' on the relationship between formative and summative assessment purposes. A biological 'membrane' metaphor may be a more helpful way of

describing the increasingly *permeable* relationship that emerged between teachers' formative and summative assessment practices, than the systems engineering metaphor of the classroom as a closed black box (Fig. 18).

In this diagram, 'assessment as learning' is portrayed as a semi- permeable biological membrane, separating teachers' formative and summative assessment practices. The membrane allows some passive diffusion of ideas across its boundary. However, there are also sites of active transfer across the barrier. The formative assessment techniques adopted by teachers in the study represent sites of active transfer across the 'assessment as learning' membrane. Teachers' prior knowledge and experience of using a criterion referenced framework for summative assessment allowed passive diffusion of ideas about assessment of learning, across the membrane, to assessment for learning.

As writing became a more socially negotiated endeavour, and links were fostered between writer and reader, teachers were able to use formative assessment techniques to share constructs of quality with pupils. The shared metalanguage which emerged enabled further metacognitive reflection on the part of pupils. These developments depended on pupils accepting and working with the concept of text provisionality and teachers developing and using salience skills.

‘Opening the Black Box’ Assessment Permeability

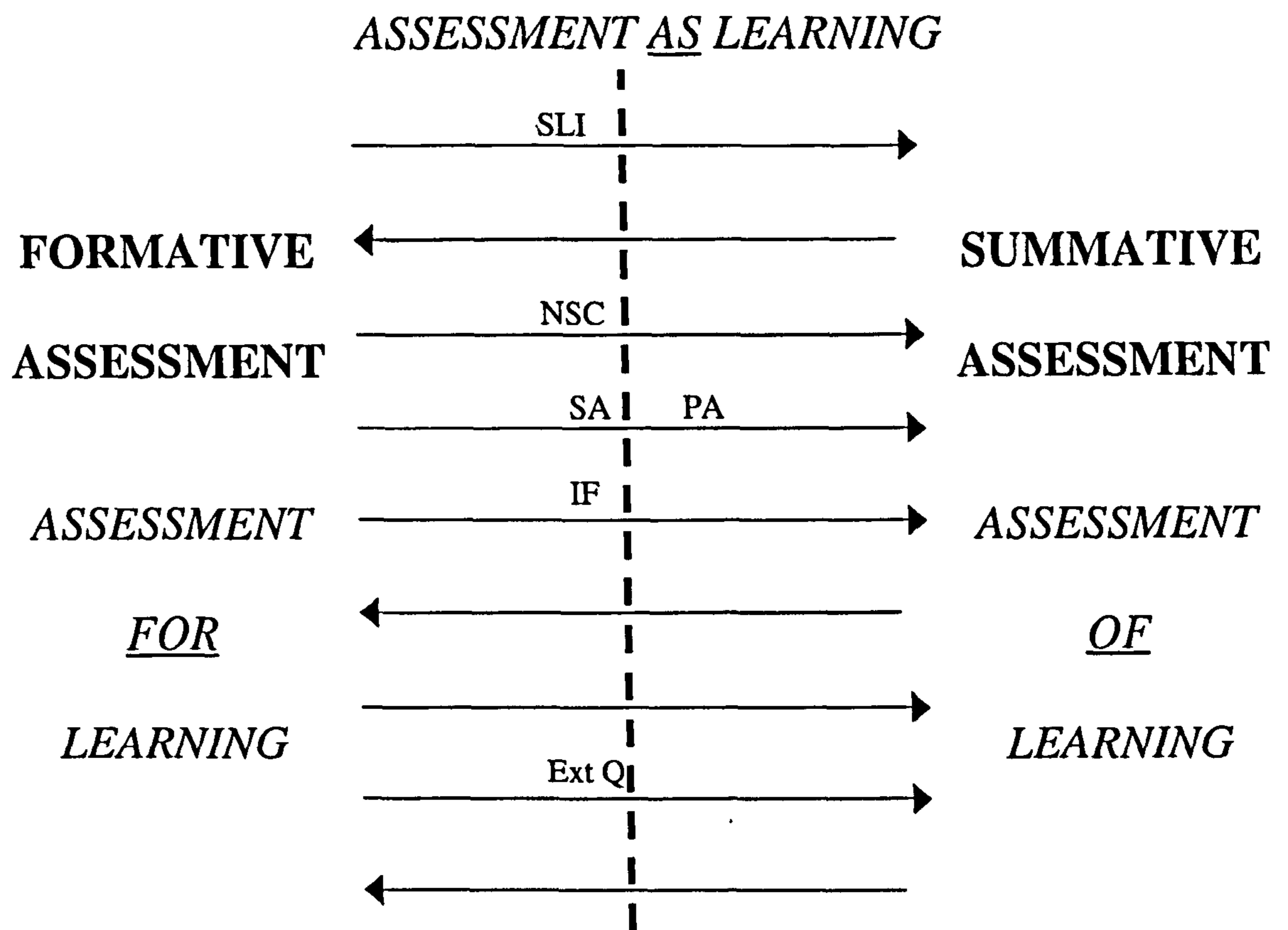


Figure 18. Assessment Permeability

Abbreviations

SLI : sharing learning intentions

NSC: negotiating success criteria

SA/ PA: self assessment/ peer assessment

IF: improved feedback

ExtQ: extended questioning

6.4 Implications for Practice

The following list details a range of ideas that teachers found help them embed formative assessment principles into practice in the writing curriculum.

- Findings from the study suggested that using an extended genre- based approach to *teacher planning*, driven by communicative purpose, led to enhanced clarity for teachers and pupils about learning aims.
- Keeping a record of success criteria selected for inclusion in rubrics helped teachers achieve an overview of aspects covered and helped teachers reconcile breadth with depth of curriculum coverage.
- Using critical reading of model texts to exemplify an author's successful achievement of communicative purpose was one way of teachers mediating a flexible understanding of success criteria with pupils. These develop links between reading and writing and promote a child's sense of self as an author.
- Learning intentions for 'coached' writing lessons' could include the communicative purpose of the author, genre, a named audience, a format, and any fixed context for the writing.
- A *limited* number of criteria (generally 3) which ranged across language use, structure and technical skill ensured breadth and depth of teaching input. Feedback could therefore be productively focused on both the pre-negotiated criteria and any emergent criteria in relation to the learning intention.
- Editing and limited redrafting were portrayed as important to successful text production and assumed an acceptance by pupils of positive text provisionality. Technical skills were addressed through inclusion in rubric criteria, through editing and redrafting, and through 'additional practice' lessons.
- Teachers used formative assessment techniques as support structures during lesson implementation in order to develop their own salience skills. This enabled them to be alert to different ways in which a child might demonstrate success in terms of the learning intention and to adopt increasingly interactive, divergent assessment practices

- In order to address transferability of learning and variety of experience for pupils, opportunities were provided for pupils to write more independently, in new contexts. The ‘coaching’ content of these ‘new context’ lessons was reduced. Teachers planned these lessons according to previously ‘coached’ learning intentions. The new contexts chosen were stimulating and ‘tapped into’ personal and cultural concerns of the children. These new context lessons allowed orchestration and consolidation of learned knowledge and skills.
- These new context lessons could provide opportunities for prospective assessment discussions about the ‘wider’ learning aims of *Curriculum for Excellence*. Teachers could mediate the discussion by an awareness of the salience of these broad curricular aims. These discussions could become part of the personal learning planning process. It is suggested that in this way, pupils would experience the process of mental self regulation, learn how to structure their own learning and reasoning and thus experience assessment as learning.

6.5 Implications for School Writing Policies

- Professional development time devoted to cooperative planning for language and the development of teachers’ critical reading skills would be helpful. Teachers varied in their ability to identify reading model texts and critically analyse them. Resources which performed these functions were supportive.
- The project suggested that *sustained* mentoring was necessary to help teachers integrate formative assessment principles with practice in writing, and that building strategies and techniques gradually into practice was helpful.
- Ways of capturing evidence from assessment conversations between teacher and pupil could be devised and used to contribute to the personal development planning process for pupils.
- Regular collaborative teacher moderation of pupil texts would be a useful staff development activity to develop teachers professional ‘salience’ skills

6.6 Implications for National Policy

Language Curriculum

- The 5-14 Language curricular guidelines could be reconfigured in genre purpose terms, with more explicit links made between reading, writing, talking, listening and watching.
- More emphasis in the guidelines on a writing process approach would be helpful, so that the concept of positive provisionality becomes an integral part of text production for pupils.

Assessment of Writing

- The present system of using a formula driven approach to arrive at a global summative assessment of pupil extended writing texts is seen as mechanistic and lacking in rigour; it also places little importance on a child's ability to engage with writing process or on a child's emerging identity as a writer. It could be adapted to conform to a construct referenced (Wiliam, 1998b) approach, such as that currently used in writer's craft tests. This would reflect confidence in teachers' subject knowledge which was justified in the project. Performance criteria descriptors could therefore be grouped under genre purpose headings and used as basis of global summative judgements for extended writing tasks, as they are at present for shorter writer's craft tests. These global judgements could be supplemented by some acknowledgement of a child's engagement with writing process and skills of metacognitive reflection.

6.7 Further Assessment Considerations

- The formative assessment strategies of sharing learning intentions, negotiating success criteria, developing self and peer assessment, supplying quality feedback to pupils on their learning, and using questioning effectively helped the teachers embed formative assessment principles into practice and thus enabled assessment to become an integral part of the teaching and learning process. A holistic approach to the use of these strategies in writing seems advisable as they impacted in an interrelated way.
- Formative assessment principles and strategies were realised through a menu of formative assessment techniques. This menu of techniques is not assumed to be exhaustive; teachers may devise other techniques better tailored to the particular cognitive and affective needs of their pupils.

6.8.1 Reflections on Methodology and Significance of Study

This was a relatively small scale study which naturally constrains the conclusions that can be drawn from the data. The reliability of data collected was dependent on the schools selected being representative of some of the diversity of educational provision in Scotland. Resources did not allow all the teachers in the project to meet together and this is perceived as a design limitation. The most robust data which emerged from the project related to planned formative assessment in relation to learning intentions and success criteria. These strategies were tackled in the early cycles of the action research process and therefore cumulatively affected the foci of subsequent cycles. Decisions taken at the research design stage therefore impacted on project outcomes. Data analysis was informed by feedback from presentations at two conferences (UKLA 2004, SERA 2004) on preliminary findings. This provides some check on validity of findings.

Developing research informed practice is a major challenge for the teaching profession, particularly in a national context when this has not necessarily been the norm. The mentored action research and the provision of the hierarchical cognitive resource for teachers was an attempt to meet this challenge. The aligning of innovation with existing practice involved a great deal of supported reflection and accommodation on the part of

the teachers in the study. All expressed the view that they needed to consolidate what they had learned over the year, indicating that lengthy time scales in excess of one year are required for this type of adjustment to practice to become embedded. Sensitivity was required to established ways of working and individual school contextual variations. However, the shift in ownership of the project towards the teachers by the final cycle indicated that the mentoring relationship and the autonomy accorded to teachers in relation to discussion agendas was empowering for the teachers involved. The structuring of interviews around teachers' own experiences, through the lesson logs and SWOT analyses helped facilitate this empowerment.

Reflection on the limitations of the study has indicated that further research into the following areas would increase understanding in the field:

- Factors affecting pupils' acceptance of text provisionality
- Factors which influence the development of primary teachers' salience skills
- Benefits of using retrospective and prospective 'assessment conversations' in writing for personal learning planning

Primary school classrooms are busy places where teachers cope with many conflicting demands. At the heart of those classrooms are individual pupils with individual needs, interests and aspirations. Being responsive to those needs is the essence of good teaching, involving as it does, effective communication between all parties. Formative assessment is about enhancing that communication and harnessing it for the benefit of pupil learning.

The techniques and strategies used in the project provide channels for communication and knowledge exchange between and among pupils and teachers. They provide support structures for what otherwise might be fortuitous occurrences. They do not have to be a substitute for spontaneous learning exchanges but can increase the likelihood of them occurring. They help create a nurturing and sustaining environment for pupils to 'grow' and thrive both intellectually and emotionally.

It is very helpful in socially active contexts if all participants have a common understanding about what are the important features of the context to attend to. The formative assessment strategies and techniques adopted helped teachers and pupils

develop that common understanding, without being over-prescriptive, and without excluding spontaneous learning opportunities. The results of the project indicate that for teachers *'knowing what are the important aspects of their interactions with pupils to attend to'* is an important pedagogic skill. It has been suggested in this dissertation that salience skills can be developed by appropriate forward planning; by developing teachers' subject domain knowledge; by making use of the understanding primary teachers have of their pupils; and by using support structures that make the most of the limited opportunities that occur for teacher / pupil dialogue.

The gains in terms of pupil learning seem worth the investment of time and energy involved in adapting practice to accommodate a holistic formative assessment approach. The evidence suggests that pupils become better motivated and more confident and articulate about their learning. In literacy terms, they develop a sense of themselves as writers and acquire an individual authorial voice. In general terms teachers perceived them to be more self aware learners with an increased sense of self efficacy. The pupils seemed willing to take on more responsibility for their own learning, to shoulder a bigger share of the 'workload' of the classroom. The teachers in the study did not see this as a power shift in the classroom; rather they valued the increased agency of pupils in shouldering more of the 'work' of learning.

The interaction of people produces unpredicted and unpredictable behaviour. That is also its greatest attraction- it celebrates agency.
(Cohen *et al.*, 2000 p. 388)

The project outcomes relating to teachers' perceptions about formative and summative assessment tensions signal an encouraging way forward for teachers' assessment practice. If formative and summative assessment can coexist in practice in a mutually beneficial state of balanced equilibrium, then perhaps assessment has a chance of performing a learning function for pupils. Balance is an important concept to bear in mind when considering educational innovations; children's school experiences help form lifelong attitudes to learning. In his poem *The Pitchfork*, Seamus Heaney reflects on the joys of efficient tools that do the job they were designed for, yet reminds us that the human elements of balance and an open disposition help the user put the tools to best effect.

Assessment is a useful tool; it can be sharpened as an educational instrument and targeted for maximum efficiency. However, the 'results' may not be worth having if they are not balanced by a fundamentally child-centred, shared understanding of what matters.

The ways in which we assess pupils reveal what we as a society regard as important; our broad educational goals as well as our more specific ones. They reveal our views of learning and the place of children in the larger world. They expose what we consider to be worthwhile learning, and are therefore worthy of careful scrutiny and an important place in educational policy and practice.

