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G9064487

THE ROLE OF SCAFFOLDING  
IN PROVIDING THE KINDS OF METACOGNITION  
THAT MAY HELP MORE ABLE KEY STAGE 3 PUPILS  
DEVELOP THEIR WRITING ABILITIES

DOCTOR OF EDUCATION (EdD)

January 2001

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## Abstract

In a study embracing three phases and using an action research methodology I have examined the role of scaffolding in promoting the kinds of metacognition that may help more able Key Stage 3 pupils develop their writing abilities. In Phase 1 I found that my more able pupils needed structured support to help them develop their metacognition and apply it to writing. In Phase 2, aided by a clearer conception of metacognition as comprising metacognitive knowledge and metacognitive control, I explored how, through a process of scaffolding, I could provide particular scaffolds to help pupils practise self-regulation (which I identified with metacognitive control). I found that pupils valued checklists most out of several scaffolds I provided. In Phase 3 I incorporated a semi-experimental element into my action research, investigating whether the devising of a checklist by pupils would help them improve their story writing. I found that the pupils who made a checklist developed their narratives more than those who did not. Most pupils perceived learning about checklists and/or devising them as helpful. Scaffolding seemed to help my more able pupils develop metacognition and use it to improve their writing.



## Introduction

Most schools in Britain are being challenged by OFSTED inspection reports or government statements to make better provision for their most able students (for example, the government white paper "Excellence in Schools" (DfEE, 1997, p.38): "A modern education service must be capable of stretching the most able"). Government reports have stated that the needs of able pupils are not being met (HMI, 1992). Research into the attitudes of teachers in Britain indicates that they give low priority to the needs of the more able (Illsley, 1989, p.219).

In the school of which I am headteacher staff are striving to respond to an OFSTED report (1996) which indicated that we needed to provide more effectively for the more able. In leading this work I began by reading books and articles written to help schools develop their provision. I did not find many, although several have been published in the last three years, for example Eyre (1997a), Teare (1997), Dean (1998). Koshy and Casey (1997b, p.66) recognised the deficiency:

"There is a noticeable shortage of published books and articles in the United Kingdom on the topic of curriculum provision for higher-ability children."

Most of the material I found seemed to concentrate on issues of identification and types of provision (such as different kinds of grouping or enrichment activities), as Ayles noted (1996, p.118). There was little examination of what seemed to me to be at the heart of all good teaching and learning, namely the interaction between teacher and learner.

A particular lack was research undertaken by teachers themselves into how they taught their able pupils as a first step in identifying how best to provide for them. Deborah Eyre, until recently President of the National Association for Able Children (NACE), has concluded:

"The need to explore more widely ways to meet the needs of able pupils is acute. Research in this field in Britain is very limited and almost non-existent in the field of

pedagogy.” (Eyre, 1997b, p.65)

Writing itself is a relatively under-researched area (Bereiter and Scardamalia, 1987). Torrance (1986) indicates that the writing of very able pupils has been neglected as an area of research compared with reading, science and mathematics.

I began my doctoral work by intending to examine effective teaching for able pupils in English and Maths, but I quickly discovered that I needed to narrow my focus, to my teaching subject English, and then onto an aspect of English, the development of writing. I chose the field of writing development for three reasons: firstly in my own school (Key Stage 2 SATs results and teacher assessments, 1997) and L.E.A. (Suffolk County Council, 1997) able children perform less well in writing than reading, speaking or listening; secondly there is national data from Key Stage 2 Tests that suggests weaknesses in the teaching of writing (T.E.S., 27.2.98, p.1); thirdly I have personal and professional interests in writing, as a writer of poetry and short stories who has reflected on the process of composition and through my involvement with the National Writing Project in which I worked as a workshop organiser in Somerset (1986-7).

In seeking to focus on what is central to the interaction of more able learners and their teachers I found the concept of scaffolding as developed by Bruner (1985) from the work of Vygotsky (and, in particular, his concept of the zone of proximal development) useful in providing a means of examining the teacher’s role. Meichenbaum and Biemiller (1998, p.157) argue that part of Vygotsky’s point in describing the zone of proximal development was that observed levels of performance may obscure differences between students: “Two students may demonstrate the same level of “independent” achievement, but one may be capable of considerably more advanced performance than the other, given instruction and scaffolded assistance (Vygotsky, 1978).” Basically I saw scaffolding as the kind of teaching that helps children “to learn to achieve heights that they cannot scale alone” (Wood, 1988, p.80). I noted that Ayles (1996, p.130) saw scaffolding as “an

appropriate model for differentiated teaching” and “a particularly appropriate framework for more able children in that it includes high conceptual levels, and readily adapts to the inclusion of tasks which anticipate the next National Curriculum Key Stage.” But it was not easy to find examples of scaffolding in accounts of provision for more able pupils. The description by Webb (1994) of how he used a planning sheet to help his more able writers was a rare exception, although he did not use the term ‘scaffolding’.

I came to see that in the concept of scaffolding the teacher is more than a provider of such resources: the teacher is given an active role in which language plays a crucial part, as it is largely through the teacher’s language that he/she “serves the learner as a vicarious form of consciousness” (Bruner, 1985, p24). Askew, Bliss and Macrae (1995), pointing out that many current constructivist approaches do not sufficiently take into account how learning is promoted through interaction, declare: “Scaffolding explicitly acknowledges the role of the teacher in the learning process” (p.209).

In discussing the development of the concept of scaffolding, Mercer points out (1995, p.72): “Vygotsky’s theory ... has room for teachers as well as learners. It draws our attention to the construction of knowledge as a joint achievement”. Mercer, in referring to how Bruner developed the concept and arguing that “the concept must be reinterpreted to fit the classroom” (p.72), having had its origin in the study of parent-child interactions, underlines the key role of language in the use of scaffolding. Following Mercer’s point about the construction of knowledge as a *joint* activity, I began to consider how the learner could contribute to the scaffolding process in an equally active way. I did not wish to see the learner as a passive recipient of help because I viewed knowledge as constructed socially (Vygotsky, 1978, p.88). And I was aware that children who are more able have suffered particularly from a failure on the part of teachers to realise how much they need opportunities to interact with teachers and other pupils, rather than being given worksheets to do on their own which, even

when appropriately matched to the pupils' abilities, rarely offer challenge (DES, 1978, p.54). Research (Bennett et al, 1984; Galton et al, 1980) has shown clearly that in an individualised style of teaching most teacher-pupil interactions are of a low-level procedural kind (and therefore unlikely to meet the needs of the more able).

Metacognition seemed to offer a concept in which the learners took the sort of active role which I was seeking to find for them. Initially I saw metacognition as the kind of thinking about their work that learners need to do to develop their learning further. I had for some time encouraged pupils of all abilities to reflect on their work, especially through asking them questions written on their first drafts; but I had also developed the use of journals with less able children to help them identify their difficulties so that I could teach them more effectively (Darch, 1987). Considering my earlier work on reflection and its origin in the work of the National Writing Project, I was struck with parallels between it and my developing interest in the link between metacognition and scaffolding. Czerniewska (1989, p.153), the former director of the National Writing Project, has noted: "there emerged in practically every local authority, cohesive and self-supporting groups ... Although not articulated in this way first, the model of learning that emerged owed much to the work of researchers such as Vygotsky (1978) and Bruner (1986). It is a model that recognises the social nature of learning and sees interaction as a vital way of 'scaffolding' cognitive processes such that the learner can achieve higher levels of abstraction."

I had been stuck by von Glasersfeld's (1989) powerful argument that knowledge is "the product of reflection" (p.12). Von Glasersfeld distinguished between "associate retrieval of a particular answer" (which he did not seem to count as knowledge) and "operative knowledge", which he saw as knowledge of what to do in order to produce an answer. He believed that competence included the ability to monitor the carrying out of activities. For von Glasersfeld the teacher "must... foster operative awareness" in pupils to help them develop competence.

I began to see that pupils' metacognition might both support a teacher's scaffolding by helping the teacher realise what kind of scaffolding to provide and be supported by it (not least because teachers often have to work hard with pupils to get them to be reflective).

I also began to consider how the scaffolding that a teacher provides is likely to be more effective if pupils are not only open to learning but also open to reflecting about their learning (and, to go one stage further, are willing to enter into a dialogue about how they are learning and how the teacher is assisting the process). The relationship between scaffolding and metacognition in the development of the writing abilities of more able children began to offer a particularly exciting prospect, as I sensed the possible dynamism of their interaction. It seemed, moreover, a dynamism that could apply particularly fruitfully to education for the more able: firstly because the concept of scaffolding is rooted in Vygotsky's theory of the zone of proximal development, a significant educational implication of which is, as Brown and Ferrara (1985, p.301) suggest, "the importance of aiming instruction at the upper bound of a child's zone", so children can be stretched; secondly, because the concept of scaffolding gives the teacher a more active role in helping the more able than has often been taken by teachers in the past: the view that the more able pupils "can look after themselves" and do not need help is still prevalent (I recorded the words I have just quoted in my own school at a staff meeting, Journal, 5.3.98); thirdly, because it seemed that metacognitive skills had been found to be strong in very able students (Romainville, 1994) so that it would be sensible for teachers to harness them or at least investigate how they could contribute to improved learning. When I found early in Phase 1 that my more able pupils did not seem to have well-developed metacognitive abilities, it was pleasing to note Bruner's (1989, p.44) conclusion from his reading of the research on metacognition that it "can be taught successfully as a skill".

The most significant learning of my own career as a teacher occurred when I undertook a course entitled "Learning about Learning" in which teachers taught school lessons to each other and reflected on the process of being a

learner. Reflection was helped by encouragement to keep a journal to record the experience of being a learner. My own experience of the value of metacognitive behaviour contributed to my excitement.

I decided to use an action research approach so that I could tie research and development closely together and “ground” theory in data (Glaser and Strauss, 1967). I identified a research question, after a process of much deliberation over the roles and relationship of scaffolding and metacognition in my study, as my account of Phase 1 shows.

#### The question being addressed:

How can a teacher of more able pupils scaffold learning to enable them to draw on their metacognition to develop their writing?

The aim of the research is to probe how teacher and learner can take an active role in the development of the more able learner’s writing through attention to metacognition and by the creation of an ongoing dialogue about what it means to be a learner writer.

#### Definitions

Because there is a wide variety of explicit definitions and implicit interpretations of both metacognition (Sternberg, 1986; Tanner and Jones, 1999) and scaffolding (Stone, 1998b), I feel that it is necessary to explain my understanding and use of the terms. The act of forming my definitions and explanatory diagrams has helped to clarify this understanding. The definitions provided below represent how I have come to view them: the definitions therefore inform my work, including my findings and conclusions.

#### Scaffolding

I have found it useful to follow Stone (1998b) in distinguishing between a scaffold on one hand and the process of scaffolding on the other.

I see a scaffold as help provided by the teacher in the form of a structure or

support which is available until the pupil can perform the task without it or until the pupil uses the structure or support on his/her own initiative, perhaps in a form modified by the pupil.

Brown and Palincsar (1989, p.411) state: "The metaphor of the scaffold captures the idea of an adjustable and temporary support that can be removed when no longer necessary."

An example of a scaffold is the provision of a structure such as a writing frame which helps the pupil develop a particular genre (Lewis and Wray, 1995).

I see scaffolding as the process by which a teacher moves a child's learning on by providing support without which the child cannot accomplish a task. The task will have been chosen to enable the child to reach a learning objective. Mercer (1995, p.74) believes that scaffolding "offers a neat metaphor for the active and sensitive involvement of a teacher in a child's learning". But he is keen to point out that he has reservations about the term being applied loosely to various kinds of support. He reminds us that the "essence of the concept of scaffolding as used by Bruner is the sensitive, supportive intervention of a teacher in the progress of a learner who is actively involved in some specific task, but who is unable to manage the task alone" (op.cit., p.74).

It was Bruner who first explicitly linked the concept to the work of Vygotsky, as I have indicated above, although it was Wood et al (1976) who first used the metaphor. It is useful to track back to Vygotsky because the process of scaffolding should not be seen as merely helping a child accomplish a task. The task only exists to enable the child to learn. The scaffolding helps the child acquire new learning in the zone of proximal development. It follows from this that a definition of scaffolding should include a reference to the child's internalisation of learning.

Finally, I believe that the scaffolding process is not done *to* learners but

involves them in playing an active part. Palincsar and Brown (1984), in reporting on their programme of reciprocal comprehension, emphasised the active involvement of students in what they called scaffolded instruction. Stone, in a recent review of the metaphor of scaffolding (1998b), has also stressed this aspect.

In the diagrams below I have tried to represent how I see the role of the teacher and the role of the learner in the process of scaffolding as it may be applied to the teaching and learning of writing. I am conscious, however, that the diagram may not bring out sufficiently strongly the importance of teacher-child interaction in the process.