The Pitchfork

*Of all the instruments, the pitchfork was the one
That came near to imagined perfection:
When he tightened his raised hand and aimed with it,
It felt like a javelin, accurate and light.*

*So, whether he played the warrior or the athlete
Or worked in earnest in the chaff and sweat,
He loved its gain of tapering, dark-flecked ash
Grown satiny from its own natural polish*

*Riveted steel, turned timber, burnish, grain,
Smoothness, straightness, roundness, length and sheen.
Sweat-cured, sharpened, balanced, tested, fitted.
The springiness, the clip and dart of it.*

*And then when he thought of the probes that reached the furthest,
He would see the shaft of a pitchfork sailing past
Evenly, imperturbably through space,
Its prongs starlit and absolutely soundless –*

*But it has learned to follow that simple lead
Past its own aim, out to an other side
Where perfection – or nearness to it – is imagined
Not in the aiming but the opening hand.*

Seamus Heaney

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APPENDICES

1. Divergent Assessment: observed teacher strategies (Torrance & Pryor, 2001, pp. 160-161)
2. National Tests in writing: criteria framework and guidance for teachers
3. Sample letters of invitation for research participation (teachers, head teachers, local authorities)
4. Samples of teachers' action research record documents: SWOT analysis, pupil text, rubric, feedback details, pupils self assessment
5. Data analysis coding framework details: definitions of coding categories
6. Data analysis tactics (Miles & Huberman, 1994 pp.10, 12, 92, 308)
7. Sample School Context Charts
8. Analytic Diagrams: researcher mind maps illustrating - interrelationships between formative assessment strategies, theme building
9. Action Research Cycles: Teacher Interview Schedules
10. Sample transcribed head teacher interview
11. Further comments by pupils and staff

Table 9.2 The processes of formative assessment

Description	Possible teacher intentions	Possible positive effect for pupil
A T observes P at work (process)	Gain in understanding of why/how the pupil has approached or achieved task	Enhanced motivation due to T's attention
B T examines work done (product)	Gain in understanding of what P has done	Enhanced motivation due to T's attention
C T asks principled question (seeks to elicit evidence of what P knows, understands or can do); P responds	Insight into P's knowledge, understanding or skills	Rehearsal of knowledge, understanding or skills; articulation of understanding to realize understanding
D T asks for clarification about what has been done, is being done or will be done; P replies	Gain in understanding of what P has done and of P's understanding of the task	Re-articulation of understanding; enhanced self-awareness and skills of summary, reflection, prediction, speculation
E T questions P about how and why specific action has been taken (meta-process and metacognitive questioning); P responds and 'handover'	Gain in understanding of why/how the pupil has approached or achieved task. Promotion of deepened understanding	Articulation of thinking-about-thinking; deepened understanding and 'handover'
F T communicates task criteria (what has to be done in order to complete the task) or negotiates them with P	Communicating goals and success criteria; ensuring work is on target; adjusting pace of work	Understanding of task and principles behind it
G T communicates quality criteria or negotiates them with P	Enhancement of quality of future work; promotion of greater independence	Understanding of notions of quality to aid future self-monitoring
H T critiques a particular aspect of the work or invites P to do so	Enhancement of quality of future work; promotion of greater independence	Articulating and interrogating quality criteria; enhanced understanding of quality issues; practice in self-monitoring
J T supplies information, corrects, or makes a counter-suggestion	Communication of alternative or more acceptable product	Enhancement of knowledge and/or understanding
K T gives and/or discusses evaluative feedback on work done with respect to: task, and/or effort and/or aptitude, ability (possibly with reference to future or past achievement)	Influence on P's attributions and therefore motivation of P for further work	Enhanced motivation and self-worth when realized in a context of empowerment; development of learning goals

Table 9.2 continued

Description	Possible teacher intentions	Possible positive effect for pupil
L T suggests or negotiates with P what to do next	Insight into ways forward for immediate further teaching of individual; refocusing P on curricular goals	Insight into ways to continue working and learning. Deepening of understanding of process/principle
M T suggests or negotiates with P what to do next time	Insight into ways forward for planning of group activities	Deepening of understanding of principle/process
N T assigns mark, grade or summary judgement on the quality of this piece of work or negotiates an agreed one with P	Information for summative assessment; communication of quality criteria; teaching/modelling skills of assessment for self-assessment	Information about; present achievement with respect to longer-term goals
P T rewards or punishes pupil, or demonstrates approval/disapproval	Improvement or maintenance of relationship with pupil; enhancement of motivation	Enhanced motivation

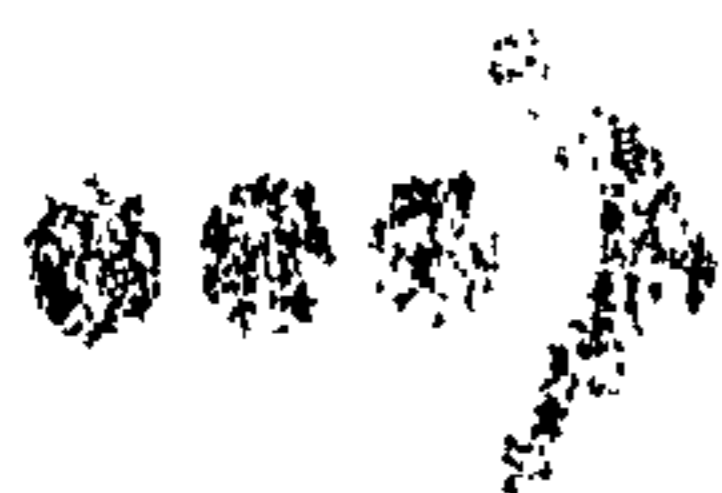
The processes of formative assessment

Table 9.2 shows an analysis of the processes of formative assessment based around a description of what the teacher and pupils actually do. In other words it is a summary of the resources – the pedagogic strategies – that might be drawn upon to carry out formative assessment.

It should be noted that the last two columns of the table are labelled 'possible'. In other words, we have made no attempt to list all the consequences, merely the most obviously desirable ones. The focus here is mainly on cognitive intentions and outcomes, but as we have seen throughout the book, the fact that assessment is accomplished socially through interaction means that one needs to guard against giving too much credibility to a reductionist chart such as this, as an entity standing alone. Following the chart, we also therefore review each category in turn, in the light of the evidence given, and argument developed, throughout the book. The table in itself cannot and should not be used as a substitute for our previous analysis. Rather it might be an *aide-memoire* to alert the reader to different possibilities in the classroom context. Whether any of the categories are likely to produce the desired intentions in any particular context is dependent on the many other psychological and social constituents of that context. However, we would argue that, when read in the light of the issues we have raised throughout the book, a knowledge of the range of possibilities contained in the chart would be potentially useful in the accomplishment of formative assessment.

Observing process (see Table 9.3) was very common across the whole data set. Observation of children at work enables teachers to deliberate on whether

1 general introduction to National Assessments 5-14



1.1 What are National Assessments?

National Assessments are assessment materials designed to be used by teachers in Scottish schools to confirm their judgements about pupils' levels of attainment in English language (reading and writing) and mathematics 5-14. They replace National Tests, which are being discontinued.

National Assessments are designed to confirm the teacher's judgement that a pupil

- has covered the strands and targets at a level
- is consistently producing work at that level in class
- can complete the assessment with the degree of independence required.

National Assessments are based on the attainment targets and levels set out in the relevant National Guidelines 5-14, and are available at each of Levels A to F in reading, writing and mathematics.

1.2 English language

For English language, National Assessments are provided separately for reading and writing. The other two attainment outcomes in English language, listening and talking, are not covered by National Assessments. However, all four outcomes should be assessed and reported by the teacher as part of the school's arrangements for assessment and reporting.

It is not necessary to take reading and writing assessments at the same time. Teachers should decide when it is appropriate to administer National Assessments in each of these areas.

In reading, a National Assessment at any level comprises two assessment units. One of these units will present pupils with a piece of narrative text to read, the other with a piece of information text. Pupils will be asked to answer a number of questions on each text.

A pupil who answers around two-thirds or more of the questions correctly in each unit will confirm that s/he is secure at the level. A pupil who reaches this threshold in one unit but not the other should be given one additional assessment, based on the genre in which the threshold score has not been met. Such re-assessment should only take place once difficulties have been identified and addressed. Reaching the threshold on this re-assessment will confirm that the pupil is secure at the level. (See guidance on using English language assessments for more information.)

In writing, a National Assessment comprises three pieces of writing by the pupil, one piece coming from class work, the other two pieces based on tasks randomly selected from the assessment bank. In more detail the arrangements are as follows:

- An extended piece of writing arising from class work – an imaginative story, for example.
- An extended piece of writing based on a task randomly selected from the assessment bank and of a genre different from the writing done as part of class work.
- A writer's craft task – a shorter, more focused piece of writing – randomly selected from the assessment bank.

At Level F, both extended pieces of writing relate to the strand *Writing about texts*.

The two extended pieces of writing will be assessed using the well-established national criteria for 5-14 writing. The writer's craft task will be assessed using a set of criteria derived from the national criteria.

A pupil who reaches the intended level on all three writing tasks will confirm that s/he is secure at the level.

A pupil who does not reach the expected level on one of the tasks from the assessment bank should be given an additional task of the same genre from the bank. Such re-assessment should only take place once difficulties have been identified and addressed. (See guidance on using English language assessments for more information.)

While special arrangements should be tailored as far as possible to the particular circumstances of the pupil, they should be no more than necessary to allow the pupil to show his/her level of achievement – for example, pupils may not be permitted to have the passage in a reading assessment read to them as these are tests of reading comprehension and not of listening. However, pupils may be read the questions.

If visually impaired pupils need to have assessments with enlarged text or on coloured paper, etc, then schools should make arrangements to prepare copies themselves. Schools are free to adapt the appearance of an assessment to suit the individual needs of pupils with visual impairments.

Pupils with English as an additional language should attempt the reading tests only when their progress suggests that they have attained the targets for Level A and beyond in the normal way, independent of any special support. They should attempt mathematics assessments as they attain the targets at a particular level, and should be given the same language support as they would receive under normal classroom conditions.

1.7 Pupils who are absent

Pupils who are absent when National Assessments are being taken should be given the opportunity to take them at a later date.

1.8 Marking National Assessments

The class teacher will be the person who normally marks the assessments completed by his/her pupils. Marking schemes will be provided with the assessments. To show that they are secure at the level pupils will need to:

- In reading, answer correctly two-thirds or more of the questions in each unit.
- In writing, satisfy the criteria for all three pieces of writing.
- In mathematics, answer correctly two-thirds or more of the questions in each unit.

In reading and mathematics, the following guidance should be followed.

- Pupils who answer two-thirds or more of the questions correctly in each unit.

Such pupils have clearly demonstrated that they are secure at the level.

- Pupils who answer around two-thirds of the questions correctly in each unit.

It is possible that a pupil may be one or even two marks short of the threshold for one of the units. If the teacher has sound evidence from classwork that the pupil has been working consistently at the level then this score can be taken as confirmation that the pupil is secure at the level. If the evidence from classwork is not entirely sound, the teacher may decide to re-assess the pupil (see below). If a pupil is one or two marks short of the threshold in both units then the teacher will probably want to use an additional unit even if there is sound evidence from classwork that the pupil has been working consistently at the level. See below for use of additional units.

- Pupils who do not meet the minimum requirement set out above

Such pupils are not working confidently and consistently at the level. Some may require only a little more time and support to be considered secure at the level. However, those who answered fewer than half the questions correctly will require more teaching and development of their skills before they attempt another National Assessment.

	A	B	C	D	E	F
Total marks	21	24	24	27	30	30
Threshold score	14	16	16	18	20	20

However, the threshold score should not be applied mechanistically (see 1.8 above).

2.5 Arrangements for re-assessment

A pupil who does not reach the expected level on one of the units should be re-assessed using an additional unit of the same genre from the bank. Re-assessment should only take place once difficulties have been identified and addressed.

2.6 Examples

Examples of reading assessments are provided in Appendix 1.

Writing

2.7 Writing assessments

National Assessment in Writing at Levels A to E comprises three pieces of writing:

- an extended piece of writing arising from class work – an imaginative story, for example;
- an extended piece of writing based on a task randomly selected from the assessment bank and of a genre different from the writing done as part of class work;
- a writer's craft task – a shorter, more focused piece of writing – randomly selected from the assessment bank.

National Assessment in Writing at Level F comprises two pieces of extended writing related to the strand Writing about Texts and a shorter writer's craft task.

2.8 Extended writing at Levels A-E

For both pieces of extended writing, introduce the task in a manner which will stimulate interest and activate prior knowledge. Ensure that the pupils are given the appropriate support for the Level (see *Levels of support* below).

- Make sure that pupils understand the audience and purpose of their piece of writing and that they are fully aware of the criteria to be used to assess their writing.
- Distribute the task sheets and ask the pupils to write their names and the date on the front cover.
- Direct the pupils to the Planning Page. Pupils may use the Planning Page provided or take responsibility for their own planning. Remind the pupils to make brief notes on the Planning Page. They do not need to write sentences. Remind them that the Planning Page is for their own use, and will not be assessed.
- Allow time at the end of the unit for pupils to check their work. Pupils may use a dictionary, thesaurus and/or word bank to check their spelling.
- Answer questions only on procedure.

There is no set time limit for pupils. It is expected that each piece of writing should be completed within approximately 120 minutes, not necessarily consecutively or on the same day.

2.9 Extended writing at Level F

The pupil should first complete the class-based extended writing task relating to the strand Writing about Texts. The Level F writing package should then be downloaded from the item bank. The package will contain a sheet detailing four extended writing tasks relating to Writing about Texts and one shorter writer's craft task.

Pupils are asked to select one of the extended writing tasks to complete. Pupils may choose the task to which they would prefer to respond. The class/group do not all have to undertake the same task. However, the task chosen must be different from the class-based task.

Pupils may refer to a copy of their chosen text during the assessment, but they may not refer to any written work undertaken as part of the study of the text or for revision purposes.

- Discuss the different purposes of writing about texts and the structure of a written response to a text.
- Discuss the techniques familiar to the pupils with regard to writing about texts, such as note-taking and presenting evidence.
- Ensure pupils have a full knowledge of the appropriate criteria used to assess their writing.
- Ask pupils to choose one of the tasks, advising which one of the four tasks may not be selected.
- Ask pupils to write their names, the date and the title and author of their chosen text at the top of the first page. Ensure subsequent pages can be identified.

Pupils are likely to write between 500 and 600 words. Although there is no set time limit, it is envisaged that the task will be completed within approximately 160 minutes, not necessarily in a single session or on the same day.

2.10 Levels of support

Pupils working at Level A should be given help with the choice of language, content, planning and layout.

Pupils working at Levels B and C should be made aware of suitable choice of language, content, planning and layout.

Pupils working at Levels D, E and F should take responsibility for planning, choice of language, content and layout. Any bullet points provided in planning sheets are for guidance only; pupils may prefer to devise their own plans.

2.11 Marking

The class teacher should usually carry out marking, but other arrangements are at the discretion of the Head Teacher or Principal Teacher. The Criteria for the different writing tasks will be downloaded along with the tasks and guidance for teachers. Pupils must achieve a minimum standard in all three pieces of writing to confirm that a level has been achieved.

2.12 Using the criteria to mark extended writing for Levels A-F

- Read the assessment piece as a whole ensuring that it is appropriate to the demands of the task. Form an initial judgement.
- Using the criteria specific to the particular assessment unit, check the individual statements in the appropriate level column.
- If the writing meets all the criteria, the pupil has achieved the expected level.
- If the writing does not meet all the criterion statements at the expected level, it is still possible to achieve the expected level.
- ✓ Where only one criterion (ie. one bullet point) is not achieved on either side, or even on both sides of the bold line, the writing has achieved the level.
- ✗ If, however, two criterion statements (ie. two bullet points) are not met on any one side of the bold line, the writing has not achieved the level.

- Where a pupil has a specific learning difficulty and an Individualised Educational Programme has been drawn up, the spelling criteria need not apply. A level of achievement should be given with an indication that spelling has not been assessed.

2.13 The Writer's Craft task at Levels A-F

The purpose of this task is to allow pupils to show, in writing, their understanding of the writer's craft at the relevant level. The writer's craft task relates to the strand within the outcome of Reading, *Reading to reflect on the writer's ideas and craft* (National Guidelines, English Language 5-14, pages 16 and 17). These tasks involve pupils in responding to a piece of text through discussion with the teacher, and then continuing the text using the features of the original as a model.

2.14 Administration of the Writer's Craft task

Introduce the task as described below. Ensure that the pupils are given the appropriate support for the level (see *Levels of support* above). Make sure that pupils understand the purpose of their piece of writing and that they are fully aware of the criteria to be used to assess their writing.

- Read aloud the starter text (pupils working at the upper levels may prefer to read the text silently) and ask pupils to identify some of the features particular to the kind of writing eg. horror, science fiction, comedy.
- Through questioning, establish involvement with the text eg. Who are the characters? What is happening? Where is the story taking place?
- Through further questioning appropriate to the level, identify features of the writer's style ie. the choice of language, content, sentence structure, punctuation and tone, used to tell the story.
- Ask the group for a few suggestions as to what might happen next. Give pupils a short time to think alone and / or to share thoughts in pairs / groups. They may make notes if they want to.

- Pupils working at Levels A and B may suggest a few words with which to make a word bank on the board. Do not write sentences.
- Tell them that they are going to write the next part of the story in the same style as the writer. Tell the pupils to pay close attention to how the writer has told the story so far, and remind pupils of the suggestions they made about the style in the earlier discussion.
- Reinforce that they are not being asked to finish the story, or to bring it to any conclusion. This is a short piece of writing.
- Encourage pupils to look at the passage again before they start to write.

2.15 Assessing performance on the Writer's Craft task

Refer to *Criteria for Marking Writer's Craft* document. Read the piece of writing, ideally more than once. A pupil needs to be able to fulfil most of the description for a particular level for the level to be awarded. If there is a problem with spelling or punctuation, for example, a level may still be achieved. If there is more than one weakness, however, it cannot be said that the pupil is confidently working at that level.

2.16 Arrangements for re-assessment

A pupil who does not reach the expected level on one of the tasks should be re-assessed using an additional task of the same genre from the bank. Re-assessment should only take place once difficulties have been identified and addressed.

Pupils who do not meet the minimum requirement in extended writing for Level F may repeat the same task using a different text or choose a different task.

2.17 Examples

Examples of tasks for the assessment of writing are provided in Appendix 2.

CRITERIA FOR MARKING WRITER'S CRAFT TASKS – IMAGINATIVE WRITING

The purpose of this task is to allow pupils to show, in writing, their understanding of the writer's craft at the relevant level. The writer's craft task relates to the strand within the outcome of Reading, *Reading to reflect on the writer's ideas and craft* (*National Guidelines, English Language 5-14, pages 16 and 17*). These tasks involve pupils in responding to a piece of text through discussion with the teacher, and then continuing the text using the features of the original as a model.

How to apply the criteria

Read the piece of writing, ideally more than once. A pupil needs to be able to fulfil most of the description for a particular level to be awarded. If there is a problem with spelling or punctuation, for example, a level may still be achieved. If there is more than one weakness, however, it cannot be said that the pupil is confidently working at that level.

1. Level A

The writing continues the story. Common linking words are used to organise ideas (eg and, then). Commonly used words are spelt accurately and a capital letter and a full stop are used to mark at least one sentence.

2. Level B

The writing continues the characters and events of the original story. Common linking words are used to organise ideas into sentences (eg and, then, but, so, that). An increased range of commonly used words are spelt accurately and punctuation is beginning to support what has been written.

3. Level C

The writing continues the characters, setting and events of the original story. Less commonly used words are spelt with increasing confidence and accuracy. In the main, the punctuation supports what has been written.

4. Level D

The writing continues the characters, setting / scene and events of the original story. The language begins to reflect the style and tone of the author. There is some variety in sentence structure. There is accurate spelling for most of the words needed for the task and most sentences are punctuated accurately.

5. Level E

The writing creates an accurate and convincing impression of the characters, setting / scene, atmosphere, and events. The writer demonstrates good understanding of the style and tone of the original author. There is appropriate variety in sentence structure. There is accurate spelling in the main and accurately constructed, punctuated and linked sentences.

6. Level F

The writing creates an accurate and convincing impression of the characters, setting / scene, atmosphere, and events. The writer makes a sustained and convincing attempt at continuing in the style and tone of the original author. There is appropriate variety in sentence structure. There is accurate spelling in the main and accurately constructed, punctuated and linked sentences.

What are the reading assessments like?

Examples of reading assessments are provided.

- The Cat is an example of a reading task at Level B.
 - The Cat in Word
 - Related marking scheme in Word
 - The Cat in PDF
 - Related marking scheme in PDF
- Julilly is an example of a task at Level D
 - Julilly in Word
 - Related marking scheme in Word
 - Julilly in PDF
 - Related marking scheme in PDF
- Taste of the Highlands is an example of a task at Level E
 - A Taste of the Highlands in Word
 - Related marking scheme in Word
 - A Taste of the Highlands in PDF
 - Related marking scheme in PDF

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What is the scope of the writing assessments?

National Assessment in Writing at Levels A to E comprises three pieces of writing:

- an extended piece of writing arising from class work – an imaginative story, for example
- an extended piece of writing based on a task randomly selected from the assessment bank and of a genre different from the writing done as part of class work
- a writer's craft task – a shorter, more focused piece of writing – randomly selected from the assessment bank.

National Assessment in Writing at Level F comprises two pieces of extended writing related to the strand *Writing about Texts* and a shorter writer's craft task.

How should the extended writing tasks at Levels A-E be used?

For both pieces of extended writing, introduce the task in a manner which will stimulate interest and activate prior knowledge. Ensure that the pupils are given the appropriate support for the Level (see *Levels of Support* below).

- Make sure that pupils understand the audience and purpose of their

piece of writing and that they are fully aware of the criteria to be used to assess their writing.

- Distribute the task sheets and ask the pupils to write their names and the date on the front cover.
- Direct the pupils to the Planning Page. Pupils may use the Planning Page provided or take responsibility for their own planning. Remind the pupils to make brief notes on the Planning Page. They do not need to write sentences. Remind them that the Planning Page is for their own use, and will not be assessed.
- Allow time at the end of the unit for pupils to check their work. Pupils may use a dictionary, thesaurus and/or word bank to check their spelling.
- Answer questions only on procedure.

There is no set time limit for pupils. It is expected that each piece of writing should be completed within approximately 120 minutes, not necessarily consecutively or on the same day.

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How should the extended writing task at Level F be used?

The pupil should first complete the class-based extended writing task relating to the strand *Writing about Texts*. The Level F writing package should then be downloaded from the item bank. The package will contain a sheet detailing four extended writing tasks relating to *Writing about Texts* and one shorter writer's craft task.

Pupils are asked to select one of the extended writing tasks to complete. Pupils may choose the task to which they would prefer to respond. The class/group do not all have to undertake the same task. However, the task chosen must be different from the class-based task.

Pupils may refer to a copy of their chosen text during the assessment, but they may not refer to any written work undertaken as part of the study of the text or for revision purposes.

- Discuss the different purposes of writing about texts and the structure of a written response to a text.
- Discuss the techniques familiar to the pupils with regard to writing about texts, such as note-taking and presenting evidence.
- Ensure pupils have a full knowledge of the appropriate criteria used to assess their writing.

- Ask pupils to choose one of the tasks, advising which one of the four tasks may not be selected.
- Ask pupils to write their names, the date and the title and author of their chosen text at the top of the first page. Ensure subsequent pages can be identified.

Pupils are likely to write between 500 and 600 words. Although there is no set time limit, it is envisaged that the task will be completed within approximately 160 minutes, not necessarily in a single session or on the same day.

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What support can be given to pupils with additional support needs?

Pupils working at Level A should be given help with the choice of language, content, planning and layout.

Pupils working at Levels B and C should be made aware of suitable choice of language, content, planning and layout.

Pupils working at Levels D, E and F should take responsibility for planning, choice of language, content and layout. Any bullet points provided in planning sheets are for guidance only; pupils may prefer to devise their own plans

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How should the extended writing be marked?

The class teacher should usually carry out marking, but other arrangements are at the discretion of the Head Teacher or Principal Teacher. The Criteria for the different writing tasks will be downloaded along with the tasks and guidance for teachers. Pupils must achieve a minimum standard in all three pieces of writing to confirm that a level has been achieved.

Here is some guidance on how to use the criteria to mark extended writing for Levels A-F

- Read the assessment piece as a whole ensuring that it is appropriate to the demands of the task. Form an initial judgement.
- Using the criteria specific to the particular assessment unit, check the individual statements in the appropriate level column.
- If the writing meets all the criteria, the pupil has achieved the expected level.
- If the writing does not meet all the criterion statements at the expected level, it is still possible to achieve the expected level.

- ✓ Where only **one** criterion (ie. one bullet point) is not achieved on either side, or even on both sides of the bold line, the writing **has** achieved the level.
 - * If, however, **two** criterion statements (ie. two bullet points) are not met on any one side of the bold line, the writing **has not** achieved the level.
- Where a pupil has a specific learning difficulty and an Individualised Educational Programme has been drawn up, the spelling criteria need not apply. A level of achievement should be given with an indication that spelling has not been assessed,

A pupil who does not reach the expected level on one of the tasks should be re-assessed using an additional task of the same genre from the bank. Re-assessment should only take place once difficulties have been identified and addressed.

Pupils who do not meet the minimum requirement in extended writing for Level F may repeat the same task using a different text or choose a different task

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Where can I find the criteria for assessing pupils' extended writing?

Both pieces of extended writing are assessed using the same criteria as were used for assessing National Tests. When you download a writing assessment, the writing criteria appropriate to your extended writing task will be generated automatically. If you would like a complete set of the national criteria for assessing writing, please click on the relevant link below.

- [Criteria for Assessing Writing In Word](#)
- [Criteria for Assessing Writing In PDF](#)

What are the extended writing tasks like?

Examples of extended writing assessments are provided.

- [My Favourite Place - An extended writing task at Levels B/C.](#)
 - [My Favourite Place In Word](#)
 - [My Favourite Place In PDF](#)
- [Report on School Grounds - An extended writing task at Levels B/C.](#)
 - [Report on School Grounds In Word](#)
 - [Report on School Grounds in PDF](#)

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What is the writer's craft task?

The purpose of this task is to allow pupils to show in writing their

		Level A	Level B	Level C	Level D	Level E
STRANDS: IMAGINATIVE / PERSONAL (as appropriate)	4-14 SELECTING AND ORGANISATION OF IDEAS (including punctuation and structure)	Write briefly for a simple practical purpose. The language: • conveys at least one or two relevant details. • includes commonly used words spelt accurately.	Write briefly in an appropriate form for a variety of practical purposes. The language: • conveys a central idea or event. • includes an increased range of commonly used words spelt accurately. ... and as appropriate to the task... • includes some elementary topic-specific terminology.	Write in an appropriate form and with adequate vocabulary to communicate key events, facts or ideas. The language: • conveys some sense of linked actions/events. • demonstrates an attempt to adapt style to purpose/audience. • includes less commonly used words spelt with increasing confidence and accuracy. ... and as appropriate to the task... • demonstrates the use of topic-specific terms with some confidence.	Given general headings and some planning prompts the pupil will then be responsible for choice of language, content, planning and layout. Write in a variety of forms to communicate key events, facts, points of view and ideas using appropriate organisation and specialist vocabulary. The language: • conveys an awareness of purpose and audience using some of the conventions of the chosen genre. • demonstrates accurate spelling for most of the words needed for the task. ... and as appropriate to the task... • demonstrates confident use of topic-specific terminology.	Write imaginative pieces in various genres, making some use of appropriate literary conventions. The language: • clearly addresses audience and purpose by using the conventions of the chosen genre confidently. • demonstrates accurate spelling in the main. ... and as appropriate to the task... • demonstrates confident use of appropriate specialist terminology.
	4-14 CHOICE AND USE OF LANGUAGE (including spelling)	The writing: • includes one or two linked details which are at least partially relevant. • begins to demonstrate some use of common linking words (eg and, but). • has capital letters and full stops used correctly in at least one sentence.	The writing: • has several relevant details logically organised. • includes sufficient information to make the main points clear. • uses common linking words appropriately (eg and, but, then, so, that, because). • has capital letters and full stops used correctly in more than one sentence.	The writing: • has ideas organised logically in the main without significant omissions/repetition. • uses linking words. • has many sentences punctuated accurately. ... and as appropriate to the task... • demonstrates an attempt to use paragraphs. • includes a simple conclusion or rounding off.	The writing: • is logically and clearly organised throughout. • demonstrates accurately constructed, punctuated and linked sentences. • includes a suitable title and headings. • demonstrates variety in sentence structure. • ideas are organised in paragraphs/sections throughout. • has a well developed/effective conclusion.	The writing: • is logically and clearly organised throughout, with linking of ideas evident. • demonstrates accurately constructed, punctuated and linked sentences. • includes a suitable title and headings. • demonstrates variety in sentence structure. • ideas are organised in paragraphs/sections throughout. • has a well developed/effective conclusion.
STRANDS: FUNCTIONAL	4-14 SELECTING AND ORGANISATION OF IDEAS (including punctuation and structure)	Write a brief, imaginative story. The language: • conveys some sense of what happens and/or evidence of a simple personal response (eg being hot, cold, bored, pleased, etc). • includes commonly used words spelt accurately.	Write a brief, imaginative story or poem or dialogue, with discernible organisation and using adequate vocabulary. Write briefly and in an appropriate sequence about a personal experience, giving an indication of feelings using adequate vocabulary. The language: • demonstrates a simple but clear sense of who, where, when and what is involved. • includes an increased range of commonly used words spelt accurately. ... and as appropriate to the task... • gives clear evidence of an appropriate simple personal response.	Write a brief, imaginative story, poem or play, using appropriate organisation and vocabulary. Write about a personal experience for a specific purpose and audience, using appropriate organisation and vocabulary. The language: • demonstrates a clear detailed sense of who, where, when and what is involved. • demonstrates an attempt to adjust style to purpose and audience. • includes less commonly used words spelt with increasing confidence and accuracy. ... and as appropriate to the task... • demonstrates reasonably developed evidence of personal involvement, physical or emotional.	Write imaginative pieces in various genres, making some use of appropriate literary conventions. The language: • begins to convey disinterest in its portrayal of setting/scene/events/circumstances/character(s). • holds the reader's interest. • demonstrates accurate spelling in the main. ... and as appropriate to the task... • demonstrates sustained evidence of personal involvement. • demonstrates some evidence of reflecting on experience where relevant. • demonstrates confident use of specialist terminology.	Write about personal experiences in a variety of forms, demonstrating some capacity to reflect on experience and with some grasp of appropriate style. The language: • begins to convey disinterest in its portrayal of setting/scene/events/circumstances/character(s). • holds the reader's interest. • demonstrates accurate spelling in the main. ... and as appropriate to the task... • demonstrates sustained evidence of personal involvement. • demonstrates some evidence of reflecting on experience where relevant. • demonstrates confident use of specialist terminology.
	4-14 CHOICE AND USE OF LANGUAGE (including spelling)	The writing: • gives some idea of a relevant order of events. • begins to demonstrate some use of common linking words (eg and, but). • has capital letters and full stops used correctly in at least one sentence.	The writing: • provides evidence of logical organisation. • uses common linking words appropriately (eg and, but, then, so, that, because). • has capital letters and full stops used correctly in more than one sentence.	The writing: • is sufficiently organised to make the setting, characters and events clear at the appropriate point(s). • has a clear sequence of events/happenings, including simple use of commas/question marks. ... and as appropriate to the task... • is sufficiently organised to create an awareness of a sense of atmosphere and/or a clear personal response to the circumstances.	The writing: • has an appropriate structure and is logically and clearly organised throughout. • has a shape and coherent thread running through it. • includes relevant and consistent supporting details. • has some variety in sentence structure. • has most sentences punctuated accurately. • and as appropriate to the task... • demonstrates some ability in developing a sense of atmosphere and/or a clear personal response to the circumstances. • uses paragraphs correctly for the most part. • has a simple but effective conclusion.	The writing: • has an appropriate structure and is logically and clearly organised throughout. • begins to show some skill in showing the development of feelings/reactions and/or a sense of atmosphere to match developing or changing circumstances. • has a clear coherent shape. • demonstrates variety in sentence structure/types/lengths. • demonstrates accurately constructed, punctuated and linked sentences. • and as appropriate to the task... • includes a turning point or climax. • is organised in paragraphs throughout. • has a well developed/effective conclusion. • indicates speech in the main correctly.