Figure 1.1: Diagram of role of teacher in scaffolding

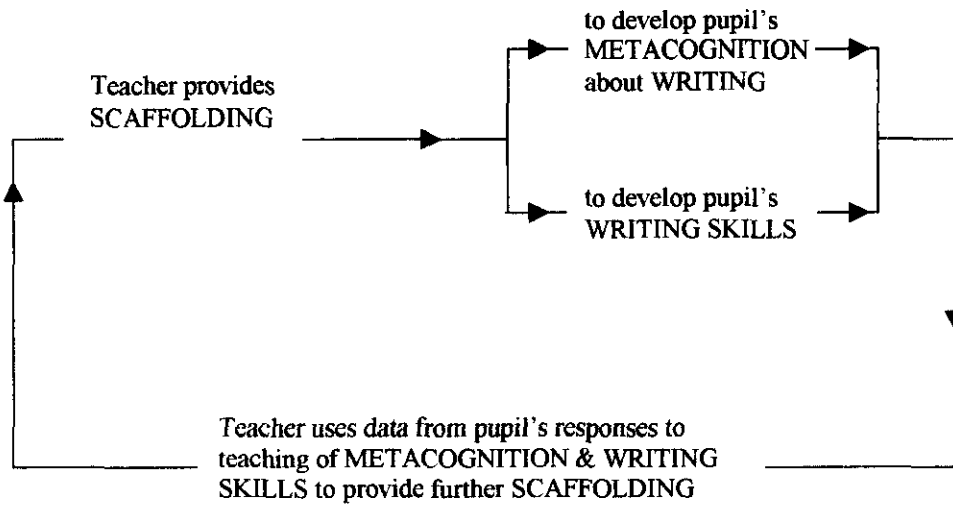
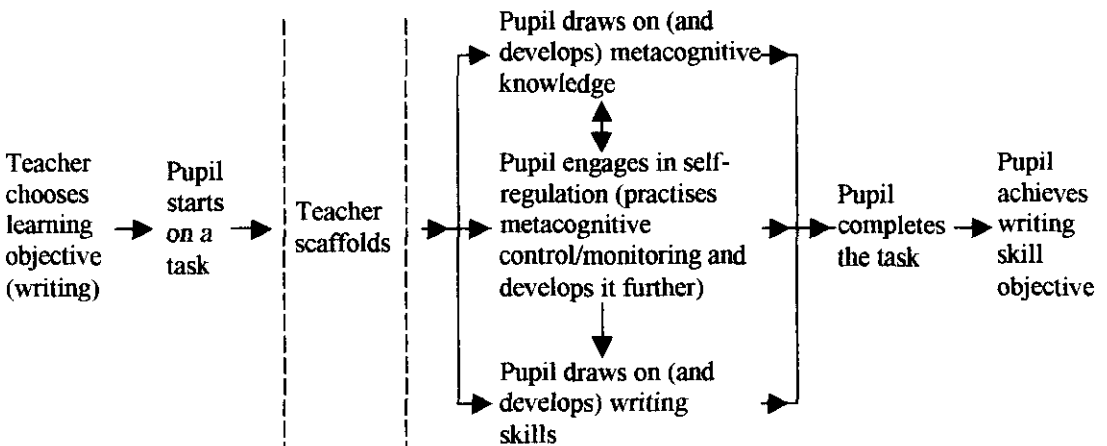


Figure 1.2: Diagram of role of pupil in scaffolding





## Metacognition

For the purposes of my study I see metacognition as the knowledge that learners have about how they learn and the thinking that learners undertake about how to proceed with a learning task and about the monitoring and evaluating of their progress.

I have found the fairly recent definitions of Baird et al (1993), Brown (1997) and Black (1999) useful in developing my understanding. It has also been useful to trace the origin of the term from Flavell and other researchers, as I indicate briefly underneath the diagram below.

Baird et al (1993, p.62) have provided a definition of metacognition which explains its main components:

“Metacognition refers to a person’s *knowledge* of the nature of learning, effective learning strategies, and his/her own learning strengths and weaknesses; *awareness* of the nature and progress of the current learning task (ie what you are doing and why you are doing it); and *control* over learning through informed and purposeful decision making.”

Brown (1997), who has been one of the leading researchers into educational applications of metacognition for two decades, has recently given a refreshingly simple explanation of metacognition:

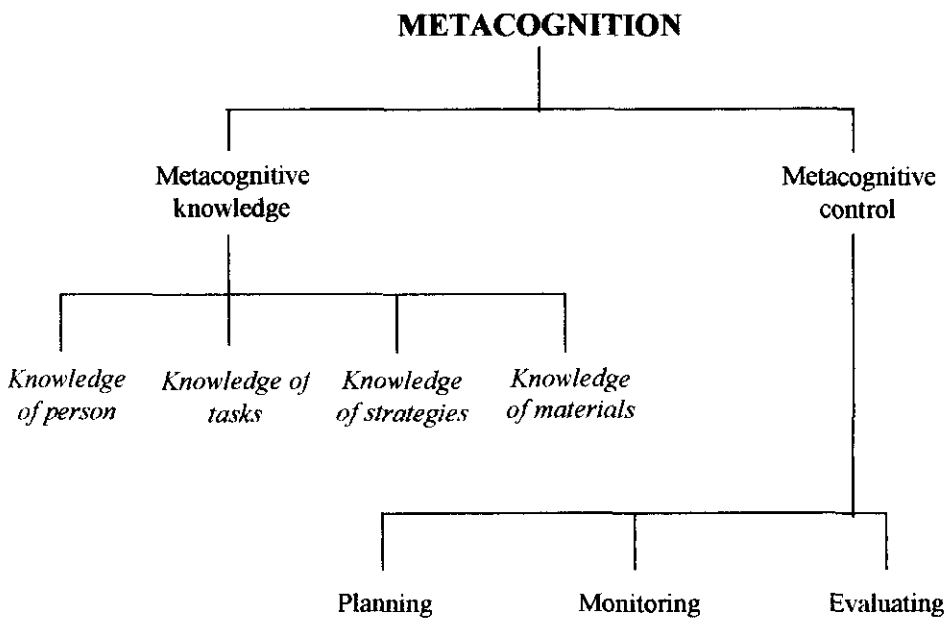
“Effective learners operate best when they have insight into their own strengths and weaknesses and access to their own repertoire of strategies for learning. For the past 20 years or so, this type of knowledge and control over thinking has been termed metacognition” (p.411).

Black (1999, p.126) defines metacognition as “reflection on one’s learning...leading to a strategic approach to one’s work guided by a clear view of its goals.” Black’s definition is useful because it reminds us that the

reflection (the 'meta') is best seen not as an end in itself but as leading to improved learning, ie a strategic approach. The definition also serves to suggest that reflection is best not undertaken in a vacuum but needs to involve the learner's understanding of the goals of the learning task: having clear goals will help the learner use reflection to develop and refine a strategic approach.

I have devised the following diagram of metacognition as involving metacognitive knowledge and metacognitive control.

Figure 1.3: Diagram of metacognition



The model is based on Flavell (1979, 1987), Brown, Campione and Day (1981) and Brown (1987). Flavell distinguishes between 'metacognitive knowledge' and 'metacognitive experiences'. He saw metacognitive knowledge as developing through the action and interaction of what he termed 'variables' (knowledge of person, knowledge of tasks and knowledge of strategies). Brown, Campione and Day suggested a fourth variable (knowledge of materials). Flavell's term 'metacognitive experiences' did not find favour with subsequent researchers (Weinert and Kluwe (1987) described it as "interesting, although not yet precise", p.18). I have preferred Brown's term 'metacognitive control' and have adopted her sub-division of this into planning, monitoring and evaluating.

Scaffolding provided by a teacher to help students take a strategic approach to their writing can be described as “metacognitive interventions” (Hattie, Biggs and Purdie, 1996, p.100: metacognitive interventions “focus on the self-management of learning, that is, on planning, implementing, and monitoring one’s learning efforts, and on the conditional knowledge of when, where, why, and how to use particular tactics and strategies in their appropriate contexts.”).

## Literature Review

### Introduction

My review of the literature has developed in parallel with the “progressive focussing” (Ball, 1993) of my action research: studies of high ability and the teaching of writing gave way to research on the teaching of writing to pupils of high ability, reading of research into metacognition and scaffolding became similarly more specific. I have included an examination of research that yields data on the characteristics of teaching styles and teachers that seem to benefit more able pupils because of its relevance to scaffolding.

The literature on self-regulation and strategy instruction, reporting work largely undertaken in the U.S.A. in the last fifteen years, has made a major contribution to my thinking; the research of Harris and Graham (1996) into writing is particularly pertinent to my study, although the majority of it has been concerned with learning disabled students. I conclude my review by examining the literature on the use of checklists, which became the focus of Phase 3 of my study.

Any review of literature on pupils of high ability needs to contain the caveat that the breadth of definitions of such pupils makes comparisons among research studies difficult, as Borkowski and Day (1987) point out. It also needs to be noted (as do Borkowski and Day) that researchers do not necessarily have access to the sort of data on pupils’ abilities that readers of their research need to receive to be certain of what the researchers mean by their definitions. I acknowledge that I have drawn on studies which collectively use a variety of definitions of ‘gifted’ children as well as of those described as ‘above average’. Apart from difficulties inherent in defining where ‘more able’ ends and ‘gifted’ begins, I wish to offer as justification for examining what may be considered to be a wide range of ability that research into the metacognition of such groups of children suggests that differences between them are ones of degree rather than kind, as I attempt to demonstrate below. It is perhaps also worth noting that metacognition is not a ‘fixed’ attribute: it can be taught, as Bruner (1986) believes. Lan (1998, P.101) concluded that his data showed that “even

graduate students ... need assistance to be involved effectively in self-regulation.”

In my early reading of the literature on high ability I came to the same conclusion as Carter and Swanson (1990), that the gifted literature is characterised by practical articles lacking firm substantiation in theory or research. As I discovered more recent work on gifted and very able pupils (such as that of Freeman, 1991, 1995, 1998), it was good to see the findings of research more securely underpinning the conclusions of writers in the field. It remains the case, nevertheless, that assertions are often made about highly able pupils on the basis of flimsy evidence; as I try to show below, amongst such assertions are some made about the relationship between high ability and metacognition.

#### Studies of able children and provision for them

##### (a) Defining high ability

The traditionalist view of intelligence as a single, inherited factor has given way in the twentieth century to a much wider conception of what it means to be intelligent and what factors contribute to its development. High intelligence or giftedness has been seen as dependent on commitment to a task and on creativity as well as on above average ability (Renzulli, 1994).

The widening of the conception of intelligence is also evident in Sternberg's *triarchic theory of intellectual giftedness* (Sternberg, 1986) which gives an important role to “metacomponents” defined as “higher order processes used in planning, monitoring, and decision-making in task performance” (p.225).

Gardner's concept of multiple intelligences (Gardner, 1993) has gained wide currency. It includes kinds of intelligence (eg linguistic) that match important subject domains but also what Goleman (1996) has called “emotional intelligence”, in particular the social intelligence of interpersonal relations and the sort of metacognitive intelligence that involves self-knowledge, two intelligences that have been increasingly recognised as

important to learning, especially by those who take a socio-constructivist stance (Wood, 1988).

The independence of kinds of intelligence from one another is part of Gardner's theory. The educational implication of this is that it is appropriate to identify and develop domain-specific intelligence rather than attempt to provide for it through the teaching of general thinking skills in context-free methods.

The social construction of 'giftedness' has been recognised (Sternberg and Davidson, 1986, p.3: "Giftedness is something we invent"), in the face of a multiplicity of definitions of the terms 'gifted' or 'talented' or 'highly able' (George, 1992, p.1). Some British researchers (eg Freeman, 1991, p.viii) have attempted to put the terms into a hierarchy and suggest percentages of a population of children to which the terms might apply. But there is no consensus in Britain on how above-average pupils might be identified or classified (Montgomery, 1996).

For the purposes of my study I have used the term 'more able'. This term has gained currency in Britain in recent years (eg Dean, 1998), although some leading proponents of provision for more able pupils (such as George, 1992; Montgomery, 1996; Eyre, 1997a) seem to prefer just 'able'. Teare (1997) distinguishes between 'able' and 'talented'. I see the 'more able' as the highest-ability 20% of pupils nationally in a school subject, a figure which is higher than the 10% used in the Department of Education and Science work carried out by Denton and Postlethwaite (1985), a rare subject-based study, but which approximates to the percentage of pupils nationally achieving Level 5 in English at Key Stage 2 (QCA, 1999) and which was reached by most of the pupils in my study.

(b) Identifying high ability

As the definition of intelligence has widened, so the scope for using a variety of methods of identifying high intelligence has increased.

Intelligence tests (very high scores in which were once considered the best indicator of giftedness, Terman and Oden, 1951) are now seen as of limited value (Wood, 1988, p.201; Young and Tye, 1992, p.22), especially if a domain-specific intelligence is being considered.

Intelligence has been increasingly viewed in terms of potential rather than performance (Csikszentmihalyi et al, 1993, p.26), so theories of learning such as Vygotsky's concept of a zone of proximal development have interested researchers (especially in the field of special education, such as Campione, 1987). Sternberg and Davidson (1986, p.178) suggest that Vygotsky's concept "might be equally relevant to the identification and enhancement of giftedness". Young and Tye (1992) have supported this view.