OVERVIEW OF NATIONAL TESTING CRITERIA FRAMEWORK

IMAGINATIVE : IMAGINED PERSONAL RESPONSE TO A GIVEN TOPIC/CONTEXT

THE WHALE'S STORY

	LEVEL C	LEVEL D	LEVEL E	COMMENT
CHOICE AND USE OF LANGUAGE	<ul style="list-style-type: none"> The language successfully describes some particular aspects of setting/scene/circumstances and adopted character and describes some related personal feelings or thoughts. The writer has made one or two obvious attempts to engage the reader by the choice of words and expressions. 	<ul style="list-style-type: none"> The language clearly describes a given or imagined setting/scene/circumstances and adopted characters and the personal feelings or views they provoke. The writer uses appropriate language to engage the reader's emotions. 	<ul style="list-style-type: none"> The language develops the interaction of the given or imagined setting/scene and adopted character and the character's personal views/feelings/reflections. The writer consistently uses appropriate language to engage the reader's emotions. 	<p>The setting is imaginatively created as are the whale's thoughts.</p> <p>The language is skilfully employed to affect the reader.</p>
RELATED TECHNICAL SKILL: SPELLING	<ul style="list-style-type: none"> The writer attempts to spell less familiar words according to known spelling strategies (using a wordbank or dictionary to check spelling if necessary). 	<ul style="list-style-type: none"> Most of the words used are spelled accurately (with access to a wordbank or dictionary to check spelling if necessary). 	<ul style="list-style-type: none"> The writer spells accurately almost all the words used, including more sophisticated and less familiar words (with access to a dictionary or glossary to check words if necessary). 	<p>The writer appears to be a confident speller; the mistakes made are surprising. There is some evidence of weakness in knowledge of the application of spelling rules eg happier.</p>
SELECTION AND ORGANISATION OF IDEAS	<ul style="list-style-type: none"> Details important to the reader's understanding of the writer's feelings or thoughts are not left out or repeated. Some attempt is made to vary the sentence structure. There is evidence of at least one attempt to mark a paragraph break. 	<ul style="list-style-type: none"> The writing has an overall shape and coherence and is 'rounded off' in some suitable way. There is some variety in sentence structure. The writer marks some paragraphs appropriately to separate ideas/events. 	<ul style="list-style-type: none"> The writing has an overall shape and coherence, possibly using a 'turning point' or climax, and is rounded off in some suitable way. The writer uses sentences of different lengths and types. The writer marks paragraphs accurately to separate ideas and events. 	<p>The narrative is simply but effectively organised and rounded off.</p> <p>Sentence structure is varied.</p>
RELATED TECHNICAL SKILL: PUNCTUATION	<ul style="list-style-type: none"> Many sentences are accurately punctuated using commas and question marks where appropriate. 	<ul style="list-style-type: none"> Common punctuation marks are used to punctuate the writing accurately, for the most part. 	<ul style="list-style-type: none"> Punctuation accurately supports the structure and meaning of the writing. 	

Level D. This is a powerfully imagined piece. The writer has a mature approach and uses language effectively and economically.

FFTP1.LJ-03

94117 NT. WRITING CRITERIA GRID - DEMONSTRATING APPLICATION OF PRINCIPLE OF 'SUFFICIENT STRENGTH'

Appendix 3. Sample letters of invitation for research participation (teachers, head teachers, local authorities)



UNIVERSITY OF
STRATHCLYDE

FACULTY OF EDUCATION
Jordanhill Campus

Dear [REDACTED],



You have agreed to take part in doctoral research project which has as its aim, investigating teachers' experience of using formative assessment to enhance pupil learning in writing. There are two other schools from different local authorities also taking part. Using an action research, multiple case study approach, the project will explore the following research questions:

- To what extent can teachers use formative assessment to enhance pupil learning in writing?
- What is the nature of the benefit perceived by pupils of the embedding of formative assessment principles into their experience of the writing curriculum?
- To what degree does the current criteria framework used for assessing children's writing match teachers' perceived demands of the task?

Data collected for the project will include:

- Taped interviews of teachers and promoted staff
- Teachers' written reflective lesson logs
- Children's comments about their learning (produced during class discussion sessions in lesson plenaries as a normal part of class work, noted down and collated by class teacher- no individual children named or identified)
- Current National Testing data for writing (most recent national test in writing passed)
- Samples of writing produced by children for each lesson, selected by class teacher

A PLACE OF USEFUL LEARNING SINCE 1796

PRIMARY EDUCATION DEPARTMENT
76 Southbrae Drive
Glasgow G13 1PP
Tel: 0141-950 3600/3342
Fax: 0141-950 3151
E-mail: a.a.hughes@strath.ac.uk



INVESTOR IN PEOPLE

Anne Hughes, MPhil
Head of Primary Education Department

You will be given opportunities to read and review interview transcriptions as they are produced in order to ascertain that they represent a fair and accurate portrayal of your views. You are free to withdraw from the study at any point. Anonymity and confidentiality will be preserved for the authority and the school.

Although I will not be working directly with the pupils in the classroom, I will introduce myself to the classes, where class teachers wish me to do so.

With the agreement of all members of staff involved, I would like to use the data produced and its subsequent analysis in the following ways:

- for the purposes of the EdD Study and subsequent dissertation
- to inform school and local authority staff of research conclusions
- to inform undergraduate and post graduate teaching
- to inform future CPD materials
- for possible submission and publication in academic journals
- for research conference presentations

I hope to use study to illuminate the relationship between theory and practice in the pedagogy and assessment of writing. A synoptic paper outlining the research aims, design and theoretical background has been scrutinised and approved by the University of Strathclyde.

I would be grateful if you could provide written assent for your participation in the project by signing below and returning this letter to me, so that I can abide by the required research protocols. I include a further copy for your records.

Yours sincerely,



Lesley Reid (lecturer)
Department of Primary Education



UNIVERSITY OF
STRATHCLYDE

FACULTY OF EDUCATION
Jordanhill Campus

Dear _____,

As head teacher of _____ Primary School, you have agreed to the voluntary participation of some members of your staff in a doctoral research project which has as its aim, investigating teachers' experience of using formative assessment to enhance pupil learning in writing. There are two other schools from different local authorities also taking part. Using an action research, multiple case study approach, the project will explore the following research questions:

- To what extent can teachers use formative assessment to enhance pupil learning in writing?
- What is the nature of the benefit perceived by pupils of the embedding of formative assessment principles into their experience of the writing curriculum?
- To what degree does the current criteria framework used for assessing children's writing match teachers' perceived demands of the task?

I began the study by offering a CPD session free of charge to the school, outlining current national developments in assessment, and providing an overview of formative assessment principles. In addition to this I intend visiting the school for research meetings with staff on around six further occasions between now and June 2004. On each occasion, I will lead free of charge, an after school CPD session for the 3 upper school teachers involved in the project, and any other interested staff, on particular formative assessment principles, strategies and techniques. I will also conduct interviews with members of the research team, which includes yourself, to allow them to reflect on their experiences of participation in the project.

A PLACE OF USEFUL LEARNING SINCE 1796

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Tel: 0141-950 3600/3342
Fax: 0141-950 3151
E-mail: a.a.hughes@strath.ac.uk



INVESTOR IN PEOPLE

Anne Hughes, MPhil
Head of Primary Education Department

You will be given opportunities to read and review interview transcriptions as they are produced in order to ascertain that they represent a fair and accurate portrayal of your views. You are free to withdraw from the study at any point. Anonymity and confidentiality will be preserved for the authority and the school.

Although I will not be working directly with the pupils in the classroom, I will introduce myself to the classes, where class teachers wish me to do so.

With the agreement of all members of staff involved, I would like to use the data produced and its subsequent analysis in the following ways:

- for the purposes of the EdD Study and subsequent dissertation
- to inform school and local authority staff of research conclusions
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I hope to use study to illuminate the relationship between theory and practice in the pedagogy and assessment of writing. A synoptic paper outlining the research aims, design and theoretical background has been scrutinised and approved by the University of Strathclyde.

I would be grateful if you could provide written assent for your participation in the project by signing below and returning this letter to me, so that I can abide by the required research protocols. I include a further copy for your records.

Yours sincerely,



Lesley Reid (lecturer)
Department of Primary Education



UNIVERSITY OF
STRATHCLYDE

FACULTY OF EDUCATION
Jordanhill Campus

6th February 2004

Dear [REDACTED]

As you are aware, I am working with teachers in [REDACTED] on a doctoral research project which has as its aim, investigating teachers' experience of using formative assessment to enhance pupil learning in writing. There are two other schools from different local authorities also taking part. Using an action research, multiple case study approach, the project will explore the following research questions:

- To what extent can teachers use formative assessment to enhance pupil learning in writing?
- What is the nature of the benefit perceived by pupils of the embedding of formative assessment principles into their experience of the writing curriculum?
- To what degree does the current criteria framework used for assessing children's writing match teachers' perceived demands of the task?

I began the study by offering a CPD session free of charge to the school, outlining current national developments in assessment, and providing an overview of formative assessment principles. In addition to this I intend visiting the school for research meetings with staff on around six further occasions between now and June 2004. On each occasion, I will lead free of charge, an after school CPD session for the 3 upper school teachers involved in the project, and any other interested staff, on particular formative assessment principles, strategies and techniques. I will also conduct interviews with members of the research team, which includes the head teacher, to allow them to reflect on their experiences of participation in the project.

A PLACE OF USEFUL LEARNING SINCE 1796

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E-mail: a.a.hughes@strath.ac.uk



INVESTOR IN PEOPLE

Anne Hughes, MPhil
Head of Primary Education Department

Data collected will include:

- Taped interviews of teachers and promoted staff
- Teachers' written reflective lesson logs
- Children's comments about their learning (produced during class discussion sessions in lesson plenaries as a normal part of class work, noted down and collated by class teacher- no individual children named or identified)
- Current National Testing data for writing (most recent national test in writing passed)
- Samples of writing produced by 4 children per lesson, selected by class teacher

Teachers and promoted staff will be given opportunities to read and review interview transcriptions as they are produced in order to ascertain that they represent a fair and accurate portrayal of the teachers' views. Teachers are taking part voluntarily and free to withdraw from the study at any point. Anonymity and confidentiality will be preserved for the authority and the school.

Although I will not be working directly with the pupils in the classroom, I have introduced myself to the classes, where class teachers wished me to do so. The children know I am working with their teachers to help the children with their writing. I have conveyed to the children that I am interested in their writing and have heard that they work very hard at writing and are making good progress.

With the agreement of all members of staff involved, I would like to use the data produced and its subsequent analysis in the following ways:

- for the purposes of the EdD Study and subsequent dissertation
- to inform undergraduate and post graduate teaching
- to inform future CPD materials
- for possible submission and publication in academic journals
- for research conference presentations

In this way I hope to use the study to illuminate the relationship between theory and practice in the pedagogy and assessment of writing. A synoptic paper outlining the research aims, design and theoretical background has been scrutinised and approved by the University of Strathclyde. I will naturally share the conclusions of the project with the school and the authority and hope that you will find it interesting and useful. I would be grateful if you could provide written consent for the project to take place, by signing below and returning this letter to me, so that I can abide by the required research protocols. I include a further copy for your records.

Yours sincerely,

Lesley Reid

Lesley Reid (lecturer)
Department of Primary Education

I was in the school
today (12 Feb) and noted
the rubrics being used.

Thank you for your input - the school is getting a lot from
the project.

Appendix 4. Samples of Teachers' Action Research Documents.

FORMATIVE ASSESSMENT LESSON LOG

Date 29th January
School

Teacher

Class

Primary 4

Formative Assessment Principle:-

negotiating success criteria

quality feedback

peer/self assessment

enhanced questioning

STRATEGIES

sharing learning intentions

Formative Assessment Technique

Context

Progress from 'The Witches' Novel to the haunted house.

Learning Intention

For children to complete a ^{scary} story with a middle and end.

SWOT

STRENGTHS

- Clear aim
- Interactive with peer work an assessment
- Children can relate back to the rubric throughout the lesson.

OPPORTUNITIES

- Move across the curriculum.
- Formative way of use during parents night.

WEAKNESSES

- Children afraid to challenge themselves because of failure.
- Timing
- When do we revisit the rubric.

THREATS

- Timing is a huge issue.
- Preparation
- Can the same rubric be use again.

Plenary Pupil Comments

- Why don't we use this rubric again?
- The colours help us get ready to learn.
- The rubric means we know what we are learning.

Your story is set in a haunted house but what can you:



Spiders
~~Witches~~
skeletons

blood



Who is in your story? Me and My friend
Witch.

What is the main event?
meeting a witch.

How does your story end?

We want to get out but we can't.

A Haunted House

It was a blazing hot day and my best friend came round. We played hide and seek. Mollie hid in a bush. I came to find her but she wasn't there. I saw a port hole and I went in. I came to a haunted house.

I saw Mollie and said "Where are we?" She said "I don't no." I said "yet's got and ask in that house." but Mollie said "No because its a haunted house." I said "can we go and have a look please" Mollie said "ok" so we went and had a look.

We knocked on the door it creaked and

opened. Some one came to the door.
It looked like a witch I checked.
I pulled her hair and she had pointed
shoes and gloves. Her eyes changed colour
and she had a bit of blue ink on
her teeth. I said to Mollie "She is
a witch." We both screamed.

We went in side. We saw horridle things.
Skelotons and spiders it was really spooky.
There also was a smell of witches.
A witch came and chased us. She
tried to catch us and turn us in
to mice. We got away. We sneaked out
but we couldn't go home.

We had a good look around but we

Couldn't get home. There was lots of things that looked like a port hole. We tried them all but we still couldn't get home.

I saw a bush it was just like the one back home. We looked inside. There was that very port hole. We jumped inside in a flash we were back home.

I told my mum but she didn't believe me. She said "It's nonsense". We said "It's true we were there for hours. Mum said "you have been away for hours". We said it was a true adventure. And we are going to do it every day of the summer

The end

225

2 STARS AND A WISH FEEDBACK

* Anna, this is a fantastic piece of writing, ^{*}great description and ^{*}good storyline.



Try this:

Everytime someone new speaks give them a new paragraph.

Next steps

PUPIL SELF ASSESSMENT

★ Try and give me all exciting endings



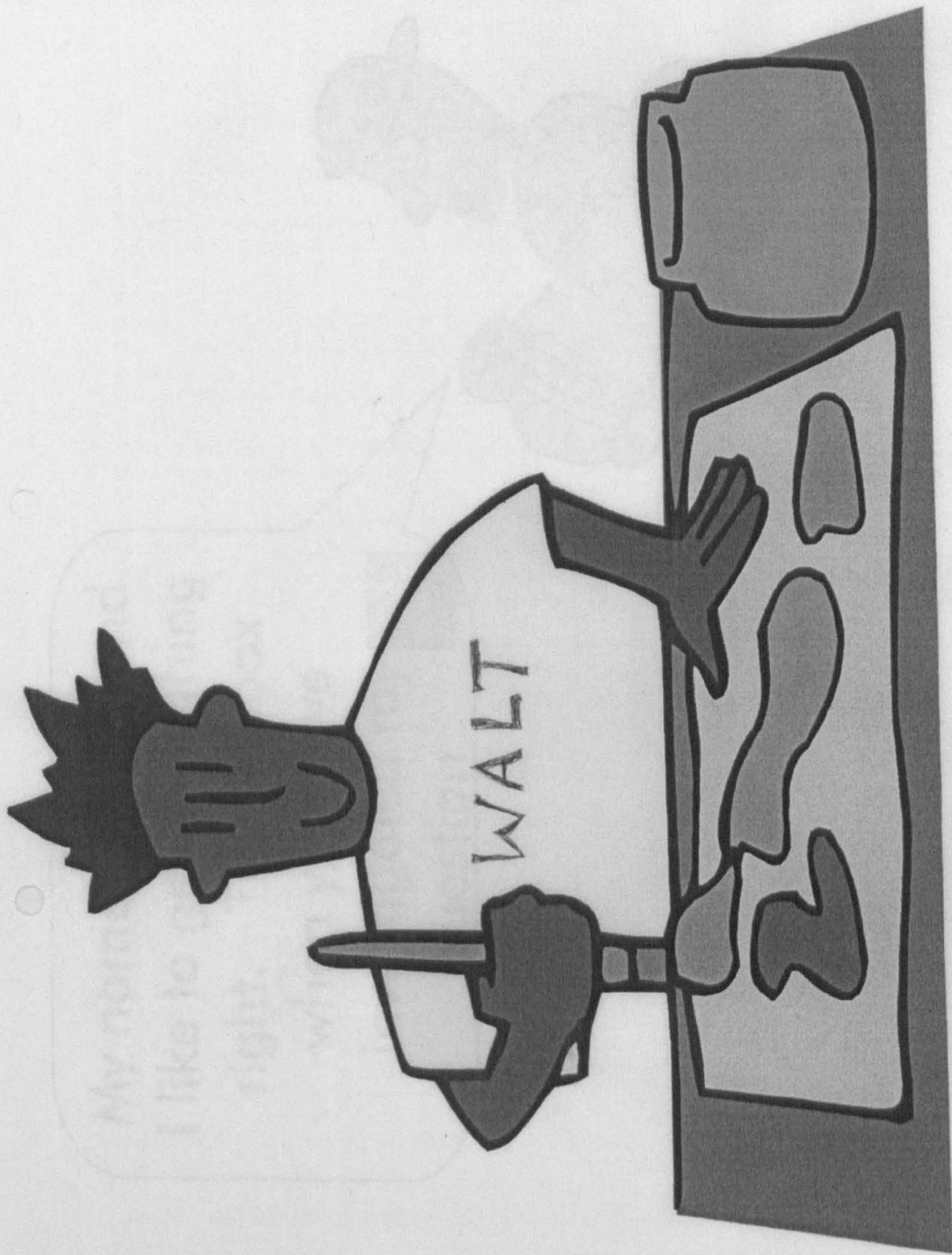
Anna



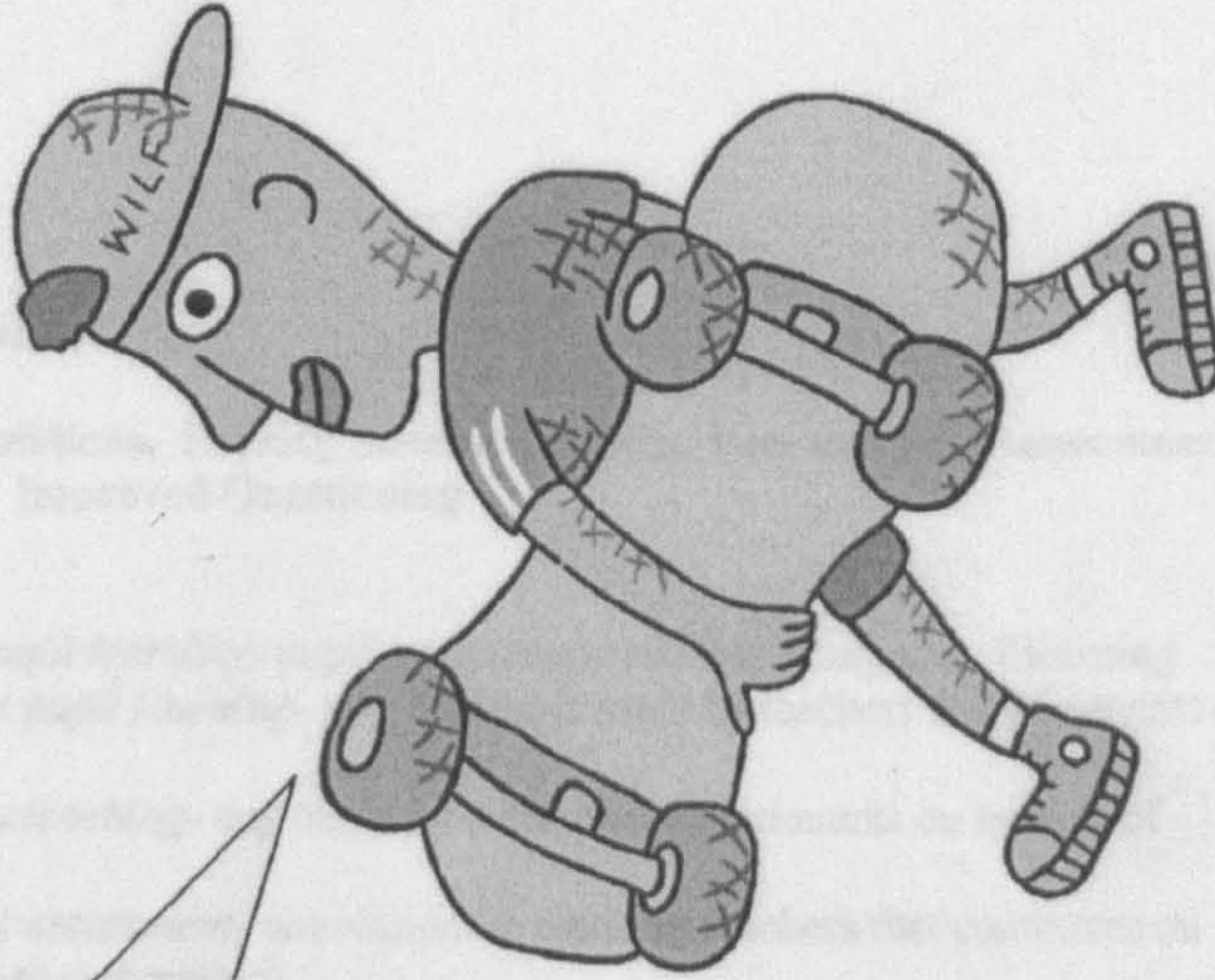
Rubric for Story Writing - A Haunted House

Beginner	Quite Good	Expert
Story has a good beginning. <input type="radio"/>	Story includes at least two adjectives when describing the scene. <input type="radio"/>	Story includes at least four adjectives when describing the scene. <input checked="" type="radio"/>
Story has included a main event. <input type="radio"/>	Story has a main event and ending. <input type="radio"/>	Story has a main event and ending using paragraphs to separate. <input checked="" type="radio"/>
Tries to spell some words correctly. <input type="radio"/>	Tries to spell words and asks an adult to help. <input type="radio"/>	Spells all words correctly using a dictionary to help. <input checked="" type="radio"/>

Name: Anna



My name is WILF and
I like to get everything
right. Tick my box
when you have
investigated my
question



Appendix 5. Data analysis coding framework details: definitions of coding categories

Appendix

Coding Categories Used

Level 1 Codes

**Sharing Learning Intentions, Sharing Success Criteria, Peer and Self Assessment
Improved Feedback, Improved Questioning**

Level 2 Codes

pupils talking about pupil learning- pupil's comments relating to aspects of learning
teachers talking about pupil learning- any statement made by teachers that comments on pupil learning

teachers talking about teaching- any made by teachers that comments on aspects of teaching

teachers talking about assessment- any statement made by teachers that comments on assessment (formative or summative)

Level 3 Codes *pupils talking about pupil* RESEARCH Question 1

cognitive relating technique to cognitive aspects of learning

social relating technique to children's social experience or development

emotional relating technique to children's emotional experience or development, motivation

teachers talking about pupil learning RESEARCH Question 2-

pupil knowledge changes to pupil knowledge base as a result of FA technique

pupil skill developments to pupil skill base as a result of FA technique

pupil attitudes changes to pupil attitudes as a result of FA technique

pupil learning style comments about pupil learning style in relation to FA technique

teachers talking about teaching RESEARCH Question 2

planning related to teachers plans for pupil learning related to technique

implementing related to the implementation of planned learning for FA technique- further branched into

domain knowledge- aspects of teachers subject domain knowledge (writing) that impacted on implementation

craft skill-aspects of teaching craft that impacted on implementation

time constraints- time factors that affected implementation

evaluating related to evaluating the impact on pupils' learning of FA technique- further branched into

assessment issues that impacted on lesson evaluation

less able pupils

more able pupils

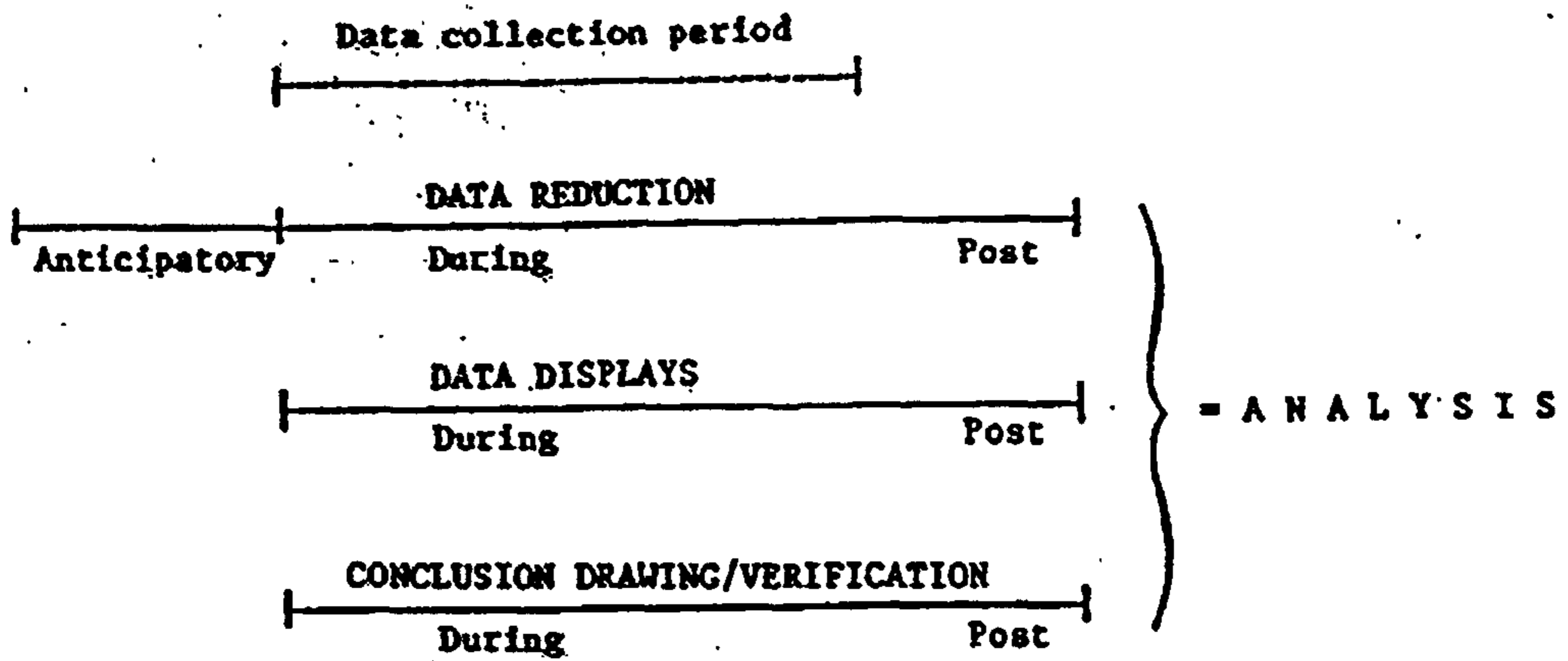
resource learning related to resources for FA technique used to help plan and implement

teachers talking about assessment RESEARCH Question 3

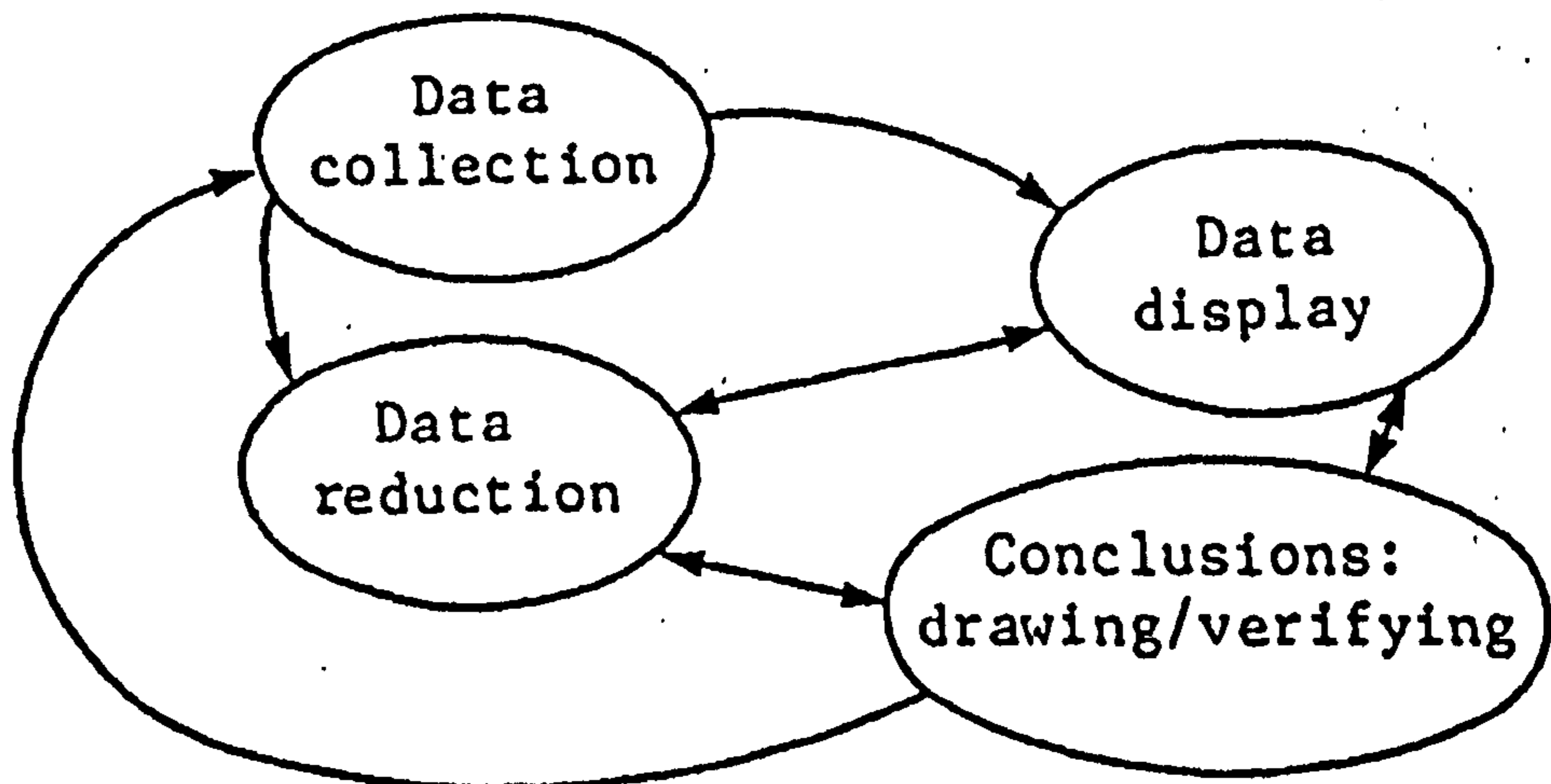
formative/summative assessment schema comments which indicate developments in teachers summative assessment schema, relating formative assessment strategies and principles to summative assessment practice and understandings

These same categories were applied to all 5 cycles, with additions added as required

Figure 1.3
Components of Data Analysis: Flow Model



Components of Data Analysis: Interactive Model



LEVELS

3 Developing and testing propositions to construct an explanatory framework

3b

Delineating the deep structure

Synthesis: integrating the data into one explanatory framework

3a

Testing hypotheses and reducing the bulk of the data for analysis of trends in it

Cross-checking tentative findings
Matrix analysis of major themes in data

2 Repackaging and aggregating the data

Identifying themes and trends in the data overall

Searching for relationships in the data: writing analytical memos
Finding out where the emphases and gaps in the data are

1 Summarizing and packaging the data

1b

Trying out coding categories to find a set that fits

Coding of data
Writing of analytical notes on linkages to various frameworks of interpretation