In the fourth quarter of the twentieth century effective identification came to be seen as following provision rather than as necessarily preceding it (Renzulli, Reis and Smith, 1981; Koshy and Casey, 1997a) and as an ongoing activity that involved using data from many sources (Teare 1997). Increasing emphasis has been placed on the value of classroom observation (what Denton and Postlethwaite (1985, p.145) described as "the day-to-day clues to ability that pupils display as a result of the challenges set to them"). Denton and Postlethwaite, in a detailed study of teachers' methods of identification of the subject-specific abilities of able 13-14 year olds in eleven Oxfordshire schools, concluded that the rate at which high ability is identified in the classroom "depends on the teaching style adopted" (p.121).

Provision and identification have thus come to have a more interactive relationship (Eyre 1997a, p.75: "Schools become more effective in identifying able children as they get better at providing for them").

(c) Characteristics of able children as learners

A recurring interest in research on very able children has centred on the question of whether they differ in kind or degree from other children. Ferretti and Butterfield (1983), in a study of problem solving, found that differences in strategy were a function of intelligence but that gifted children did not use strategies peculiar to the gifted: rather, they used strategies characteristic of older average children. Jackson and Butterfield (1986), reviewing the “surprisingly few investigations of gifted children’s strategic repertoires” (p. 169), concluded that the evidence was “insufficient to indicate the circumstances in which gifted children use (perhaps more effectively) the same strategies as other children their age and the circumstances in which they use strategies characteristic of older children” (p. 171) but that there was no evidence that gifted children use memory or problem-solving strategies that are qualitatively different from those of average children.

Butterfield and Ferretti (1987), having examined hypotheses about intellectual differences among children, identified four kinds of cognitive differences: base knowledge, strategies, metacognitive understanding and executive procedures that control strategic processing. They saw intelligent behaviour as dependent on all four elements, hypothesising that executive processes draw on base knowledge and metacognitive understanding to select strategies.

Several researchers have pointed to greater metacognitive awareness amongst more able children, but often there is insufficient data to justify the comparisons made. It is not unusual to find such a statement as the following, unsupported by reference to research: “The average ability pupil appears not to be at the same stage in their metacognitive development as the more able pupil and this appears to be the main difference between the more able pupil and the average ability pupil” (O’Brien, 1999, p. 18). In the article containing the statement O’Brien lays out evidence of metacognitive activity among more able students spanning Years 2 to 10, but he gives no data on students of average ability. Even when a reference is given to



support an assertion about a relationship between ability and metacognition, little caution seems to be exercised in using the reference to support the assertion in its entirety; for example, Fisher, who is one of the leading proponents of the teaching of thinking skills in England, states (1998): “If there is one characteristic of very able or gifted children it is that they have more metacognitive awareness than less able peers (Sternberg, 1983).” An examination of the article cited (which, as Fisher’s references show, is Sternberg and Davidson, 1983) reveals very little that could be cited as data to support Fisher’s statement; Sternberg and Davidson themselves describe their article as “a psychological account of what ... insight skills might be” (p.51). Interestingly, Sternberg (1986), in a volume in which several contributors (including himself, as he acknowledges) name metacognition as a distinguishing feature of the gifted, declares: “Even investigators who emphasize the term do not agree with each other as to where its domain begins and ends” (p.429). He also points out that “phenomena that might on the surface seem to be inherently metacognitive in nature may have fundamentally different explanations” and warns of “the danger of using trait-like terms as explanations” (ibid.).

Among the researchers who *have* collected data that bears on the relationship between high ability and metacognition, Freeman (1991) concludes that the more successful young people in her study “were more aware of, and made more use of, their personal learning styles” (p.201). She finds that they “can often take an overview of the best way for them to work (metacognition) and so can marshal their intellectual forces with greater flexibility and speed” (p.65): children of average ability, by contrast, she finds, cannot take such an overview. Freeman’s research derives strength from its longitudinal nature and the large number of one-to-one in-depth interviews conducted. Such interviewing seems rare in research on able pupils (certainly in England).

Hannah and Shore (1995) set out to “provide empirical data in support of the proposition that metacognition is a defining quality of intellectual giftedness” (p.95). In a study based on reading they found that the

metacognitive performance of learning-disabled gifted students resembled that of the gifted students more than it did that of the learning-disabled students; they concluded that their results gave qualified support to the proposition. The significance of their study needs to be considered in the light of their small sample (six students in each ability category at two age levels) and the absence of girls (on the grounds that only sufficient numbers of learning-disabled gifted boys could be found).

McCrinkle and Christensen (1995) found that university students who used learning journals made more use of metacognitive strategies in a learning task *and performed better* than other students who had written up their work in a traditional form; McCrinkle and Christensen offer strong evidence for the improved performance of the learning journal students in their end-of-year examination. Romainville (1994) concluded that high-achieving university students had more awareness of their thinking and used their awareness more (than lower-achieving university students); it needs to be borne in mind that Romainville's sample was small (thirty five students).

Some researchers have looked specifically at the role of self-regulation in the performance of very able pupils. Zimmerman and Martinez-Pons (1986), for example, found that students in an advanced track in high school used significantly more self-regulating strategies than average students, including planning and self-monitoring. Schofield and Ashman (1987) looked at differences among grade 5 and 6 children on measures of cognitive processing: they concluded that what distinguished the most able students was their "higher level planning/metacognitive and simultaneous planning functions" (p.19), adding that if these students "are to be fully extended in the educational context, then it is in these areas that they should be pressed" (ibid.). Bouffard-Bouchon et al (1993) found that gifted students were more inclined to set themselves specific goals and put more effort into self-regulating their performance than average students.

In their research on underachievement in talented teenagers

Csikszentmihalyi et al (1993) found that the successful highly able children

showed a high level of curiosity, openness to experience and awareness. Csikszentmihalyi et al did not investigate metacognition, but the attributes of successful highly able children which they identify could support the development of metacognitive abilities (Lehwal, 1990, found that highly intelligent children who used metacognitive skills effectively had greater curiosity and motivation than those who did not).

Knight et al (1998), evaluating children's use of a particular cognitive and metacognitive approach to instruction (SPELT), discovered that able pupils enjoyed the challenge of extending the strategies that they had been given to try out (such as mnemonics to help them remember the key features of tasks) and generating their own strategies. Baird et al (1993) came to the same conclusion in the field of science teaching.

Cheng (1993), in a review of the theoretical literature, reaches the conclusion that "on theoretical bases there is sufficient ground to hypothesize that superior metacognitive ability is a key component of giftedness" (p.108). Cheng concludes from a review of empirical studies that further research is needed to demonstrate a causal link between metacognition and giftedness, but she believes that the evidence is "highly suggestive" that metacognition is an essential component of giftedness (p.110). In a subsequent review of the literature on the development of metacognition in gifted children, Alexander, Carr and Schwanenflugel (1995) are more cautious, arguing that Cheng's "conclusions are premature particularly when one takes into account the multiple design problems affecting measures of metacognitive knowledge and strategy effectiveness training" (p.5). Alexander et al believe that different conclusions about the relationship between high ability and metacognition are to be drawn for different kinds of metacognition; for example, they find more evidence for the existence of a strong relationship in metacognitive knowledge than in the monitoring aspect of metacognitive control. They also believe that the relationship between high ability and metacognition may be domain-specific. Alexander et al support Cheng's call for further research.

(d) Characteristics of teaching styles and teachers that able pupils prefer and that benefit them

Csikszentmihalyi et al (1993) interviewed talented teenagers in the U.S.A. as part of their study. They found that “talented teenagers liked teachers best who were supportive and modeled enjoyable involvement in a field” (p.249). They felt that these teachers challenged them in line with their abilities, showed interest in them and gave both support and stimulation. Their teaching had some of the characteristics of the master-apprentice approach. Csikszentmihalyi et al decided that such an approach had become harder to implement: “An unfortunate by-product of the standardized curriculum of most modern schools is the depreciation of the role of teacher to that of information technician” (p.177).

Freeman (1991) found that very able pupils appreciated teachers who were “willing to listen as well as talk” (p.133). They wanted teachers to have an interactive relationship with them and valued direct feedback on their work. Freeman comments (p.132): “Successful teaching for learning helps children to a sense of control over both the learning situation and themselves, and there is ample research evidence to show that this involves guidance by the teacher. And the gifted children want it too”. Young people’s “ideal teachers would be as concerned with the structure of their learning and their ability to cope as with the passing on of information” (p.212). The value to able children of an interactive relationship with adults is stressed by Freeman: “The parents who had the most positive effects on their children’s high-level development were not those who told their children what to do, but those who did it with them” (p.195).

Freeman suggested that able children’s sense of a lack of communication with their teachers could be remedied by teachers investigating pupils’ learning styles. She felt that discussion of different styles of learning and thinking would help able pupils to understand themselves better and, as a result, be more effective learners. She saw self-assessment as “the first step towards self-reflection and control” (p.203).

Story (1985) observed teacher interactions with able students. She concluded that the quality and quantity of verbal interactions is a key factor in effective teaching of gifted children. Successful teachers were flexible in the amount of time and support they provided. Silverman (1980) also studied how teachers interacted with very able students, finding that the main difference between master teachers of the gifted and novice teachers was in the use of feedback; master teachers gave more scope for interaction with students because they were less judgmental and more flexible in responding to students' needs.

Rogers (1983) suggested that teachers of able pupils would benefit from training to develop their metacognitive skills because "teachers of gifted children who can think efficiently and consciously monitor their own learning will be able to facilitate those executive processes in their gifted students" (p.21). Recent research at the Research Centre for Able Pupils, Westminster Institute of Education (Wilson, 2000), has identified the encouragement of metacognition as a feature of teachers picked out as good teachers of able pupils. The strategy that was common to all five teachers in the study was the use of higher-order thinking skills. The teachers were found to be familiar with Bloom's taxonomy of educational objectives (1956). Metacognition was a feature of their teaching.

Fitzgerald (1999) makes an explicit connection between the evaluation section of Bloom's taxonomy and metacognition, arguing that metacognitive regulation, which involves the use of strategies, is a necessary part of evaluation (and that the strategies used in evaluation constitute metacognitive knowledge). Williams (2000) links her own research, which identified teachers who offered children opportunities to acquire a "metacognitive layer to their learning" (p.1) as the most likely to be effective teachers of literacy, to QCA findings (1998) that Key Stage 2 children who gained above average scores (ie Level 5) in the English SATs were able to make *explicit* connections to previous experience or learning. Williams believes that teachers' use of "high levels of questioning" (p.3),

requiring pupils to justify their responses by drawing on appropriate evidence, helps pupils to make such connections.

### The effective teaching of writing

Hillocks (1984) concluded from his meta-analysis of research studies that the most effective teaching of writing was what he called the “environmental mode”; he saw this as deriving from Vygotsky’s concept of the zone of proximal development. Hillocks (1995) contrasts the “environmental mode” with what he identifies as the traditional mode (which he calls “presentational”) and a “natural process” mode. He sees the traditional mode as assuming that knowledge can be imparted by the teacher or text prior to engagement in writing and the “natural process” mode as rejecting the use of models to teach the features of genres and relying instead on students finding their own structures and improving them through successive drafts. The “environmental mode” combines the teaching of “task-specific knowledge” (Smagorinsky and Smith, 1992) with a process approach that involves students in learning writing through creating their own writing in a variety of genres.

At the same time as Hillocks has been developing his ideas on the basis of the analysis of research, teachers of writing in the U.S.A. such as Atwell (1998) have moved towards greater explicitness in teaching discourse knowledge: Atwell has maintained a Writer’s Workshop approach but now makes much greater use of modelling writing and teaching specific features of written language through “mini-lessons”.

Much of what Bereiter and Scardamalia recommended in their seminal work (*‘The Psychology of Written Composition’*, 1987) is being increasingly supported by researchers and practitioners. They had admitted that their model of the effective teacher of literacy was largely theoretical as it was only beginning to emerge out of experimental instructional studies specifically concerned with the fostering of higher-order competencies.

For Bereiter and Scardamalia the effective teacher of writing gives pupils choice in selecting topics for writing, provides a variety of support in allowing pupils to collect information and interacts with them individually to help them develop plans and drafts. The teacher models the process of asking questions of oneself and coaches the student in carrying out the modelled process, so that the student becomes less dependent on the teacher: "In writing [the effective teacher] makes use of external prompts, modeling, and peer co-operation to enable students to carry on their own Socratic dialogue, by means of which their knowledge is not only actualised but reconsidered and evaluated in relation to what they are trying to write" (pp.10-11). In other words, the teacher uses scaffolding of various kinds to develop metacognition.

In Britain the National Literacy Strategy has incorporated a number of features of the "environmental mode" in the teaching of writing, as shown in the review by Beard (1998) of research that underpins the Strategy: "shared writing" (the joint construction of a text by teacher and pupils) provides a good example, as it tends to involve explicit modelling of the writing process and reference to genre features. Beard (p39) notes: "The success of shared writing is likely to be related to the teacher's skill in using dialogue to provide scaffolded understanding of what is involved in writing."