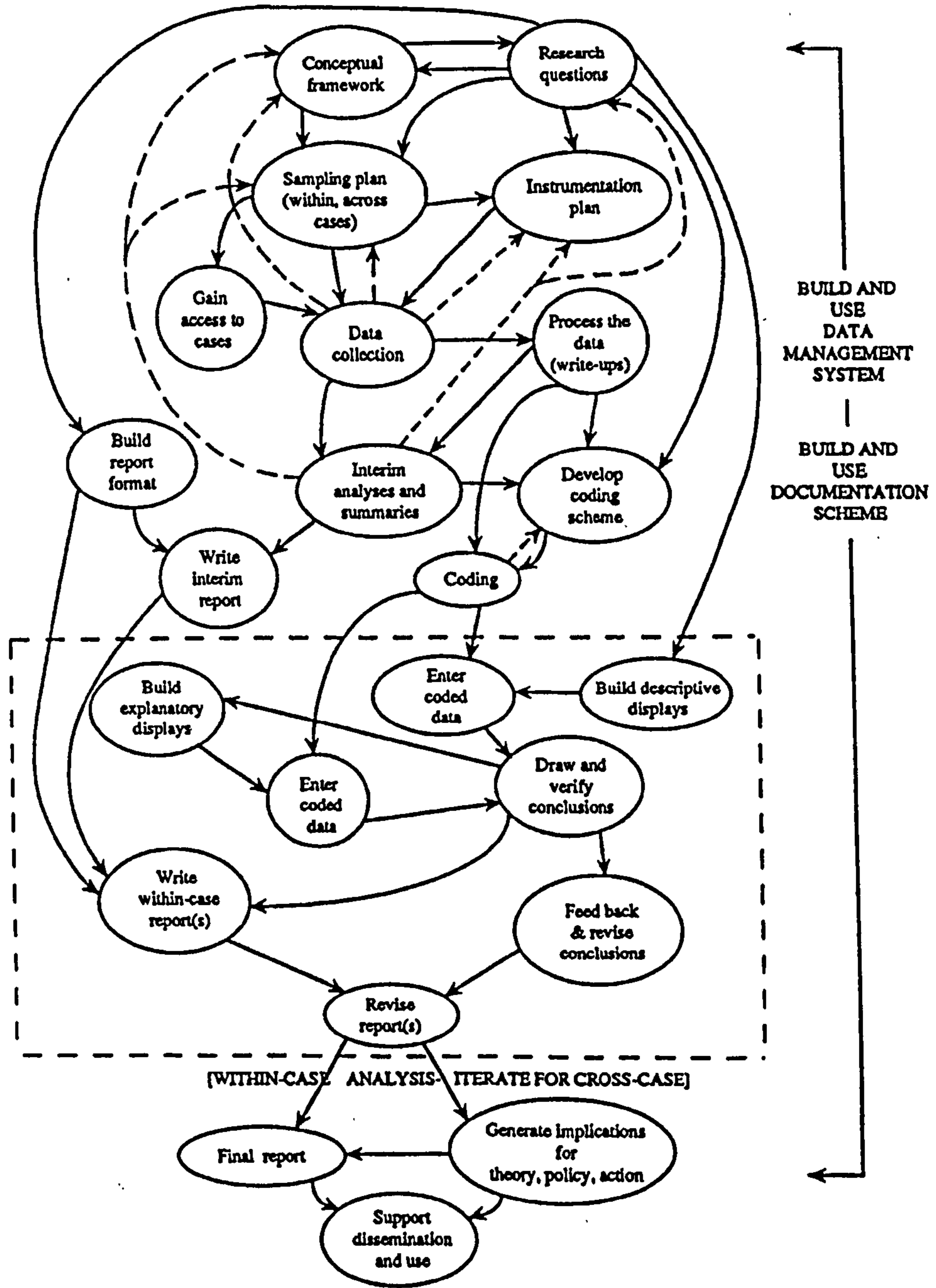
1a

Creating a text to work on

Reconstruction of interview tapes as written notes
Synopsis of individual interviews

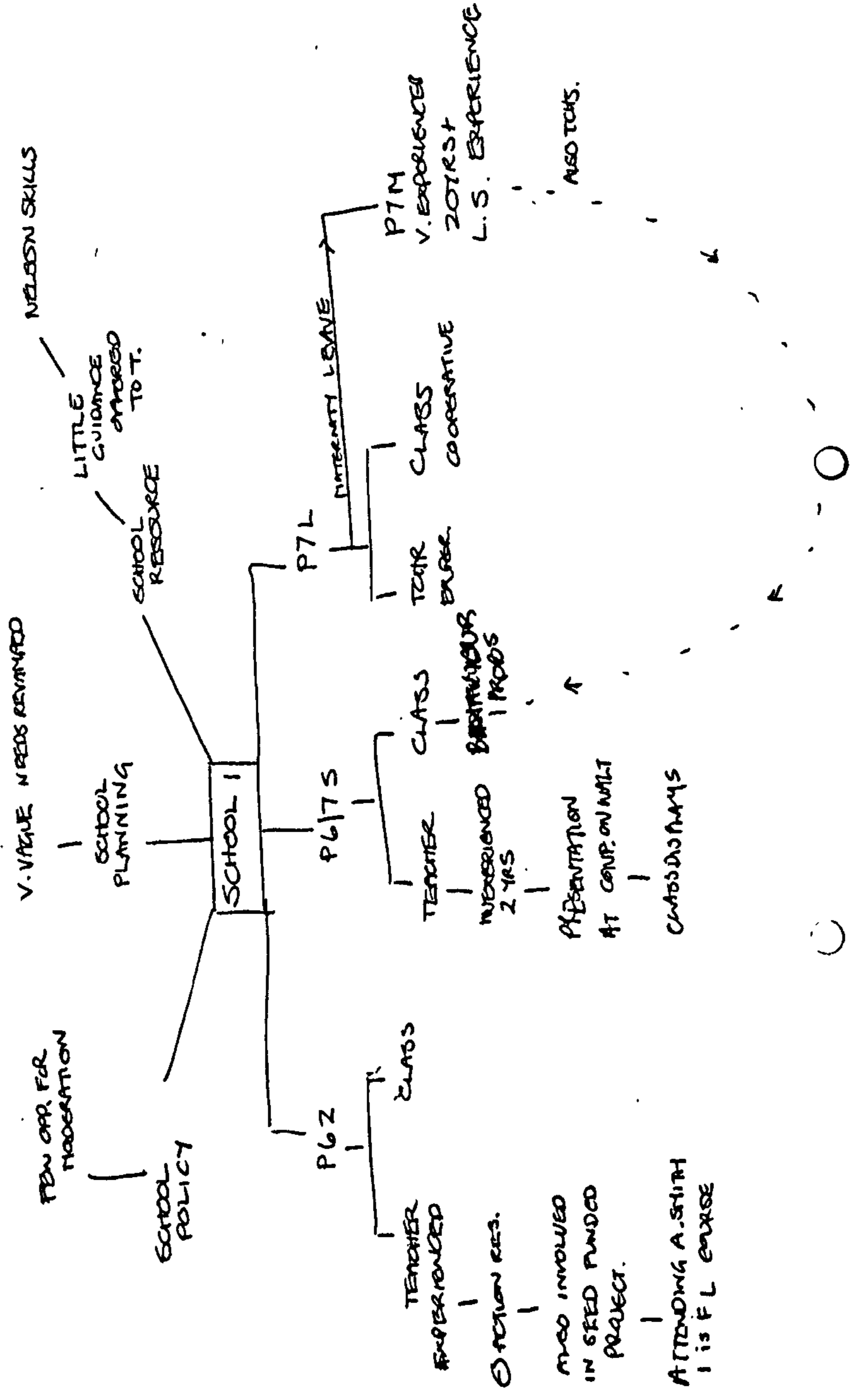


Figure 13.1
Overview of Qualitative Data Analysis Processes

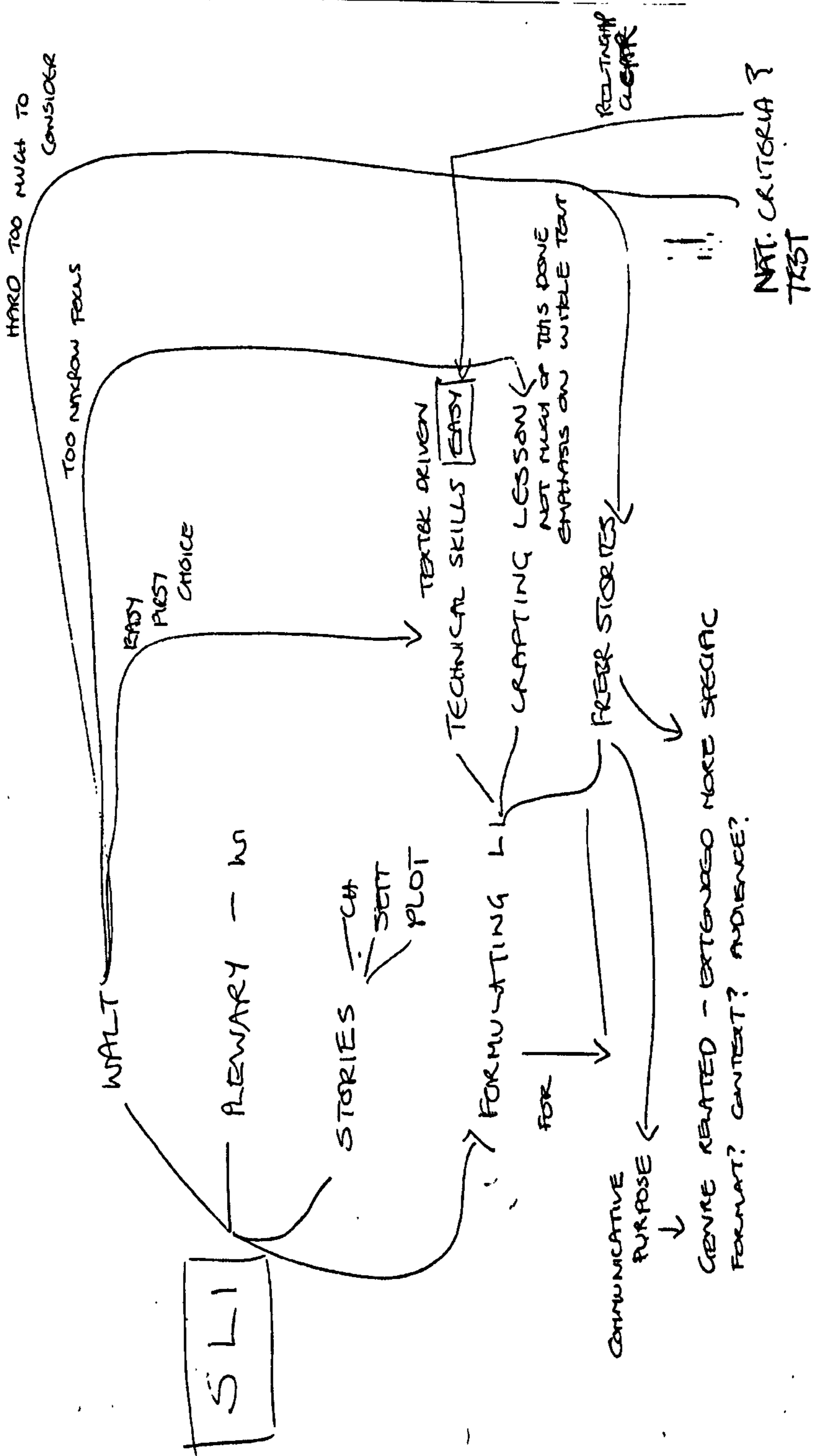


Appendix 7. Sample School Context Chart

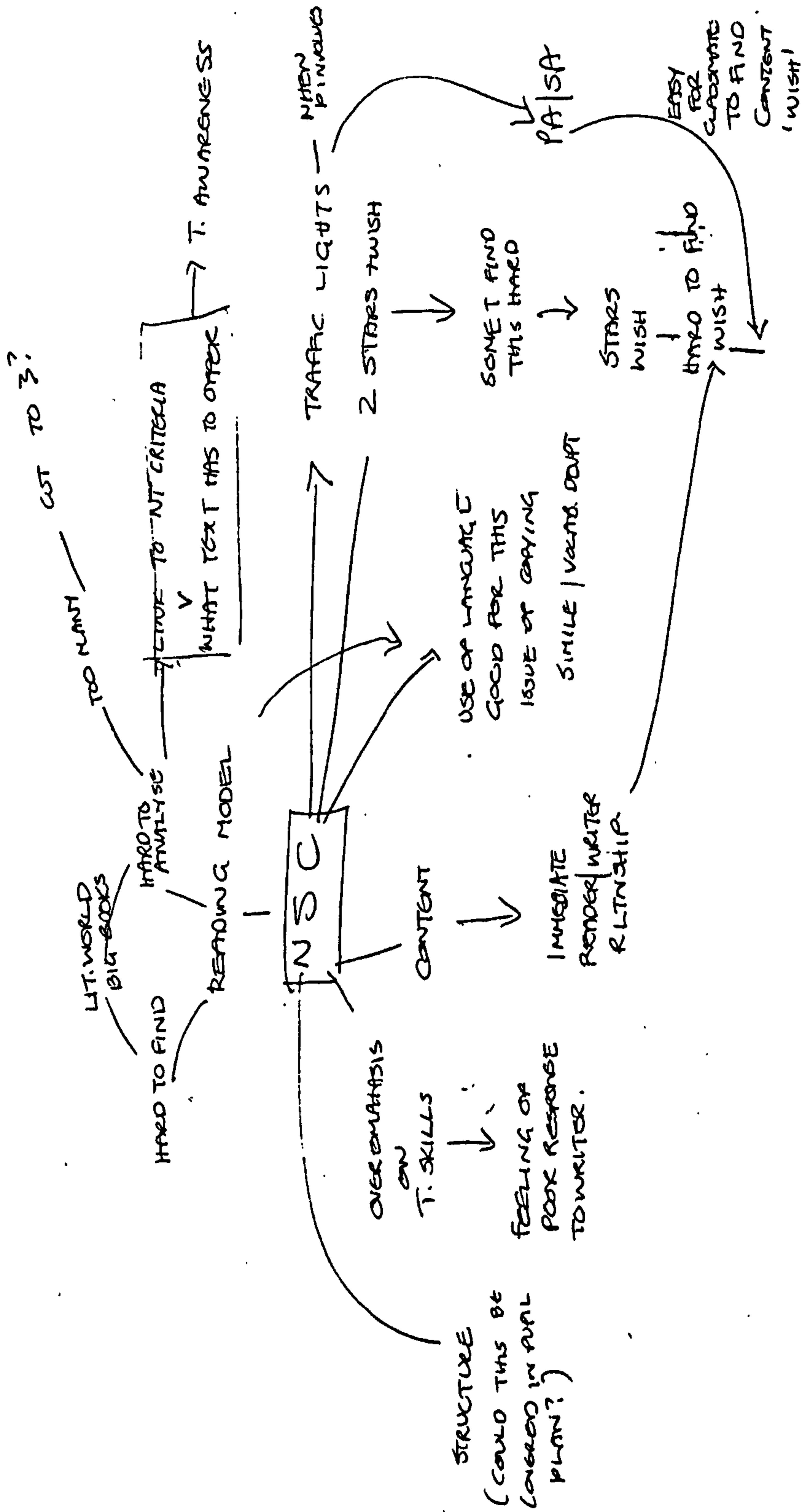
CONTEXT MAP SCHOOL 1



CONCEPT MAP SLI



CONCEPT MAP
NSC



Appendix 9. Action Research Cycles: Teacher Interview Schedules

First Cycle Interviews Schedule: Sharing Learning Intentions November 2003

How have you got on with sharing learning intentions?

Was it difficult to word the learning intention?

Did it help you focus your teaching?