In their evaluation of the first year of the National Literacy Strategy (OFSTED, 1999, p.16) inspectors concluded: "Pupils' progress in writing was greatly enhanced when the teacher provided direct guidance and instruction on an aspect of writing." Where this was done well (which the inspectors said was rare), "the complexities of writing in a chosen genre (such as fable, horror story or press report) were explored; pupils were taught how to construct a coherent narrative with clear distinctions between the beginning, the middle and the ending of a story; and techniques for developing characterisation, such as through direct speech or actions, were studied" (ibid.).

In addition to this composite illustration, the inspectors provide a specific example of direct guidance and instruction in which Year 3 pupils were helped to write a book review with the scaffolding of a “writing frame”. Writing frames have been particularly developed in Britain by Lewis and Wray (1995, 1996, 1998), who refer to Vygotsky and the proponents of genre theory (Martin, Christie and Rothery, 1994) in explaining the theoretical underpinning of their work.

Wray himself (1994) sees the development of metacognition in writing as critically important to the learning of writing skills; he calls writing “the most self-evidently metacognitive ... of all the processes of literacy and language” and asserts: “‘being aware of’ one’s thoughts in writing is a necessary precursor to ‘being more fully in control of’ the writing process” (p.82).

Wray draws on the distinction made by Bereiter and Scardamalia (1987) between expert writers (who ‘transform knowledge’) and novice writers (who ‘tell’ it). Bereiter and Scardamalia suggest that teachers need to develop their pupils’ “intentional learning” which in the case of “talented young writers” they see as “learning to write” while engaged on a writing task (“extracting knowledge from the current experience that will help them in future writing” (p.19)).

Several studies which have focused on the differences between good and poor writers may give pointers to how to provide effective teaching of writing. Good writers have been found to have more discourse knowledge (McCormick et al, 1992; McCutchen, 1986) and to be more proficient in spelling and punctuation which may reduce cognitive load and free up more resources for other aspects of composition (Kellogg, 1994; McCutchen et al, 1994).

Good writing requires self-regulation of the writing process (Englert and Raphael, 1988; Harris and Graham, 1992). Good writers reflect more during the process of writing (Pianko, 1979). They plan and revise



recursively (Hayes and Flower, 1986), monitor their writing (Beal, 1990) and consider their audience (Bereiter and Scardamalia, 1987). Pianko (1979, p.278) argues that to help students become good writers teachers must “change their focus from evaluating and correcting finished papers to helping students expand and elaborate qualitatively the stages of their composing processes; they must, in short, help their students become more reflective writers”.

Since Pianko’s article was published considerable attention has been paid to the process of composition. Hayes and Flower (1980b) identified three writing sub-processes (planning, translating (text generation) and revision), controlled by a monitoring process (the ‘monitor’). The model has had considerable influence (Kellogg, 1996; Dean, 1998). In a recent revision of the model (Hayes, 1996) Hayes gives greater emphasis to the central role of working memory and to motivation and affect (both of which have implications for my study: an advantage of checklists may be a reduction in cognitive load and checklists seemed to give pupils greater confidence). Students’ confident use of strategies which they believe help them may counter the tendency (of even able students) to see writing ability as a gift (Palmquist and Young, 1992, found that students who had this view showed significant greater anxiety about writing).

Hayes has also revised the cognitive process section of the model, which includes subsuming planning under a more general category of reflection. In Hayes and Flower’s 1980 model planning was the only reflective process explicitly included. In the revised model Hayes (1996, p.20) has included other reflective processes, namely “problem solving (including planning), decision-making, and inferencing” (an example of which is the making of an inference about what the audience may know). Hayes believes that ‘task schemas’ (“packages of information stored in long-term memory that specify how to carry out a particular task”, p.24) can be activated by reflection; the task schemas contain genre-specific information and include criteria for evaluating the success of the task.

Hayes' increased emphasis on the importance of reflection is mirrored in the greater attention paid to self-regulation in recent studies of writing in both England (Wray, 1994) and the United States (Levy and Ransdell, 1996). In the latter country the research of Harris, Graham and colleagues into the role of strategy instruction and self-regulation seems to be amongst the most detailed and extensive of studies of the teaching of writing. They show how strategy instruction can be successfully integrated into process writing classrooms (Danoff, Harris and Graham, 1993; MacArthur et al, 1995; Graham and Harris, 1996b) and how the development of self-regulation is an important aspect of strategy instruction (Harris and Graham, 1992, 1996). Their model of Self-Regulated Strategy Development (Graham, Harris and Troia, 1998) contains various "forms of support" (Graham and Harris, 1996a, p.352) which provide scaffolding. An example of such a support is a story writing strategy which both uses a particular scaffold (to engage pupils' metacognition) and pays careful attention to the process of scaffolding through which the strategy is delivered (Graham and Harris, 1996a, pp.359-60). The studies of Harris and Graham have mainly focused on less able students. The next section of my Review examines the writing of able pupils.

### Studies of the development of the writing of able pupils

The literature published in Britain on the teaching of writing to more able pupils lacks a substantial native research base, as is clear from one of the most recently published books on the learning and teaching of the more able language user (Dean 1998).

Goodwyn (1995) is an exception, although he writes more about teachers than learners. In a study of eighteen teachers in three secondary schools Goodwyn found that teachers of English could readily identify very able pupils and agree on their characteristics, including their ability in writing, but they felt unclear about how to help them. Goodwyn found that differentiation by outcome was the most commonly cited strategy for written work. Goodwyn describes this as "perfectly effective in itself" but states that it "does not acknowledge the point that the most able may have

different needs, some of which might be defined as special". Goodwyn does not provide a detailed description of what these needs may be but suggests that able pupils "appear to need certain kinds of support that might enable them to develop at a pace that suits them better". This suggests that teachers should take a more interventionist approach. Goodwyn attributes English teachers' lack of confidence in teaching the more able to the use of differentiation by outcome and to the dominance of the 'personal growth' model of English teaching which stresses the development of the individual as an individual (and which seems related to the "natural process" mode identified by Hillocks, 1984, discussed above).

Goodwyn makes several suggestions for helping more able pupils which he says are based on research, but in terms of writing development the suggestions are very general (eg setting writing tasks that make the most of pupils' imaginative potential) and do not provide detail of the kind of support which Goodwyn suggests is needed.

A number of modes of development in writing have been adduced but they lack the support of research. Moffett (1968) put forward a programme for teaching writing based on his theory that development in writing should be seen in terms of pupils' becoming progressively more able to handle abstractions, but he did not investigate empirically the relationship between the teaching programme and pupils' developing ability. More recently, proponents of genre theory, particularly in Australia, have argued that development in writing should be measured in terms of the use of an increasing range of genres (Martin, Christie and Rothery, 1994), an idea found in the descriptions of Levels for writing in England's National Curriculum.

In the U.S.A. more attention (than in Britain) has been paid to the development of students who show above-average ability in writing; and details of several programmes have been published. Tangherlini and Durden (1993) describe CTY (Center for the Advancement of Academically Talented Youth) programmes (covering students aged 7-16) which seek to

promote writing development through the use of small classes run as writers' workshops. Students are encouraged to see themselves as young writers being coached by teachers who are writers themselves. "Critical thinking and metacognitive skills are integrated into the disciplines rather than taught in isolation, for CTY instructors have found that verbally talented youth have little patience or use for ... excessive psychological jargon and 'scaffolding'" (p.430). Scaffolding, however, plays an important part in the programme as teachers are "expected to coach students intensively on an individual basis, to share insights and tricks of the trade" (p.430). The writing workshops (as described by Reynolds et al, 1984) contain a wide range of scaffolding. The workshop approach focuses on specific aspects of writing (eg structure of paragraphs) as well as more general matters (such as the need to keep an audience in mind for a piece of writing, p.62). Teachers model activities (eg how to critique a student's work, p.173) and gradually reduce the level of scaffolding until students take over the process for themselves.

Tangherlini and Durden say the "Optimal Match Principle" is at the heart of CTY's instructional approach. This is based on the idea that "an appropriate educational experience is one which challenges the individual to perform at a level just beyond his or her cognitive grasp" (p.431). Such a level seems equivalent to Vygotsky's zone of proximal development. Tangherlini and Durden offer no evidence for the development of the students' writing, but in their description of the CTY workshops Reynolds, Kopelke and Durden (1984) claim that the success of the programme can be demonstrated in improvements in standardised scores and provide some data; no comparisons, however, are made with how groups of similar students might fare with other methods.

Studies of how "expert writers" operate have been made in the U.S.A., and their findings examined for pedagogical implications. Expert writers use their knowledge of genres and textual conventions to help them plan their writing (Schumacher, Klare, Cronin & Moses, 1984). When they are required to produce plans which do not readily match a known genre, they

“...the concept could reasonably be broadened to include anything psychological, rather than just anything cognitive. Any kind of monitoring might also be considered a form of metacognition.” (p.21)

Brown (1987) points out that a primary problem with the term ‘metacognition’ is that “it is often difficult to distinguish between what is meta and what is cognitive” (p.66). Von Wright (1992) helps to make the distinction clear. He instances someone “capable of reflecting about many features of the world in the sense of considering and comparing them in her mind” but “unlikely to be capable of reflecting about herself as the intentional subject of her own actions” (pp.60-61). Von Wright then refers to Vygotsky’s distinction between ‘consciousness in the broader sense’ on one hand and ‘conscious awareness’ on the other.

Many of the meanings of the term cluster around one or other of two particular areas of research, namely knowledge about cognition and regulation of cognition (Brown 1987, p.67). Drawing on Brown’s distinction, Puntambekar and du Boulay (1997, p.3) point out that during the last decade and a half there has been an increasing realisation that to become effective learners students should be aware of the process of learning and take control of their learning. Puntambekar and du Boulay define metacognition as “learning ‘to learn’” (ibid.).

Hacker (1998), in a recent review of definitions of metacognition, concludes:

“Although not all researchers would agree on some of the fuzzier aspects of metacognition, there does seem to be general consensus that a definition of metacognition should include at least these notions: knowledge of one’s knowledge, processes, and cognitive and affective states; and the ability to consciously and deliberately monitor and regulate one’s knowledge, processes, and cognitive and affective states.” (p.11)

The concept of 'self-regulation' has assumed considerable significance in the last decade (Schunk and Zimmerman, 1994, 1998); and it has been increasingly recognised that self-regulation is important in the development of writing (Zimmerman and Bandura, 1994; Zimmerman and Risemberg, 1997). Brown et al (1981) had defined self-regulation as "the ability to orchestrate, monitor, and check one's own cognitive activities" (p.30) and argued that teachers need to develop it in pupils to help them learn how to learn so that they become effective learners. Flavell (1987) believes: "Good schools should be hotbeds of metacognitive development . . . . In schools, children have repeated opportunities to monitor and regulate their cognition" (p.27). For Borkowski (1992) self-regulation is the "heart of metacognition" (p.253). He sees the monitoring aspect of metacognition as self-regulatory: self-regulation first helps the learner to size up the task and then to monitor performance in tackling it.

Metacognition has come to be seen not as an extra (in the way that one might see reflection as linked to the refining of a draft) but as central to the development of learning. Collins, Brown and Newman (1989, p.455) argue: "To make real differences in student skill, we need to both understand the nature of expert practice and to devise methods appropriate to learning that practice. To do this, we must first recognise that cognitive and metacognitive strategies and processes are more central than either low-level subskills or abstract conceptual and factual knowledge. They are the organizing principles of expertise, particularly in such domains as reading, writing, and mathematics." Bereiter and Scardamalia make a similar point (1987, p.363) when they say that the acquisition of content or rhetorical knowledge is necessary but not sufficient to develop writing. They argue that pupils need strategies to enable them to formulate goals, deal with problems and revise choices.

#### Studies of scaffolding provided by teachers

The concept of scaffolding was developed by Bruner and others from Vygotsky's theory of a zone of proximal development (Wood, Bruner and

Ross, 1976). Vygotsky (1978) saw the zone as the area between a child's actual level of development and potential level reachable with the help of an adult or more competent peer.

What is central to the idea of scaffolding is, as the name implies, the provision of a supportive framework which is removed when the learning task is complete. Sperling (1990, p.283) describes scaffolding as "providing support and thereby extending the range of the worker".

Applebee (1989) recounts how he and Langer "developed the metaphor of *instructional scaffolding* as a way to think about the teacher's role in effective instruction" (p.221). Applebee specifies five criteria for their model of instructional scaffolding: ownership (which concerns the room given to students to make their own contribution to the task), *appropriateness* (which concerns the level of difficulty), *structure*, collaboration (of teacher with student) and transfer of control. In defining 'structure' Applebee refers to the teacher modelling a sequence of thought and language through which strategies are explicitly taught; he makes a clear link with the metacognitive aspects of self-regulation: "as we introduce students to new approaches, it also helps to cultivate the metacognitive skills necessary for them to use the approaches most effectively" (p.222).