How did you manage with the plenary sessions?

Did reviewing the lesson in small groups help?

What did pupils make of the changes?

Tell me about what you've been teaching.

Which pupils did you choose to track and why?

Let's look at your lesson logs.

Strategy: Negotiating success criteria with pupils

Techniques: Using rubrics and reading models

Think back to the action points we developed from last time.

What progress have you made with them and how do you feel about SLI/ WALT now?

Let's turn now to using reading model texts.

How did you cope with that .

What sources did you use for model texts?

Were you able to decide easily the significant language features of chosen texts that you wanted to share with children?

What do you see as the benefits of using text models?

How did you find negotiating rubrics with children in relation to these model texts?

What were the practical difficulties?

What were the cognitive difficulties?

What were the social difficulties?

What were the emotional difficulties?

What do you see as the benefits of using rubrics?

Does this help you think about assessment of writing more formatively?

Lets look now at specific lessons and try to illustrate some of the things you've said in relation to those specific lessons. (SWOT analyses as prompts)

What action points can we develop for next time?

How do you think we can incorporate peer and self assessment into what we are doing?

How does this relate to next this term's plans for writing?

What other constraints will be operating for you? e.g. testing?

Third Cycle Interviews February 2004

How are you getting on with the rubrics?

How did traffic lighting fit in?

What have the children been writing about this term

How did you cope with action points from last visit?

Have you tried some self assessment using traffic lights?

How has it worked for you?

Lets look at your lesson logs

Review teachers use of...

- **Walt**
- **LI**
- **rubrics**
- **NSC**
- **self assessment**
- **traffic lights**

Interview Schedule 4

What have the children been writing about since my last visit?

Review action points from last visit

Have you tried 2 stars and a wish?

Did you come up with another name for it?

How did it help you supply feedback to pupils?

Did you link it to peer assessment?

Let's look at your lesson logs

Interview Schedule 5

How did you cope with fat and skinny questions?

I want to begin by you describing the 3 children you chose as your examples to track.

Name, age, ability level (before and after) class ranking, interests in and out of school, sociability, emotional, personality, attitude to writing, attitude to work

We decided to apply this idea to your own planning and to try sharing it with pupils.

You are also trying to bring together the other strategies we have been working on into a coherent, workable approach.

Did you introduce the idea of fat and skinny questions to pupils?

What situations did you use them in?

How did they fit with the other things we have been doing?

Where were you with the other strategies and techniques?

Let's have a look at the lessons you have chosen for this cycle?

I want you to reflect back on all the things we've tried this session and consider the pros and cons of all the strategies and techniques.

Sharing learning intentions- WALT

Negotiating success criteria- RUBRICS

Peer and self assessment- TRAFFIC LIGHTS

Improving Feedback- 2 STARS and a WISH

Improving Questioning- FAT and SKINNY QUESTIONS

What benefits have there been for pupil learning?

In terms of :Knowledge? Skills? Attitudes?

Learning styles?

Are the benefits differentiated?- impact on less able particularly, closing the gap?

What impact have these formative assessment strategies and techniques made on your practice?

Planning, Differentiation, Implementing

Links between reading and writing? Resources

What do you see as your own development needs?

What do you think you have learned in the project?

What are your views of participating in action research

Project design?

**Has the approach changed your view of pupil learning in writing?
What do you think now is involved in writing assessment?**

Interview for School Managers

June 2004

- To what extent can teachers use formative assessment to enhance pupil learning in writing?
- What is the nature of the benefit perceived by pupils of the embedding of formative assessment principles into their experience of the writing curriculum?
- To what degree does the current criteria framework used for assessing children's writing match teachers' perceived demands of the task?

School details:

How would you describe your school?

Size, location, catchment, Free School Meals I,

results in writing in upper primary, school results, school targets

Research design

What do you see as the benefits of action research for teachers?

How does it help them learn?

What about this form of mentored action research?

What sort of learning does it enable?

Are there any indications of a learning community developing?

What aspects of the research design were most helpful?

What do you think posed the biggest challenges for staff?

Results

One result that has emerged is the benefit of a more integrated view of Language teaching.

If we were to consider 'roll out', extending the approach school wide,

What implications does this have for school organisation of learning in Language?

Whole school setting?

Differentiation within classes?

Timetabling of reading and writing within classes?

Resourcing, particularly of model texts?

Staff development in the use of model texts?

Teacher planning for language- implications of SLI and SC work?

What implications does this all have for your **assessment policy for writing**?

Pupils are now more involved in the process

Was this considered important before or was the emphasis before on collecting evidence?

How has this affected the formative v summative agenda/ perspective in school?

How does this map on to changes in National Testing?

Benefits for pupils? Enhanced learning? In what ways?

Appendix 10. Sample transcribed head teacher interview

School 2 Head Teacher final interview June 2004
Researcher : R Headteacher S

R

Let's talk first about the project structure as a staff development model?
What was hard for staff in mentored action research process?

S

As they work through it, they enjoyed the challenges
It has been about how do they fit it all together, that feeling of 'are we doing the right thing?' teacher confidence- they are all very competent, able, enthusiastic, committed teachers but they still have that thing of overcoming those initial hurdles about 'here's somebody asking us to do something that's not only slightly alien to what we normally do, takes us in a different direction, makes us think about things in a different way but is also something that will be scrutinised in some way. There is an engagement there in the whole process that makes people.... Apprehensive might be the wrong word but it certainly focuses the mind let's say. There are all of those issues, but I think the fact that there were a number of them, 3 initially working together, they all got on well, were confident in talking to each other. The fact that it wasn't just one person taking it on board, and trying to move forward. From any of that, you could see the development of any sort of good working group, if you like, the way that they initially toiled with it themselves, then started to share out their results, their successes, their fears, their failures, whatever it might be, through the process, Talk to each other, gain confidence, and then work together; that permeated very quickly through the rest of the staff. Through CAT times and meetings, and all the rest, formally but more importantly, really, informally, at the end of the day, getting together in their classes, working through things, talking through things, with the group that you were working directly with, but also with the wider group of teachers as well. Karen became very much involved in everything as well, its been really a useful way of going about things, I would say. This business of looking at language in a more integrated way is quite a big challenge, I think.

Where we have traditionally thought about reading and how we tackle writing being something separate. I think lots of teaching models for writing have reinforced the separation in many ways. When you started your project we were very much down the local authority route, which I'm still convinced has a lot of merit, in what there is in the content, and the kind of things that they were asking the children to do, the way they tackled it, lots of good stuff in there, but, what has become apparent and why during the course of the year we have had a big debate about it, and a structure changing outcome, really. The teachers really felt that what we had as our reading resource, in terms of the Literacy World materials that we had were offering so many opportunities to tackle writing, in the way that they were more and more looking at it, through the work that you were doing with them, the links became much more obvious there. The desire to say, this is what we are doing in reading, so this is what we should be doing in writing,

could tie it all together. Not that the resource drives the whole thing but, just a natural progression there between studying model texts in reading, and then just carrying that straight over into the kind of writing, that they are expected to do anyway, but, it seemed like a natural thing to do, rather than regarding them as separate. We've moved towards that and we have an agreement now that come August, the staff will completely change the way they have been planning their writing, in terms of not using the resource we've been using in the past but changing it to be more about linking reading and writing together.

R

If you were starting with that genre outline that you had at the beginning of the year, could you still use that? Would it just need fine tuning for long term planning?

They have managed to resolve the issue of children's planning and where that comes together with what we have been doing.

WALT – big questions

WILF- the smaller questions that will fill in planning for children.

As they come to do shorter term planning, they will be able to do shorter term planning, that they get from the reading model, to help them plan individual lessons effectively

Time tabling and setting seems to be problematic though.

S

That has changed because of disruption to staffing, the demise of setting arrangements. If this model dictates that we shouldn't do that, the whole point of setting is to make it easier to teach groups if you are doing it in a certain way this model means that it is much better if the class are kept together.

We maybe need to think, if we are thinking in terms of setting by ability, that it could be overcome by ensuring that any reading activity is carried on through with the same group of children. The numbers game may mean that next year's P7 stay together as a group anyway because it is a small class.

R

Teachers are also concerned about the integration of the teaching of skills. They now see more logic in linking the skills programme for the year or level to the genre demands of the teaching 'block'. As they draw success criteria from model texts, they have developed a more integrated view of how to teach technical skills as well.

S

The project has enabled the breaking down of restrictions, those thoughts of well, if we're using literacy world or if we are using the Nelson Skills, its week one so we have to do unit one. They feel able to do technical skills units, wherever they match in now with the type of writing. Those were all issues that were discussed when we came to look at the whole way we 'do' language. It has been so useful. Its given people confidence, its given the staff a much greater confidence in their own approach to language as a whole. And the perception that because of all the opportunities that you have been able to give the staff, Lesley, that it has put them ahead of the game in terms

of where South Lanarkshire are at the moment, and other authorities with role out of formative assessment, which really was a nominated person, it happened to be Jackie here, going for a couple of courses, and coming back, and trying to cascade a little bit. That drip model is still what's perceived for next year. Again, we will have a volunteer because we have to, who will listen to all those messages and bring it back, but, because we have been doing this, Donna and Maureen in particular, are a core group in the school, with the practical expertise that has been built up over the year, able to discuss through all the pitfalls, all the challenges, all the successes, that we might be able to have as we bring everybody else on board. Then as we look at formative assessment in other areas, and try to roll it out through other curricular areas, as time goes on, so it has been really, really useful.

R

What about the impact on your school assessment policy?

S

There still are all those moderation issues. In a way, I think that's good, because if the staff are so involved in it, they are taking the time to agonise over their judgements. Four of them had a meeting here the other night, for a couple of hours, basically, looking at each others' test papers and trying to get a consensus. That shows that it is top of their agenda; they are actively involved in trying to see the whole assessment process through.

I'm really glad that you asked to be involved. It's been very worthwhile.

R

Thank you very much for agreeing to this.

y pupils and staff

Cycle 1 Coded comments.

PRINCIPLE: Learners learn best when they understand clearly what they are trying to learn

STRATEGY: Sharing Learning Intentions

TECHNIQUE: WALT

5.1.2 Cycle 1: Research Question 1

What is the nature of the benefit perceived by pupils of the embedding of formative assessment principles into their experience of the writing curriculum?

Comments Coded

Cognitive: 44

Emotional: 16

Social: 4

WALT helped me to know more describing words to make my sentences better. I was thinking about my setting of shady lane

It's important to set the scene like this because it lets you know if some people are angry or kind.

5.1.1 Cycle 1: Research Question 2

To what extent can teachers use formative assessment to enhance pupil learning in writing?

Comments Coded

Teachers on Pupil Learning

knowledge 18

skills 43

attitudes 62

learning style 20

Children have picked up on the WALT idea. They have certainly enjoyed it. Enjoyed is a word that they have used a lot. They like, something new. I have explained that it is something new for me and that it is something that we are going to try together. They ask for WALT if I don't mention him and they all designed their own. Just having this cartoon character up on the wall- suddenly it's not a boring old writing lesson. We have a pile of ones the children have drawn and we change them every day.

(1L)

I think this has made me get over to the children that we do value their writing. Before, sometimes in writing lessons, as a teacher I felt very downhearted. Previously, when children were doing the writing, I used to go round, as they were working, and feel sometimes, oh they haven't really got that at all. But now, between the planning and the chatting, I do feel much happier with them. (2O)

When children went off focus, I was able to 'bring them back' by referring to the learning intention for the lesson, and they understood that. (3A)

I feel when you are starting off the lesson, what you are saying to the children is clear, but in the plenary discussion afterwards, you sometimes wonder if the children fully understood, so that has kind of made me think.(1Z)

To what extent can teachers use formative assessment to enhance pupil learning in writing?

Comments Coded

Teachers on Teaching

Planning 39 Implementing 34 Evaluating 17 Resource 13

I didn't find it hard to word the learning intentions. If you've still got the Jordanhill mindset of aims and objectives. I've been teaching just 7 years so I still remember all that. I need to relate the learning intention to a bigger picture- I probably did when we spoke about it but didn't write it down. (2J)

I would decide on the learning intentions for the lessons. I thought about what the children could do, what I could expect of them and chose maybe two learning intentions. (2J)

I should have just asked the children to describe the wizard. Although that was my stated learning intention, I was actually asking them to write a whole fairy tale. That took too much out of them. The task should have matched the learning intention better. I felt that too much effort went into the rest of the story.(2D)

I was starting to do this to tell them about the learning intention but it has taken all these years to get round to that way of thinking. I knew it made sense but I didn't actually do it.

(3A)

Cycle 1 Research Question 3

To what degree does the current criteria framework used for assessing children's writing match teachers' perceived demands of the task?

Comments Coded

positive 42 negative 16 summative assessment schema 31

I was happy that the children had achieved the learning intention of using their senses to describe in the poem but I couldn't go on to the next piece of writing until they had fixed the format problem. We did this through an editing session so I had to allow time to do that. It was a whole extra lesson.

I still had a sense of disappointment in my teaching because it wasn't the way it should have been, even though the children had achieved the learning intention.(3A)

*There was some reaction from children who would not often contribute to lesson discussion. It may be because he is getting a more formal opportunity in the plenary to feedback. The structure of the plenary may have given him confidence.(1S)
We send the jotters home. A lot of the parents were even talking about it. I walked to church with a parent and she said, Who is Walt? What is Walt?(3J)*

*Children were a bit worried if they felt they hadn't achieved the target
They were scared that the 'hook' they chose to draw the reader in might not be good enough. They have a fear of failure. (3G)*

I am thinking that the work produced will be too similar, that it won't give enough scope for creativity. I think the more able children are a bit limited by this. Having 2 different levels in the class means 2 different teaching styles I am catering most for the children who need the supportive structure, the middle of the class. I feel the better ones weren't being stretched enough. (1, D)

Appendix 11 Cycle 2 Further Coded Comments

5.2.2 Cycle 2: Research Question 1

What is the nature of the benefit perceived by pupils of the embedding of formative assessment principles into their experience of the writing curriculum?

Comments Coded

Cognitive: 29

Emotional: 2

Social: 1

I needed to use technical words more.

I was able to use onomatopoeia and similes

The rubric reminded me to use alliteration

Made me think more. It helped me use bigger words.

It reminded me of what I was doing.

Looking at 'Goodnight Mr Tom' (reading mode) gave me useful ideas.

I can reread it and try to improve it now.

Rubrics are good because when you have finished your writing, you can check how you did.

Cycle 2: Research Question 2

To what extent can teachers use formative assessment to enhance pupil learning in writing?

Comments Coded

Teachers on Pupil Learning

knowledge 1

skills 24

attitudes 21

learning style 2

I did ask about what WALT had in his pocket -they were enthusiastic they enjoyed that. The direct speech one worked well. It really helped them and I got a lot of positive feedback from them. It just laid things out really clearly- what they should be doing, they could remind themselves, they could mark it. (2L)

Less able children found it too complicated. The rubric was too much for the less able children to be focusing on. They need it less wordy. The reading and underlining was too hard for poorer children. (1J)

They were able to identify what they were aiming for and aim for that, so it stretched the ones that really need stretching. It was a new thing but I feel they coped with it really well. It took quite a bit of time in the first lesson, looking at it and reading it all through... I think because the speech one was the first one, it was the easier to assess

yourself on. It helped a lot to have a nice easy first one. It was a way of training children to use them. They enjoyed the first bit of ticking what they were aiming for, that was the interesting bit. They had it beside them. When I talked to them at the end, one boy (one of the poorest) said, well it just sat there... whereas, one of the more able said, No, I kept looking at mine...just to check that I was doing everything. Another girl said it really gave me something to aim for.... To challenge me...they could see that, so they were checking their work through and at the end, they could check it again, but I do feel that the more able children are able to while they're working, keep checking back. However, the less able ones will do the bit at the start, and then it goes to one side; because they can't think about all of these things at once. However even they did read it at the start and it did help. (2L)

They've got some sort of idea about criteria by using the rubric, then rereading and going over your own work, that's definitely what needs to happen next. From using the rubric I've seen that the children lack skills in self assessment. (2Z)

Yes definitely- there was a high quality of writing came through. A lot of them had thought further about the personality, whereas some children at this stage usually just go on what they can see- the physical features. Children are becoming quicker at creating the rubric. (3J)

Comments Coded

Teachers on Teaching

Planning 12 Implementing 6 Evaluating 5 Resource 2

Learning intentions are a bit easier now. (2L)

I did feel, the learning intention wasn't enough on its own.