Borkowski (1992, p.255) sees scaffolding as an "important component of good strategy instruction". He rejects the view that strategy instruction does not place sufficient emphasis on the learner's active construction of knowledge by arguing that "strategy instruction, including the kind of scaffolding provided to particular students, is unique because the components of teacher-student interactions are not scripted but, rather, develop as instruction unfolds... the ultimate goal of strategy-oriented scaffolding is to develop student independence through the gradual internalization of the processes that are encouraged during instruction." Borkowski believes that good strategy instruction should provide opportunities for students to "personalize strategies" (ibid.).

Maybin et al (1992), conscious of the original development of the concept of scaffolding by researchers studying the language of adult-child interactions, see scaffolding as provided through the teacher's language, but it is clear that the meaning of 'scaffolding' has expanded in the last thirty years to include "tools and devices" (as well as people) that carry part of the performance load (Resnick, 1989, p.10) and the highlighting of aspects of a task that the child might overlook (Wood and Wood, 1996, p.5). Hoel (1999, p.2) typifies the way in which the definition has expanded: "well known forms of scaffolding in an educational context are models for problem-solving, guidelines, instructions, work routines and so on." Hoel also argues that "when students collaborate they can function as scaffolds for each other by assuming complementary roles and supplementing each other's knowledge and skills because they may be experts in different areas." (pp.2-3). Mercer (1994), however, believes that the term 'scaffolding' should not be applied to "such educational tools or 'props' as worksheets or computer software" (p.100) because they give pupils very limited feedback. It may be more profitable to think about the essential features of scaffolding rather than be concerned whether a particular aid to teaching can be called scaffolding. It may be useful to remember the point made by Webster et al (1995) that teachers tend to think of their work in terms of tasks rather than the learning issues involved. Webster et al remind us that "Scaffolding is the complex set of interactions which shape and promote children's thinking through a task. Effective scaffolding focuses on the working minds of children, rather than the nature of the work in hand" (p.96). Webster et al also remind us that to be effective at scaffolding teachers must develop a precise knowledge of the characteristics of learners including their levels of experience and understanding.

Askew et al (1995, p.216) argue that 'scaffolding' is "potentially open to misinterpretation" if one does not have an awareness of the work of Vygotsky that lies behind the metaphor. They suggest that 'scaffolding' could perhaps be best regarded as "some form of general orientating metaphor, alerting the teacher to watch out for the extent to which pupils



can succeed at tasks on their own, suppressing the desire to step in and help too soon yet being prepared to work alongside the pupil when a genuine need arises.” Maybin et al (1992) argue for the retention of the idea (covered in Bruner’s original usage) that scaffolding is help given to enable a pupil to complete a specified learning activity. They suggest that this and the teacher’s tuning in to the pupil’s current state of development are necessary conditions for a teaching activity to count as scaffolding. They also suggest that the learner’s successful completion of the activity and increased competence may also be necessary conditions.

If we see scaffolding as derived from Vygotsky’s concept of the zone of proximal development, it would certainly be important to expect successful scaffolding to produce increased competence rather than merely facilitate the completion of tasks. Giving a pupil a correct spelling is not scaffolding; helping the pupil use existing phonic knowledge, perhaps by making links with known spellings, may be. Bruner (1985, p.25) refers to how the teacher scaffolds the learning task “to make it possible for the child, in Vygotsky’s word, to internalise external knowledge.”

The work of several researchers in the field of teaching writing, however, suggests that the metaphor can have a more precise meaning when applied to the teacher’s role. Scardamalia and Bereiter’s (1985) “procedural facilitation” draws on the theory of cognitive apprenticeship (including, as we have seen, the use of contrasting models of expert and novice writers). Pupils are given prompts (in the form of cue cards) which provide scaffolding for their writing. The cards are “faded out” as students internalise the processes which the prompts invoke. Scardamalia and Bereiter (1994, p.303) believe that their “facilitations aim to boost the level of reflective thought or critical thought that goes on in composition but to do so without stimuli or aids to thought that stand outside the composing process.”

Wray and Lewis (1997) make explicit use of the metaphor of scaffolding in describing the development of ‘writing frames’. They have developed a

can succeed at tasks on their own, suppressing the desire to step in and help too soon yet being prepared to work alongside the pupil when a genuine need arises.” Maybin et al (1992) argue for the retention of the idea (covered in Bruner’s original usage) that scaffolding is help given to enable a pupil to complete a specified learning activity. They suggest that this and the teacher’s tuning in to the pupil’s current state of development are necessary conditions for a teaching activity to count as scaffolding. They also suggest that the learner’s successful completion of the activity and increased competence may also be necessary conditions.

If we see scaffolding as derived from Vygotsky’s concept of the zone of proximal development, it would certainly be important to expect successful scaffolding to produce increased competence rather than merely facilitate the completion of tasks. Giving a pupil a correct spelling is not scaffolding; helping the pupil use existing phonic knowledge, perhaps by making links with known spellings, may be. Bruner (1985, p.25) refers to how the teacher scaffolds the learning task “to make it possible for the child, in Vygotsky’s word, to internalise external knowledge.”

The work of several researchers in the field of teaching writing, however, suggests that the metaphor can have a more precise meaning when applied to the teacher’s role. Scardamalia and Bereiter’s (1985) “procedural facilitation” draws on the theory of cognitive apprenticeship (including, as we have seen, the use of contrasting models of expert and novice writers). Pupils are given prompts (in the form of cue cards) which provide scaffolding for their writing. The cards are “faded out” as students internalise the processes which the prompts invoke. Scardamalia and Bereiter (1994, p.303) believe that their “facilitations aim to boost the level of reflective thought or critical thought that goes on in composition but to do so without stimuli or aids to thought that stand outside the composing process.”

Wray and Lewis (1997) make explicit use of the metaphor of scaffolding in describing the development of ‘writing frames’. They have developed a

model of teaching and learning based on a curriculum cycle of a) teacher modelling/demonstration b) joint activity c) supported activity d) independent activity.

Englert and Raphael (1988) describe how scaffolding is provided in the Cognitive Strategy Instruction in Writing programme, developed at the Institute for Research on Teaching, Michigan State University. After modelling strategies that develop the comprehension of texts, teachers introduce 'think sheets' that guide students through the writing process by providing "a temporary scaffold until strategies and questions are internalised" (p.518). Scaffolding is also used to develop the metacognitive strategies pupils need for self-monitoring and self-regulation.

The program has been developed for pupils with special educational needs, but Englert and Raphael have also used some of its features with 10-11 year old children of "low-average to high average" ability (Raphael et al, 1989), including 'think sheets' to guide students through prewriting, drafting and revising. The think sheets were used, for example, to help students focus on audience and purpose. The conclusions of Raphael et al focus mainly on the link between metacognition and writing development, but it is clear from their research (which included comparing the work of experimental groups with that of a control group) that scaffolding in the form of think sheets contributed to the development of children's writing.

The extent of such contributions in classroom settings needs further research, as Webster et al (1995, p.58) point out. In their own study they "identified the teacher's scaffolding of interactions as highly influential in children's learning" of literacy (p.158). Their findings would be stronger if they had provided more clearly defined evidence of the children's learning. Such evidence often seems to be the missing link in studies of the contribution of scaffolding to learning, especially in Britain.

Some writers have questioned whether the concept of scaffolding can be applied to the classroom situation. As Hennessy (1993) points out,

programmes such as Palincsar and Brown's (1984) reciprocal teaching have shown that the concept of scaffolding can be translated from its origins in the study of 1:1 interactions to classroom practice. Collins, Brown and Newman (1989) illustrate their definition of scaffolding ("the supports the teacher provides to help the student carry out a task", p.482) by reference to the help or suggestions provided by teachers in Palincsar and Brown's reciprocal teaching of comprehension and to the "physical supports" in the form of cue cards used in Scardamalia, Bereiter and Steinbach's (1984) procedural facilitation of writing. Collins et al point out that requisites of scaffolding are accurate diagnosis of the student's current skill level or difficulty and the availability of an intermediate step at the appropriate level of difficulty in the carrying out of the target activity.

The concept of scaffolding has been used in research into the teaching of writing (Applebee and Langer, 1983; Bereiter and Scardamalia, 1987; Sperling, 1990; Graham, Harris and Troia, 1998), the development of domain-specific knowledge (Adey and Shayer, 1994; Tanner and Jones, 1999) and the teaching of able pupils (Kanevsky, 1994).

Recently, the utility of the scaffolding metaphor has been re-examined in a group of articles led by Stone (1998a). It is clear that the metaphor is still seen as useful, particularly in terms of viewing scaffolding as a process (Stone makes the distinction between a scaffold (such as a single device) and the process of scaffolding): Palincsar (1998), for example, argues that "if scaffolding is to remain a useful construct, we must examine it in a more holistic way, and view it as one aspect of effective teaching" (p.372).

Butler, too, is anxious about a narrow focus on strategies which will not lead to transferable or sustainable learning if the selection, use and evaluation of the strategies are neglected; she recommends interactive instructional approaches (such as those of Palincsar and Brown, 1984) that embed strategy instruction in the context of meaningful tasks (Butler, 1998).

### Studies of the use of checklists and similar devices

Underpinning checklists is the idea of self-assessment or asking oneself questions about one's work. King (1991) found that students trained to ask themselves questions outperformed students who took and studied notes 'their own way'. Some studies of the use of question have involved students in asking themselves questions about strategies and text structures. Englert et al (1991) refer to a number of such studies with which they were involved, pointing out that the questions were designed to make the strategies and structures "visible" to students. Englert et al found that students' writing improved through the use of 'think sheets' which asked them to answer questions about the audience, purpose and organisation of their expository writing.

Rosenshine, Meister and Chapman (1996), having defined scaffolds as "temporary supports" which "serve as aids during the initial learning of a complex skill or cognitive strategy" and which "are gradually removed as the learner becomes more proficient", give as an example of a scaffold "a checklist against which students can compare their work" (p.186).

Graves, Montague and Wong (1990) found that a simple checklist of story grammar elements led to improvements in the writing of less able students. They describe the checklist as a 'scaffold' and 'metacognitive prompt' (Graves and Montague, 1991).

Harris, Graham and colleagues in an extensive array of studies (eg Graham and Harris, 1989; Harris and Graham, 1985) have explored how explicit teaching of text structure (including narrative structures) can help students develop their writing. Included in the work of Harris and Graham is research into the use of checklists in teaching narrative structure, but only the study of Danoff, Harris and Graham (1993) seems to focus on pupils of at least average ability. Danoff found that the writing of pupils of average ability improved through the use of checklists, but it needs to be remembered that Danoff included only three such students in her study.

Williams (2000) provides a checklist as an illustration of how pupils can be “reminded of successful learning strategies which they have used in the past” to “enhance metacognition” (p.6). The checklist entitled ‘What to think about when planning a story’ asks pupils to specify audience, genre, characters (and describe them), setting, important action, title and opening sentence. She does not, however, provide any information on how teachers used the checklist or the impact on pupils’ learning, although she makes a powerful argument (using examples from the practice of teachers) that “explicit teaching focussing on metacognition can help to raise levels of literacy” (p. 1).

It is clear that checklists have been seen as having different purposes:

- (i) to remind pupils of important features of a task at the planning stage (Williams, 2000)
- (ii) to help pupils assess progress *during* the undertaking of a task (Graves and Montague, 1991)
- (iii) to help pupils assess at the end of a task (as with the ‘self-edit think sheets’ of Englert and Raphael, 1988) how well they have done it (Rosenshine, Meister and Chapman, 1996)

Sometimes a checklist can serve more than one of these purposes, as with Quicke and Winter’s strategy card (1994).

Some checklists take the form of questions (Englert and Raphael, 1988; Williams, 2000), others statements or single words (Graves and Montague, 1991). Checklists also vary as to whether the checklist has a facility to be filled in, such as with words (Williams, 2000) or by ticking (Graves and Montague, 1991), or not (the studies of Danoff: Danoff et al, 1993, Harris and Graham, 1996).

Nearly all studies of the use of checklists seem to have been made with pupils of less than average attainment. No studies appear to have focused explicitly on the writing of more able students. Of the literature cited above, on the use of checklists, the work of Englert and Raphael (1988), Graves

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and Montague (1991), Danoff et al (1993) and Williams (2000) have concerned children's writing (all but Englert and Raphael (1988) focusing on narrative).

Montague, Graves and Leavell (1991) claimed that procedural facilitation in the form of story grammar cue cards (which listed story grammar elements) helped learning disabled students produce better stories but led to normally achieving students writing stories inferior to their earlier ones. This study has a number of limitations, however, including striking gender differences in the composition of the normally achieving and learning disabled groups and the conducting of the story writing sessions by graduate students rather than the pupils' own teachers. One wonders whether the normally achieving pupils became bored: they did not actively use a checklist but simply read the cards.



## Introduction to the research design

### Research rationale: the choice of action research

I have adopted an action research model because firstly I want to use my research to improve my practice as a teacher. I see teacher-led action research as a systematic and reflective enquiry undertaken by a practitioner in order to teach more effectively. In its name 'action' denotes the teacher's work which will include the trying of new methods; 'research' is the process of enquiry into how the new methods work. Theory in action research is grounded in the data (Glaser and Strauss, 1967).

In developing my definition I am indebted to Stenhouse (1980) who saw action research as a systematic enquiry made public and to Carr and Kemmis (1986) who provide a definition which McNiff (1988) suggests may be the most widely accepted working definition of action research:

“Action research is a form of self-reflective enquiry undertaken by participants ... in order to improve the rationality and justice of (a) their own social or educational practices, (b) their understanding of these practices, and (c) the situations (and institutions) in which these practices are carried out.”

For me as a teacher the rationality of my classroom work derives from the development of what Applebee (1989) calls 'principled practice'. Applebee saw this as dependent on the growth of a teacher's understanding of *why* particular approaches are selected and on the teacher's developing of expertise in creating solutions to classroom problems. Action research seems an appropriate method for developing principled practice: it incorporates the kind of reflecting about experience that Applebee believes will help teachers “continue to grow, improving their own teaching and, ultimately, helping them contribute to a continuing professional dialogue about the principles of effective practice” (ibid., p.222).

As a headteacher I am interested in my findings being shared with my colleagues because I believe that it is important that classroom research is

undertaken by teachers and shared (Anthea Millett, head of the Teacher Training Agency, told Middle School headteachers at the National Middle Schools' Forum annual conference, 1998: "Every school should have a teacher undertaking a piece of research ... The only way to move pedagogy on is in the classroom"). As I have indicated in the introduction to my study, I am also keen to improve the performance of able pupils in my school and contribute to an area that is under-researched nationally (Deborah Eyre, until recently the President of the National Association for Able Children (NACE), has concluded (1997b, p.65): "The need to explore more widely ways to meet the needs of able pupils is acute. Research in this field in Britain is very limited and almost non-existent in the field of pedagogy"). In order to share my findings with colleagues at the school level and more widely I need the 'understanding' to which Carr and Kemmis refer in their definition.

I believe that it is important for a headteacher to have credibility as the "head learner" (Barth, 1990, p.46). MacGilchrist et al (1997, p.15) argue that "in *the intelligent school* senior managers see themselves as teachers and learners and as such provide a model for classroom teachers". Feiman-Nemser and Floden (1986) say that the principal in American schools is seldom seen as a respected expert on classroom practice although he is expected to provide leadership, advice, supervision and evaluation. In England headteachers are increasingly expected to be able to monitor and evaluate lessons as LEA guidance on managing the National Literacy Strategy (S.C.C., 1999) makes clear. Action research is developing my skills as an observer and evaluator.

As Kemmis (1993) points out, the action researcher embarks on a course of action strategically "deliberately experimenting with practice while aiming simultaneously for improvement in the practice, understanding of the practice and the situation in which the practice occurs" (p.182). My strategic intent was first general (trying out a variety of teaching approaches which might improve the learning of able children, my ideas coming from a small study undertaken for Open University course E835 from which I had

concluded that the able pupils could not necessarily be identified from available school test data, that they benefited from some choice over learning tasks, and that the drafting process was a means of providing differentiation for them).

As my study developed and I worked through cycles of planning, acting, observing and reflecting I found myself engaging in what Ball (1993, p.41) calls “progressive focusing” and my strategic intent became more particular. Part of my research design has been to immerse myself in the literature, so that ideas and research findings could contribute to my experimenting. The narrowing of the focus of my study developed in parallel with reading of increasingly specific studies.

My techniques are characteristic of those used in action research but, as Kemmis argues, action research is characterised more by its method of a “self-reflective spiral of cycles of planning, acting, observing, and reflecting” (Kemmis, 1993, p.184) than by a particular set of techniques. In action research the choice of technique depends on the need to obtain data to answer questions as they arise in response to emerging hypotheses: as Measor and Woods (1991, p.60) point out, “research design and theory making is ongoing”. Kemmis later admitted (Kemmis and Wilkinson, 1998, p.21): “In reality the process is likely to be more fluid, open and responsive” than the spiral model suggests. I have found this to be true, not least because I am involved in the action of teaching and trying to use new methods of teaching at the same time as researching. As a teacher I have to be a pragmatist and adapt plans, including within lessons, to my developing knowledge of my students: as research goes hand in hand with teaching in an action research model it is not surprising that it must be pragmatic too.

I regard the final part of my work (Phase 3) as the last turn in the series of action research spirals (data collection followed by teaching, followed by data collection), even though I was working with a different group of pupils from those in Phase 2 (and 1) and my work with them might be seen as more of an experiment than action research.

It could be argued that I abandoned action research in Phase 3 in favour of a semi-experimental approach. Action research can contain such an approach (Morse, 1998, p.66: "Qualitative research may ... incorporate quantitative methods into the design to answer particular questions."). Kirsch (1992) argues for methodological pluralism in studies of writing because of the range and complexity of writing processes; and Beach (1992) points out that experimental research in the field of composition is not incompatible with a social-constructivist perspective (which I hold, together with many action researchers, eg Quicke and Winter, 1994; Tanner and Jones, 1999, whose action research project they describe as a "quasi-experiment" in which observation and interview data were used to illuminate and interpret the statistical analysis).

In Phase 3 my research did not end with the semi-experimental work; for example, I interviewed pupils about their plans and stories. It was particularly exciting to trace the line of development from checklist to plan to story. So I was interested in far more than comparisons with the 'control' group. I was interested in *how* pupils had improved and *why*.

Action research allows a wide range of data-gathering techniques to be used and therefore facilitates triangulation. Triangulation helps to create "a more holistic view" because it brings together "different 'lenses' or perspectives ... from the use of different methods" (Morse, 1998, p.6). Triangulation is important to my study as the act of thinking about thinking may alter the thinking (Freeman, 1996, p.193: "The very act of introspection ... alters the vision. Simply by taking the streaming out of the stream of consciousness, that consciousness is itself altered."). To rely merely on students' descriptions of their metacognition would therefore be unsafe.

Tomlinson's (1984) warning about the limitations of retrospective accounts in composition research (in terms of the accuracy of respondents) suggests that the kind of triangulation that action research methods often provide is particularly valuable in a study of writing. Tomlinson argues that writers'

reports about their writing processes are unreliable, particularly if there is a gap between the composing of the writing considered and the act of considering.

It is worth noting that much of the strongest criticism of retrospective accounts seems to come from the study of *experimental* research (Nisbett and Wilson, 1977).

Ericsson and Simon (1980) point out that verbal reports collected concurrently with other records of behaviour make it “possible to check the consistency of the reports with other behaviour” (p.247). When making this statement Ericsson and Simon did not have action research in mind, but their point would seem to apply to action research in which a range of data on behaviour and context can be collected to help check the validity of verbal data.

But no listing of data-gathering techniques can adequately describe action research because the whole teaching process (the action) needs to be examined, including the role, perceptions and values of the teacher. As a participant observer engaged in an ethnographic study, I decided that a key element of the research design was the development of reflexivity (defined by Ball, 1993, p.33 as “the conscious and deliberate linking of the social process of engagement in the field with the technical processes of data collection and the decisions that that linking involves”): I needed to maintain a deliberate “research self” (Ball, *ibid.*) and reflect critically on the whole process in which I was engaged. I decided that keeping a research journal would be a principal means of achieving this, but also that I needed to discuss emerging issues with colleagues in school (and more widely) as I find discussion helps crystallise ideas and enables me to explore more deeply the “theoretical memos” (Strauss, 1987, p.18) which I record in my journal as I respond to data.

Kantor (1984, p.72) argues that “Composition teaching is a multidimensional phenomena, one which requires a research methodology

that will account for its complexity.” Action research includes the five features of ethnographic enquiry that Kantor believes makes such enquiry appropriate to the study of the teaching of writing, namely attention to context, reflexivity on the part of the researcher, the gathering of multiple perspectives (and use of triangulation), the generating of theory from data and the construction of meaning by participants about their writing processes. Kantor describes how he used an ethnographic approach to study “how writers’ intuitions, such as awareness of audience, revision strategies, modes of discourse, and writing as discovery, can be brought to light and strengthened within a supportive classroom environment” (p.75). He does not use the terms metacognition and scaffolding, but it is clear that he was interested in the acquisition of metacognitive awareness and the teacher’s scaffolding techniques which helped it develop.

Kantor’s research (which centred on seven twelfth grade students with above average ability to write creatively, as assessed by a teacher) resonates with me as a teacher of writing because of the “thick description” (Geertz, 1973) he provides in the form of concrete detail of event and setting, and the way in which he documents reflexively the development of “grounded theory” (Glaser and Strauss, 1967) from data, illuminated by his knowledge and reactions to the theories and research of other students of the teaching of writing. It is this quality of ‘resonance’ which gives action research particular strength as a contributor to the development of practice beyond the action researcher’s own context. I see resonance as akin to what Guba and Lincoln (1981, p.62) called ‘fittingness’, the match which the readers of research can see between the findings of the research and their own realities. Guba and Lincoln argue that ‘fittingness’ is a more appropriate concept than generalizability in ethnographic research. As Guba and Lincoln point out, for ‘fittingness’ to occur, it is necessary to provide detailed information about the entity studied and the setting.

It is also, of course, necessary to supply evidence and theoretical underpinning. Griffiths and Davies (1993), in action research into how Year 5 and 6 pupils could be helped to reflect on the processes by which they

learn (with a view to helping them become better at it), point out that action research “focuses on the rigorous examination of a single situation, using knowledge drawn from experience and research findings to illuminate it” (p.45), but they provide scanty reference to the substantive literature (on pedagogy and psychology). Although they show how children can be helped to examine their own behaviour, they provide flimsy evidence (in the form of one somewhat unconvincing example) in support of their claim that the children were “much more able to think of particular processes they needed to work on rather than global ones” (p.50): the one example (a child moved from saying “Writing. I want to improve because I will be able to write better” to “I learnt a lot when I talk [sic] to other people and when I sit on my own table I get more work done”) would have been more compelling if the child had referred to the writing goal (thus allowing like to be compared with like; pupils had been asked to review their self-chosen goals after an interval of two months).

My reading of the substantive and methodological literature has encouraged me to believe that action research is appropriate to my study. Action research, particularly in the form of case-studies, is an established method for research in the field of students’ writing (Bissex and Bullock, 1987; Lensmire, 1994). Action research also seems suited to the study of the learning of able pupils as it enables individual differences to be explored more readily than quantitative methods (or qualitative methods which collect data at only one point in time). Freeman (1996) recommends qualitative methods for research into high ability because they allow the researcher to probe individual reactions to experiences. Clark (1997) describes a number of action research projects focusing on more able pupils.

Action research has been used to investigate improving learning through metacognition (Baird, 1986), and, as I indicate in my Literature Review, Tanner and Jones (1999) report an action research project which examined the scaffolding of metacognition in mathematics.

## Setting

The research was undertaken in a Middle School in the east of England. The school contains nearly 500 boys and girls aged 9-13 (National Curriculum Years 5-8).

Pupils are grouped in mixed ability classes for most of their timetable, except in Year 8 where they are set for Maths and were set for a small part of their English timetable at the time of Phase 2 of my study.

When the school was last inspected by OFSTED (1996) pupils reached national expectations in nearly all subjects. In English the attainment of pupils in Years 7 and 8 was judged to be good but in Years 5 and 6 pupils' vocabulary was unadventurous and the use of grammatically complex sentences and opportunities for extended writing were limited. Overall, standards were considered to be 'generally in line with national expectations', but work was not always sufficiently matched to pupils' attainments and tasks set for middle and high attaining pupils often lacked challenge and did not actively engage pupils in their learning.

In 1999 75% of pupils achieved Level 4 in the English SAT at the end of Year 6 (national figure, 70%); 23% achieved Level 5 (national figure 22%). Results for English since 1996 have improved at a rate higher than the national improvement rate.

The school's catchment contains a mixture of private and social housing. The population has a low turn-over, but unemployment is well above the average for England (the electoral wards in which most of the pupils live have a rate of unemployment which places them in the 10% most deprived wards of the County Council). The percentage of pupils eligible for Free School Meals is a little above the national average.

About 4% of the pupils have a racial origin which is other than that of the majority white British. Overall, boys outnumber girls, but in most Years this difference is close to the national average. The school has been



oversubscribed in each of the last two years. About a quarter of the pupils come from outside the catchment area. The turn-over of staff is low. Most of the English teaching in Years 7 and 8 is in the hands of experienced specialists.

At the time of the OFSTED inspection the school was described as having a 'very positive ethos' and 'strong sense of community with shared values and purpose'. Inspectors decided that pupils showed good levels of interest and concentration and that the school was very orderly.

### The teacher-researcher

I have taught English for nearly all of my career of 26 years, in grammar, high and middle schools. After nine years as Head of English in a middle school I moved into senior management but still taught some English classes. I developed my interest in teaching writing during Somerset's involvement in the National Writing Project when I acted as the workshop co-ordinator for West Somerset.

In my current post I have been keen to promote the school as a learning community in which teachers, as well as pupils, are learners (Fullan, 1993). As part of the *School Development Plan* we have established *mini-research* groups to examine a range of whole-school issues such as pupils' sense of responsibility for learning and the role of reflection by pupils in learning. One of my aims has been to create a 'reflective culture' (Tuckwell and Billingham, 1997) in which 'Yes' is the answer to the questions which Tuckwell and Billingham ask: 'Is the headteacher seen to be a continuous learner? Are the purposes and outcomes of that learning shared with the staff?' (p.183).