The plenary was also much better because it was linked back to the learning intention. My learning intention now seems too narrow, I'm confused myself about how I did it. I kind of did the learning intention alongside the rubric criteria. (1J)

We read them together, I didn't just leave them to it because there is different reading abilities, we read them and discussed them so the more able pupils in the class were giving orally and the less able ones could listen to what they were saying about it and you know they were taking in the points that they were making, so even if they read it and didn't get a lot from it, through the discussion, they did get a lot from it. (2L)

I think it's improved my teaching because it has looked at why are we doing that rather than here's what we are doing It just made it a bit sharper for me. It made me aware that if I was teaching similes. I would get a differentiated outcome. I was aware that would happen before but I hadn't thought before of what that differentiated outcome would be. By having the rubric it's clearer. (2Z)

I know find that I've started to spot things that I could use as reading models. I've started to photocopy things to keep to use in the future. I would never have thought like that before. Before I might have made it up myself.(3J)

I've always thought that talking and listening were part of the writing process, but for a while reading has been separated from writing and you cannot take one out of the equation; it all has to be there. (3G)

I put it on acetate to use with the class, so I could underline in different colours the things I was looking for. The children came up and underlined what colour it was. (3J)

*I didn't feel confident about which language features should go in the rubric. (1J)
Literacy World- the text is there, you don't have to go looking for it- it is annotated so you know exactly what you are looking for*

*I didn't feel confident about which language features should go in the rubric (1J)
It helped me focus both my teaching and my assessment and feedback as they were writing. (1J)*

*The second one was the letter. I found that difficult. I was trying to help them use words that showed their feelings and emotions and I found it extremely difficult.
I wanted that a letter that they would put their heart and soul in- I wanted them to get themselves into the role of the character- but it was so difficult to put that into a learning intention and I found it difficult to tease out of that how you could do that (2L)*

Yes...I think it was also something to do with the fact that it was imaginative writing.. I know I wanted something emotional, with lots of feelings in and lots of ideas ... but I didn't want them all to be the same. They could choose whether they were happy, they could choose whether they were sad at their new home, they could choose what kind of family they were with- a lot of it was to do with the content as well. (2L)

I found the imaginative story rubric the most difficult, for me to decide the night before what I wanted them to extract from it. (3J)

5.2.3 Cycle 2 Research Question 3

To what degree does the current criteria framework used for assessing children's writing match teachers' perceived demands of the task.

Comments Coded

Formative/ summative assessment schema 6

It does help you in assessing the children- where they really are because you do have it split into three and it keeps you focused on what you are looking for when you are marking. Normally if I'm marking, I'm doing all the spelling.. and the punctuation and

at the end you think, well, that's a good story. But this way you are actually looking at the skills that they are using, that they have, breaking it down far more, than you normally would. It is far more time consuming to mark, though. Perhaps it's something that with practice that you get quicker at. I was labouring over them. It's about the same in terms of time as trying to assess a test using the national testing criteria, except that for a national test, you will take longer because that is information for other people as well, and you are going to make sure that you have it exactly right. (2L)

It is hard to get away from national testing criteria, but teachers can use the rubric as well as children to see what they have achieved. It's another way. It does make the marking a bit more straightforward because you are only looking for certain things. At the moment I feel I'm working with both systems. There always every term some children who are ready to go forward for a test. It's always there. You do feel pressure if they are able to do it to test them. (3A)

Appendix 11 Cycle 3 Further Coded Comments

5.3.2 Cycle 3: Research Question 1

What is the nature of the benefit perceived by pupils of the embedding of formative assessment principles into their experience of the writing curriculum?

Cognitive 19 Social 1 Emotional 12

The book showed us what a report should look like.

The letters helped me get ideas

I am going to try to use titles and subtitles, just like the one in the book

But it would be good to see more reports, different ones

The rubric gets in the way. It takes up room on your desk and falls off.

It takes a long time to sort all the bits of the rubric.

The colours help us get ready to learn.

Getting the pens is a good idea.

I like to tick a box when I had done that thing.

I liked swapping jotters and someone else reading what I'd written and helping me.

I just liked ticking boxes to see what I'd done and what I still had to do.

The rubric helped e to write a better story.

It helped me write an excellent letter.

It made me write more.

I think it (self assessment) is good because it lets us see what we need to do to get better.

It was fun as it was different. I enjoyed the lessons because it was easier

The rubric helped me with my writing. I kept looking at it and when I thought I had done something from the rubric and checked it.

It helped me realize what I was doing in my letter.

It makes you think.

It made me think about what I am going to work harder on next time.

Why don't we use the same rubric again?

It helps me know what I have to achieve next time, if not achieved this time.

Rubrics tell us the points we're covering.

5.2.3 Cycle 3: Research Question 2

To what extent can teachers use formative assessment to enhance pupil learning in writing?

Comments Coded

Teachers on Pupil Learning

Knowledge 10 Skills 25 Attitudes 14 Learning style 5

*I did feel often the children knew what they needed to work on next time. (2S)
They were a good judge of each others' work because they had written the rubrics and because they were getting to know the criteria very well. (3A)*

It gave them opportunities to discuss each others work. They were very good at praising each other and being very positive about the work. They would say, "That's a really good start, I like that...I like the way you used those words there.... That was a good climax, but maybe you didn't have a turning point. (3G)

They are spotting where the weaknesses are in their own work, where their strengths are, so its informing their planning for the next time.It's hard enough for teachers to do that, to see where the weaknesses are when they are teaching, and the strengths, an use that to inform their planning. But, if we are getting children to do it, then it is so much better. That's the main benefit of using the rubrics, the children are very aware of their writing, they are aware of how things are put together to make a good story, they are aware o what's good work, of how to improve, they can recognise good writing in others through this sharing of the rubrics. (3G)

I do think it is good to give children some responsibility for their own learning. Sometimes I feel I wear myself out trying to get them motivated but I feel they have to recognise that at the end of the day, they are the ones that have to produce the goods. The more things you put in place to help that, the better. (3A)

I feel children are becoming more independent, less dependent on teacher input They seem to be clearer of what's expected of them and that makes them more independent. I can definitely see a difference with the poorer ones, including the bottom group. Having used the model text, they know what they are working from., and having the discussion and using the rubric as well. I do have to remind them to use the rubric while they are writing. Some used it at the end rather than during writing and I feel that's what we want more. The poorer ones used it at the end of writing but not so much during writing. It is important to include the poorer children in the class discussion. Just now I think I would rather stick with the same way of using them. I want the whole class discussion, the whole class set up (1D)

They found it a bit threatening to let someone else read your work, who might criticise it. That was quite difficult for some, so they were allowed to chose who was going to read their work. Next time, I'll choose someone, but tell them beforehand so that they know who it is. I think they were all kind of scared of letting the best writers read their work.

Generally children thought peer assessment was going to be threatening but once they had done it, they seemed to find it helpful. They were a bit worried at first that they might be found wanting. It was a niggle, rather than a big worry. (3G)

They ticked the rubric then coloured it in with traffic lights afterwards. It worked fine.

It did encourage them to chat to each other about their work. It became more of a peer assessment task, than a self assessment task because they asked each other for advice while they were writing using the rubric as a 'crutch'. (1O)

They did also swap over and do a bit of peer assessment, to see if their neighbour agreed with their judgement. It was quite natural. (1D)

So I've gone over it with them. It can be either way- sometimes they can be a bit generous so I've explained to them why it is not the case or sometimes they have undermarked then I have explained that to them as well. (3A)

To what extent can teachers use formative assessment to enhance pupil learning in writing?

Comments Coded

Teachers on Teaching

Planning 14 Implementing 12 Evaluating 3 Resource 3

Spelling and punctuation are easy to fall back on. I do sometimes feel it is a cop out if that's all I comment on. It usually is that that is something that they have to work on.(3A)

I've done that before, used a story to really teach something like speech marks. I would always have said it would be a good idea to teach punctuation through the children's own writing but I can see now that this is a really good way to do it. I could never just have found those things in the reading model like you did just now.....It does seem a good idea and I will certainly try it. (1O)

I feel that the barrier has come down. I know I have my planning focus, I know that this is where I want the children to go. Sometimes I even have filled in next week's rubric at the same time as I was doing the first one because I thought that's where I want them to go next. (3J)

Deciding on a learning intention with the children took a lot of time and a lot of discussion. I feel that helped. We kept the same rubric that we had used for the first explanation text. I've stuck to this same rubric for all the different explanations they have written. (1O)

*I also find the rubric very good with the children I'm giving feedback to- I call this pair marked, I mark it with the child present. Usually I write a constructive comment on a piece of paper and he takes it away with him and keeps with him
The rubric gives you something to fall back on, while you talking to the child. (3J)*

5.3.3 Cycle 3 Research Question 3

To what degree does the current criteria framework used for assessing children's writing match teachers' perceived demands of the task.

Comments Coded
formative /summative assessment schema 2

Appendix 11 Cycle 4 Further Coded Comments

5.4.1 Cycle 4: Research Question 1

What is the nature of the benefit perceived by pupils of the embedding of formative assessment principles into their experience of the writing curriculum?

Comments Coded

Cognitive: 6

Emotional:2

Social: 3

Getting complements helps you because some people laugh at your ideas and that cuts off your confidence

Two stars and a wish tells you what to do and gives you good thoughts.

The rubric and the stars kind of connect

We know what we've achieved.

I really liked the self and peer assessment. When you see someone else's work, it makes you think you could do better next time

I enjoyed peer assessment- I liked reading what someone else has said about my work.

Peer assessment is difficult- it's hard to be honest, really honest.

I liked it because spelling and handwriting were not being judged.

The 'post- it' notes were a good idea!

He really is coming on coming on in leaps and bounds now this year.. He works on an IEP a lot of the time. A lot of what we do in class, he tackles differently. I mark it differently, probably subconsciously. For him to have a star and a wish and a question the same as all the other children in the class, has been positive for him.

He wrote a fairy story about Beckham's castle. He was really into it. He wrote, The princess found her true love and I asked him, how does someone know when they first meet someone that they've found true love.

I spoke to him about it and said was it the way she looked, the way she spoke, the way she carried herself? We went through all that, then he wrote, 'because she was.'

The benefit was not in what he answered but in the actual teaching from the question.

I feel because of all the teaching dialogue that went into it I feel maybe next time he will pull on and try. When you look at where D was at the beginning of the year he has made huge progress. This piece is close to C. He was pre level A at the start of the year! It's a huge step. He has really taken to it . He has made more progress than I would have expected him to make. D works especially well with WALT. He says , "Walt says I have to do such and such.... Have I done it?"

Perhaps it just took longer for it to start working with the less able children. I think as well, that now they feel part of something that's going on in the classroom.

For the likes of D who is 8 years old to say...I can't do that... I didn't get that today.... Can I take it home to work on? In Primary 4 I feel that is a huge step. He will always need support throughout his school career. For him to be able to say to a teacher, I need help, it's a huge thing. (3J)

5.4.2 To what extent can teachers use formative assessment to enhance pupil learning in writing?

Comments Coded

Teachers on Teaching

planning 6 implementing 18 evaluating 16 resources 3

I decided in advance on my key features that I wanted to elicit from the model text. I knew that was what we were going to talk about and that these would become the statements on the rubric. That was enough for me to think about for lesson planning too. When I did my forward plan for writing, I had never thought about using this model text for a writing model, but now when I read it, I thought it would lend itself to a good piece of writing. (1D)

It's not boring redrafting. By asking questions that direct them back in it makes them look at their story in a different way. They would have ignored a written instruction but because it was a question, it prompted a response. (3G)

I feel sometimes they can do a good piece of work but not achieve anything on the rubric.

We had been doing similes last time. Some of the children thought they were not allowed to use similes this time because they weren't in this week's rubric. If we had a way of displaying learning intentions covered in previous lessons, that would maybe have helped with this. I had to say to them 'think about other pieces of writing that you have done. Use those techniques too if you want to.' (1 O)

5.4.3 Cycle 4 Research Question 3

To what degree does the current criteria framework used for assessing children's writing match teachers' perceived demands of the task.

Comments Coded

formative 0 summative assessment 7 schema

Appendix 11 Cycle 5 Findings

5.5.1 Cycle 5: Research Question 1

What is the nature of the benefit perceived by pupils of the embedding of formative assessment principles into their experience of the writing curriculum?

Comments Coded

Cognitive: 12

Emotional: 1

Social: 6

It helped you to use more descriptive language and to keep your writing tighter controlled.

It helps to stop you rambling and keeps you focused

Wilf's questions are easier than Walt's

I like Walt and Wilf. Re there any more people like them?

5.5.2 Cycle 5: Research Question 2

To what extent can teachers use formative assessment to enhance pupil learning in writing?

Comments Coded

Teachers on Pupil Learning

Knowledge 6

Skills 8

Attitudes 6

Learning style 4

Something I want to develop are ways of helping children feel enthusiastic about writing.

When children are enthusiastic and have a purpose for the writing, they achieve more with it. Things like writing a book for a younger class, and then they can take it down and read it to the younger kids. Having purposes to motivate, (1S)

Teachers on Teaching

Planning 18 Implementing 8 Evaluating 3 Resource 4

Yes, I think now always have a purpose. You need to write the purpose within the learning intention and who it's for, developing an audience for their writing. 1S

Fat questions are about how they would achieve the learning intention, basically changing the learning intention into a question. Then using other skinny questions to elicit how you might achieve the learning intention. 1Z

Sharing learning intentions is something you've always kind of done. The sharing you have probably always done but the learning intention itself, is now much 'tighter', you are much more aware of what exactly you are teaching I kind of feel more confident in that. 3A

All this has made me think, rethink things, look at writing from a different point of view, its not that there is anything really new in this. 3G

I used to find that I knew what I wanted the children to produce, I knew what would be a good bit of writing, I felt that I had the skill to do that, English was my thing at school and it always has been, but I felt up until I got involved in this, I tended to take an awful

long, roundabout tortuous route, and often spent too much time with the talk, to get this result, and the children weren't quite as involved in it. Whereas now, although I still know where I want them to go, and what they need to know to get there, its now getting them to see it as well

This has encouraged me to plan my writing lessons in more detail and I've found it hugely interesting.

It's finding just the thing that you want them to learn.

I think in the past I was trying to get them to learn too many things in the one lesson.1M

Its important that we appreciate how many skills children need to write and give them a chance to learn these skills, give them the tools to be able to do the job 1M.

Cycle 5: Research Question 3

To what degree does the current criteria framework used for assessing children's writing match teachers' perceived demands of the task.

Comments Coded

formative 12 summative assessment 9

At the end of the day, the final piece of writing is your final assessment of how successful the process has been. Part of my criteria of how successful they have been is the final piece of writing. I wouldn't necessarily write down how well they've done on the other things like the planning, but I know myself that I have assessed it all the way through.1S

It has made them talk about their writing. It has made them more aware of their writing. Its made the writing lively and renewed. I've been teaching writing for a long, long time and its opened another door for me. Marking the writing is a pleasure now because now they come out tome and say can you check this for me please, and I say well, what am I looking for? And they will tell me what I'm looking for. 3G

They have stopped believing that the teacher is picking on them. Because they are involved in setting the targets, you are involving them in reading it and editing, you are involving them. It feels more like a working partnership with them. Writing is not a chore, its fun, it's stopped long rambling stories that take up pages and pages but say nothing. 3G