Accepting the point of Measor and Woods (1991, p.67) that in ethnographic research it is "essential methodologically to give some details about the researcher" to help the reader of the study interpret the responses of participants, I have thought about how the pupils in the study may have perceived me.

I have had to consider whether my role as headteacher has affected pupils' responses. If I had taken pupils out of lessons not knowing them, they might have perceived me as the headteacher, but in Phases 1 and 2 I was primarily an English teacher, although it would be naïve to believe that they forgot that I was the headteacher. In Phase 3 I did not teach the pupils as their regular teacher, but my working with them was as an English teacher. As I mention in Phase 3, at the time of the week when I worked with them another English teacher took out a group of less able pupils, so my working with the more able would not have seemed unusual.

My final point about myself as teacher-researcher is that, as I indicated in my introduction, I view learning as socially constructed. Beach (1992), pointing out that the recent shift towards composition theory focusing more on particular writing contexts and on differences among writers, which has been underpinned by a social-constructivist perspective, has led to forms of research that reflect social conceptions of learning. Action research is suitable for a teacher-researcher with a social-constructivist perspective because it facilitates focusing on how knowledge is created in a social context and the interaction between teacher and learner. Swanson-Owens and Newell (1994), arguing that in the field of writing process and instructional research have operated on parallel and not intersecting tracks, with process studies being largely detached from instructional issues, and instructional issues ignoring how pupils internalise learning and incorporate it into their composing strategies, declare: "What we now need are studies that employ methodologies that enable us to acquire a better understanding of the interrelationship between the role of the teacher and the role of the student as they interact in school contexts" (p.144). I believe that action research provides such a methodology.

	1997				1998				1999							2000											
	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	July	Sept	Oct	Nov	Dec	Jan	Feb	Mar	
	PHASE 1								PHASE 2											PHASE 3							
	Part 1				Part 2				Part 1											Part 2							
Pupils' Journals					*	*	*		*	*	*	*	*	*													
Questionnaire							1.1		2.1	2.2		2.3	2.4	2.5		2.6	2.7, 2.8		2.9			3.1 Gp.A		3.1 Gp.B	3.5, 3.6		
Interview		*	*	*	*	*	*	*					*	*		*	*	*	*	*			*		*	*	*
Incidental observation of pupils	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*			*		*	*	*
Discussion with pupils in lessons	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*			*		*	*	*
Major writing tasks					Space story, 'Goodnight, Mr Tom'	Space story	Shakespeare Booklet	Poetry		Writing in role		'Macbeth' essay	Discovering John Trenchard	The Perspective of Another Character		'Moonfleet' essay	Writing of own choice	Writing of own choice	Writing of own choice	'Lost'	Dialogue and Diary		'Abandoned'		'Trapped'		
Prompts							'Thinking Sheet'	'Thought Commentary'						'Thoughts on Planning'				Checklist	Checklist	Checklist		Checklist (Group A)		Checklist (Group B)			

The timetable for the study is given below, divided into Phases.

## Phase 1

### Introduction

In Phase 1 I carried out action research with a Year 7 class. Initially, my focus was on improving provision for more able pupils. As I indicated above (in the Introduction to the study), my focus narrowed considerably during the Phase. I have divided Phase 1 into two parts: Part 1 (before I narrowed the focus onto the role of scaffolding in promoting metacognition in the service of more able pupils' writing development), Part 2 (after I narrowed the focus).

During Phase 1 I gave the more able group some tasks which were different from those given to the rest of the class, although the majority of tasks were set for all pupils. The different tasks took the form of (i) reading more challenging texts (supplied by me) and undertaking associated written work; (ii) completing writing activities based on the pupils' current self-chosen reading book; (iii) undertaking other tasks which capitalised on pupils' particular interests.

Phase 1 was also a means of piloting my research methods, so I report on these as part of my findings for the Phase.

A timetable for Phase 1 is provided overleaf.

## Timetable for Phase 1

	1997				1998			
	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr
	<b>PHASE 1</b>							
	<b>Part 1</b>				<b>Part 2</b>			
Pupils' Journals					*	*	*	
Questionnaire							1.1	
Interview		*	*	*	*	*	*	*
Incidental observation of pupils	*	*	*	*	*	*	*	*
Discussion with pupils in lessons	*	*	*	*	*	*	*	*
Major writing tasks					Space story, 'Goodnight, Mr Tom'	Space story	Shakespeare Booklet	Poetry
Prompts							'Thinking Sheet'	'Thought Commentary'

## Setting

The research setting was the classroom used by a class of 30 Year 7 mixed ability pupils who had seven lessons of 35 minutes for English each week (six of the lessons being double periods).

All observations and recordings were conducted in the classroom or in an adjacent area during English lessons. This was a deliberate decision as I wanted the participants to see me as their English teacher rather than as an investigator or the headteacher, which might have been their perception if I had removed them from other lessons or seen them at a break time in my office. I taught the pupils for all of their English lessons for the year. I had not taught the pupils before. I had taught similar classes in the school in the two preceding years.

## Participants

I decided initially to keep open the composition of the group of pupils whom I was studying rather than have a fixed group. My reasons were firstly that I believed that existing quantitative data on the pupils was not an adequate basis for identification and secondly that I wanted identification to spring from provision rather than be dependent on it (Eyre 1997a, p.75).

After a few weeks I identified six pupils whom I considered would or could be in the top 20% of national attainment in English. In some cases their strengths were particularly in one or two aspects of English rather than in the whole subject. I made this judgement on the basis of Year 6 data (reading scores on the Suffolk Reading Test (Hagley, 1987), National Curriculum SAT results, teacher assessments) and my own qualitative assessments of speaking and listening, reading and writing. All of the pupils had scored 108 or more in the Suffolk Reading Test, which has a range of -70 to 130+, except one pupil whose score did not seem to me to reflect his ability.

When I decided to focus on writing, I added a pupil with a particular strength in it, perhaps not a 'top 20%' pupil but one who showed considerable facility in developing first drafts and responding to opportunities for creative use of language. I kept in the group a pupil whose strength was not in writing but whom I suspected was an able underachiever.

The seven pupils with whom I worked comprised four boys and three girls. They were 11 to 12 years of age. Six of the pupils were of white British descent and one was of mixed white British and European descent.

## Sources of data and analysis

### Introduction

I chose methods initially which would match my action research approach. I wanted to be open to a wide variety of information. Much of my early recording of data took place in my journal which I developed into a 'data

record' (Graue and Walsh, 1998). My journal also served to facilitate the development of my thinking, as I describe below. The interweaving of data collection and analysis, characteristic of action research (Lacey, 1993), greatly assisted this process; another key component was a wide range of ideas and research findings from the literature on substantive issues and methodology. I collected quantitative data (such as pupils' reading scores), but most of the data was qualitative.

As Kirsch (1992) points out, the action researcher needs to be opportunistic in the gathering of data. I found that data and ideas sometimes came from unexpected sources. I also found that the regular re-visiting of my data record and notes on key readings revealed points of value not realised previously. Writing about data helped me to interrogate it, as Ball (1991) found.

When I reached the point in Phase 1 at which I came to focus on scaffolding and metacognition, I sharpened my data sources to allow them to accommodate the narrowing of focus: so, for example, I used interview questions which explored specifically pupils' responses to the scaffolds that I had provided to support metacognition.

I present a description of my approach to the analysis of data next. Details of the analysis of some particular sources of data are included within the section on individual data sources.

In examining data, including field notes, transcripts of interviews and responses from questionnaires, to identify categories and patterns, I followed the method of 'analytic induction' (Glaser and Strauss, 1967), as used by Kantor (1984) in his ethnographic study of more able writers. Unlike Kantor, however, I usually noted down (during the main stage of Phase 1) my reactions to data in my journal (Appendix 2.12) rather than annotate transcripts and field notes, as I found that writing about data in sentences helped me develop my thinking more readily. I did annotate some transcripts at the end of Phase 1 and make some comments in the margins of

my journal against field note entries. Full annotation in the form of coding came later (Appendix 1.11). My journal contained all my thinking, often in the form of questions (eg 12.1.98: “The logs could be a way of linking scaffolding and metacognition. What other ways could there be?”). Moss (1992) notes how she frequently asked herself questions when conducting ethnographic research in composition to help develop reflection and introspection. An important element of my procedure was to re-read entries at frequent intervals (to develop “familiarization” with the data, Ball, 1991, p.182) and periodically to identify what I called ‘key issues’. These included reflexive summaries of how I had been operating (eg 10.1.98 “What in fact I have been doing is building up case-study data on several pupils. I need to collate my conclusions on these: 1) ...” ) and directions to myself as to what data to collect next (“theoretical sampling”, Ball, 1993, p.41); for example, 10.1.98 “Interviews ... too abstract. I need to discuss actual learning experiences with pupils and pieces of work”. Under ‘key issues’ I also listed emerging themes.

The inclusion in my journal of reactions to my reading of the literature on the emerging themes helped me keep data and theory close together. The interaction of data and theory (Nias, 1991) helped me look more critically at my data and identify themes which fed the development of my own theory in the form of “theoretical memos” (Strauss, 1987, p.18). The act of writing ‘key issues’ sections helped me “discover and express ideas ... germinating throughout the study” thus far (Bos and Richardson, 1994, p.196). It also played an important role in ‘progressive focusing’ (Ball, 1991). From one such writing episode emerged the idea of looking at the inter-relationship of scaffolding and metacognition in the development of writing skills.

I linked emerging themes in diagrammatic form (Strauss, 1987).

Metacognition and scaffolding first appeared together in such a diagram (Appendix 1.5) but not in the direct, dynamic relationship which later ensued.



At the end of the data-collecting stage of Phase 1, I coded interview transcripts with the categories ‘scaffolding’ and ‘metacognition’, using the method of constant comparison (Bogdan and Biklen, 1982) and annotated the transcripts with “theoretical memos” (Strauss, 1987, p. 18) and questions.

My examination of data in Part 1 of Phase 1 had taken the form of “reflective analysis” (Gall, Borg and Gall, 1996, p.570), but it became more like “interpretational analysis” (ibid., p.562) when I narrowed the focus onto scaffolding and metacognition. I re-analysed my Phase 1 data after Phase 3 and found it useful to examine it first by the method of reflective analysis (so that I was open to themes and patterns that I had not seen before) and afterwards interpretational analysis where I was looking for evidence of scaffolding and metacognition as well as issues that I had not explicitly focused on at the end of Phase 1, such as the role of learning objectives in providing scaffolding and the need to look at scaffolding in terms of episodes of teaching and learning rather than the use of prompts by themselves. To some extent I was re-examining the data with ‘new eyes’ after the learning (from my research and literature) of Phases 2 and 3. The fact that I had not coded most of my data to categories by annotation kept it more accessible when re-examined (Mercer, 1991).

Below I describe each data source, provide my rationale for including it in my methodology, outline the procedures through which the data source was employed and provide details of my method of analysis for the source.

### 1. My research journal

#### *Description*

My journal contained details of planning, classroom data (including data from incidental observation, discussions with pupils and information about how pupils responded to activities), analysis and interpretation, reflections on the literature and questions that arose. I also tried to use it to make my values and possible biases explicit, as in the style of the reflexive journal recommended by Lincoln and Guba (1985).

My journal encouraged me to “‘escalate insights’ through moving backwards and forwards between observation and analysis” (Lacey 1993, p. 125). Regular reading and re-reading of journal entries helped this process. All journal entries were dated, which allowed me to reflect more easily on how the thinking of both the participants and myself developed over time.

### *Rationale*

Journals are an established method for research, including at Doctoral level (eg Hanrahan, 1998) who used her journal to reflect on her reading and research as well as her own beliefs and personal history.

In previous research for Masters’ level courses I had found the keeping of a journal essential for recording, analysis and the development of my thinking.

The following extract (8.2.97) demonstrates how the actual writing of journal entries helped stimulate ideas:

“Looking at log of M. and S. I was disappointed that comments were so brief and ‘low-level’ along lines of “We worked well today”. Occasional references to a particular feature of their story.

What children need is help to write in more detail ... I have said a few things as pointers, but this does not seem to have had much effect. I need to consider what scaffolding to provide, perhaps in form of a *pro-forma* (with sub-headings) or could I create an example?”

Hanrahan (1998) notes: “Most of my insight took place in the process of writing” (p.317).

### *Procedures*

Classroom data was usually written down after the lesson (sometimes immediately afterwards but usually in the evening). It included descriptions of how I had introduced activities and how pupils had responded.

### *Analysis*

Analysis of journal entries took place at four 'times':

- (i) within a day or two of data being recorded
- (ii) through regular re-reading during Phase 1
- (iii) at the end of Phase 1
- (iv) at the end of Phase 3

Different forms of analysis were used at the different 'times':

- (i) data began to be analysed in the act of writing it down (Grant-Davie, 1992, p.274: "data collection is a selective process and therefore involves interpretation or coding"); I added context and explanatory notes (and often my reactions and questions) to form a 'data record' (Graue and Walsh, 1998).
- (ii) Regular re-reading led to my being able to link segments of data together. I wrote sections called 'key issues' every half term or so to evaluate my progress and plan future work.
- (iii) At the end of Phase 1 I read through all my journal entries.
- (iv) At the end of Phase 3 I coded journal entries (Appendix 1.4 shows the categories used and Appendix 1.11 is an extract from my journal showing the codes in use).

## 2. Interviews with able pupils

### *Description*

I conducted eight interviews with pupils, two of which were with individuals, two with pairs and the rest with groups of between three and five pupils. The interviews took a semi-structured form (Gall, Borg and Gall, 1996), to allow me to explore pupils' thinking unconstrained by a set

of questions rigidly administered (Hitchcock and Hughes, 1989). Probes (Drever, 1995) were used because I was keen that pupils should be given opportunities to provide reasons for their opinions and examples to illustrate their reasons. I sought responses that were “concrete” (Nias, 1991, p.150) as I surmised that these would make it less easy for pupils to give me the answers they thought I wanted (Hoinville and Jowell, 1978) and more easy for me to detect such answers if they were given.

Initially the interviews sought evidence of pupils’ ability to reflect about their work in general. Later they became more focused, as I describe below under ‘Procedures’.

### *Rationale*

I decided that semi-structured interviews would suit an exploratory period in which my starting point was, as I have mentioned, an attempt to examine able pupils’ ability to reflect on their work.

### *Procedures*

I audio-recorded five of the interviews; in the other three, which were shorter interviews, I wrote down the pupils’ responses. Interviews were transcribed.

I decided to interview the pupils in small groups so that they would feel less inhibited than if they had been on their own and also so that their thinking might be stimulated by the points made by other members of the group (Walker, 1985). At this stage in my research I was looking for possible directions to follow rather than being concerned with issues of one pupil’s opinions influencing another, but I was still keen that pupils provided the kind of particularity in their reasons and examples that had the ring of truth about it. As I noted above (in the Introduction to the Research Design) strong arguments have been put forward about the weaknesses of data derived from general questions in composition research (Ericsson and Simon, 1980; Tomlinson, 1984).

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As I began to introduce scaffolds to develop metacognition, I used interviews to ask pupils for opinions of their effectiveness; most of the interviewing from then on was based on looking at pupils' work with them (in the style of 'stimulated recall', Powney and Watts, 1987, p.27) particularly what they had written onto their copies of the scaffolding devices. Like Quicke and Winter (1994, p.432) I "wanted pupils to make generalisations but to derive these from their shared experience of learning rather than to indulge in abstract discussion about learning in general." Quicke and Winter point out: "such discussions often do not give a true picture of the actual metacognitive knowledge and learning strategies used in specific learning events" (ibid.). Focusing on pupils' work enabled them to be specific. It also enabled me to reflect on my role as teacher (including the nature of any scaffolding that I had provided). Interviews were now more likely to be conducted with individuals or pairs, in lesson time (just outside the classroom when I had another teacher with me and I could record the pupils easily or in the course of the lesson at other times when I wrote down the pupils' responses verbatim).

### *Analysis*

Initial reactions to interview data were recorded in my journal after each interview was transcribed. When I was preparing my account of Phase 1, I coded relevant interview transcripts, using categories of 'scaffolding' and 'metacognition'. At the end of Phase 3 I coded transcripts, drawing on the categories used to code journal entries.

### 3. Audio-recording of pupils working together

#### *Description*

As I indicated above, in my introduction to my report on Phase 1, during the phase I gave the more able group some tasks which were different from those given to the rest of the class, including tasks which capitalised on pupils' particular interests. I used audio-recording (amongst other methods) to investigate how pupils worked on one such task.

Two boys (one of whom was in the group that I had identified as 'more able') had shown great interest in the work we had done based on the film 'Star Wars'. I suggested to them that they might like to write their own space story. After working on their story for a couple of sessions, the boys asked if a third boy (who was in the more able group) could join them, to which I agreed.

### *Rationale*

I wished to record the pupils because I wanted to collect data on the kinds of reflection the pupils might engage in during the process of writing. I had considered the use of verbal protocols (Ericsson and Simon, 1980), but I had decided against using them on the grounds of reactivity (Stratman and Hamp-Lyons, 1994). I was also interested in exploring whether collaborating would encourage reflection.

### *Procedures*

The boys worked in an area adjacent to the classroom. I explained to them that I was going to record their working together because I was interested in how they developed their ideas.

I was aware that the relatively novel experience of having their talk recorded might have affected what the boys said and how they said it, but apart from a few moments of self-consciousness at the beginning of the recording, the pupils did not seem to notice the recorder. Perhaps the unobtrusive location of the device helped (Hitchcock and Hughes, 1989).

The recording spanned one and a half hours, spread over two sessions.

The recording was transcribed.

## *Analysis*

I analysed the recording in the same ways as I used to analyse interview data (described above).

### 4. Able pupils' written work

- a) writing assignments (such as the booklet about Shakespeare which the 'Thinking Sheet' (described below) was designed to help pupils make);
- b) 'Thinking Sheet', 'Thought Commentaries', logs and self-assessment questionnaire designed to encourage metacognition:

#### (i) The 'Thinking Sheet'

##### *Description*

The 'Thinking Sheet' (Appendix 1.3) was a pro-forma which asked pupils to record answers to questions the answering of which would help them complete the subtasks of a writing activity (a booklet about Shakespeare). The pupils were given a 'Task Details' sheet (Appendix 1.2) setting out the subtasks, which began with the identification of an audience for the booklet. 'Reflect boxes' were provided on the Thinking Sheet to help pupils evaluate progress and 'Help boxes' to enable them to request assistance.

##### *Rationale*

The 'Thinking Sheet' was an attempt to provide structured support to help pupils take a 'metacognitive approach' to an activity (a booklet about Shakespeare's life) which I had set for a similar class the year before; then I had asked the pupils to make a list of questions which they could find answers to in sources of information about Shakespeare (so that they would be less likely to copy out large chunks into their booklets) but I had not used the idea of audience (Walvoord 1985, describes the use of such questions). I also wanted to *integrate* opportunities for developing metacognition *into* the activity rather than at the end, as in the case of the logs which I asked pupils to complete at the end of sessions.

I developed the idea of the Thinking Sheet from Englert and Raphael's (1988) Think Sheets which they created to help learning disabled pupils



overcome their “metacognitive deficiencies” (p.519). The Think Sheets “scaffold writing by presenting a series of prompts that frees writers from trying to remember the self-questions and strategies for each writing process” (p.518).

This description may seem to suggest that the prompts are a mere memory aid, but this would be an injustice to the Cognitive Strategy Instruction in Writing (CSIW) programme of which the Think Sheets form a part. The programme had particular appeal to me because of its emphasis on process writing, the importance of genre knowledge (heightened for me by my reading of Lewis and Wray, 1995), a ‘dialogic approach’ (p.517), which involved the teacher in what is essentially scaffolding, the teaching of task-specific strategies (such as considering audience) and the development of metacognitive control strategies. I was keen to apply the programme’s key elements to the teaching of able pupils.

I was also keen to provide an activity which gave pupils scope for independent research (Beamon, 1997, p.89, sees such activities as suitable for assessing young adolescents’ “expanding metacognitive skills”, but I was interested in how the skills would contribute to domain-specific skill development).

The Englert and Raphael (1988) Think Sheets contain questions which help students focus on such issues as audience (“who am I writing for?” p.518), purpose and text structure. My Thinking Sheet starts with a similar question on audience but builds in an activity which involves researching the audience’s wishes. The Thinking Sheet thus has broader purposes than the Englert and Raphael Think Sheets.

The Reflect box and Help box were my ideas, both designed to encourage reflection and the latter, in addition, to show the teacher what subsequent scaffolding might be needed.

As a further encouragement to pupil reflection, I decided to make the assessment criteria explicit (Black and Wiliam, 1998), as the reverse side of the Task Details sheet shows. I devised 'Level statements', based on the National Curriculum (DfE, 1995) but giving a particular focus to metacognition, that were applicable to the task set.

Although I did not realise it at the time, my attention to assessment criteria *derived at least in part from a growing concern with learning objectives.* My re-examining of Phase 1 journal entries at the end of Phase 3 (using a greater range of categories than previously) revealed that in the first part of Phase 1 I had identified a need on several occasions to make my learning objectives more explicit (eg 5.9.97 "Making objectives explicit is key. Much of 'good work' depends on defining 'what good work is': how far does this apply to the able pupil?"). At the end of Phase 1 I had recognised that clarity of learning objectives was important to scaffolding but I had underestimated how much the issue of learning objectives had figured as a *concern.*

### *Procedures*

All the pupils in the class were given the 'Task Details' sheet (setting out the details of the Shakespeare booklet assignment), together with the Thinking Sheet. The sheets were read through and discussed with the children. The Thinking Sheet was completed as pupils worked through the activities.

### *Analysis*

I read the Thinking Sheets during lessons whenever I could, because it was important that I responded quickly to any request for help contained in a 'Help box'. I collected the sheets at the end of lessons and studied them, responding to pupils' reflective comments and requests in the next lesson. Discussion with pupils helped me to analyse their responses and to explore the thinking that lay behind the comments and questions. I began to identify categories in the data and choose examples which illustrated them. When I interviewed the more able pupils about their use of the Thinking Sheets,

pupils had their sheets in front of them. Both pupils and I were able to refer to the sheets, which helped me to analyse the data further. At the end of Phase 1 I completed the identification of categories, retaining copies of sheets which illustrated them. I was able to re-examine the copies at the end of Phase 3.

## (ii) The Thought Commentary

### *Description*

The Thought Commentary (Appendix 1.7) was the provision of a space at the right-hand side of a page of writing paper in which pupils were encouraged to put their thoughts, ideas, uncertainties and questions *as* they wrote.

### *Rationale*

The purpose of the Thought Commentary was to enable pupils to reflect on their writing, to record any questions to themselves and to note sudden ideas. The word ‘commentary’ came to me because I wanted pupils to run a line of metacognitive thought alongside their developing writing (Quicke and Winter, 1994, describe how, in an action-research study exploring a metacognitive approach to teach low-achieving Year 8 pupils’ they introduced to pupils two discourses, ie “the formal discourse of the subject” and the other “the discourse of learning”. Quicke and Winter used a strategy card to develop pupils’ awareness of the discourse of learning while engaged in the discourse of the subject. I aimed to ground the discourse of learning in the act of composition by providing pupils with an opportunity to use and then evaluate a metacognitive tool).

### *Procedures*

The Thought Commentary was explained to pupils as a device to help them record thoughts, ideas and questions while writing; pupils readily understood the choice of the word ‘commentary’ because I had used it previously in the context of events such as football matches and in drama, one pupil providing a commentary on another’s actions. I used the device

once with my Year 7 class towards the end of Phase 1, having piloted it with my Year 8 high ability set.

### *Analysis*

I examined pupils' commentaries and identified categories. I also made photocopies of two of the commentaries of pupils who had made what I considered to be a particularly metacognitive response. I re-examined these commentaries at the end of Phase 3. To help me look closely at the kind of thinking going on, I made a written examination of each part of one pupil's commentary (Appendix 1.7).

### (iii) *Logs*

#### *Description*

The log was a record which I asked pupils to keep to document their thinking about their written work. Although the pupils did not have previous experience of logs, I provided very little assistance in helping them use them (assuming naively that they would write them up readily).

#### *Rationale*

Logs or journals are a well-established means of encouraging pupils to reflect in the service of their learning (Sanford, 1988; Hollister, 1992; Beamon, 1997). They have been used to help pupils reflect on their reading and writing (Greene, 1993), particularly in the form of response journals in which the teacher enters into a written dialogue with the student (Atwell, 1998; Wyse, 1998). Gallagher and Gallagher (1994) recommended that they be used by very able pupils, citing the example of the journals of da Vinci and Darwin. O'Brien (1999) provided more able pupils (including Middle School age pupils) with 'Thinking' Log Books for science.

O'Brien's concern was rather with what the logs revealed about the pupils' thinking (which O'Brien concluded showed strong evidence of metacognition) than with how the use of the logs contributed to the development of their thinking, but it is clear that the logs facilitated thinking (for example, he reports that pupils often use the log books for "thinking out a problem for themselves", p.16). Armstrong (1994) examined the use of

dialogue journals with very able students and concluded that they were “an effective component of collaborative, student-centred learning” for such students (p.16), allowing the teacher to take account of individual learning styles.

When I had used logs previously (Darch, 1987), I had identified a number of benefits from using logs, particularly for the teacher; but I had underestimated their potential in developing metacognition in the service of pupils’ learning.

### *Procedures*

Pupils were asked to complete the logs before finishing a session of work. I used logs with a pupil working on a writing assignment in response to her reading book and with the boys working collaboratively on a science fiction story. In the case of the latter, after the boys had written little in their log at the end of their first session, I asked them to discuss with each other *before* they made their log entries how they had worked; I hoped that their discussion would stimulate reflection and lead to fuller entries.

### *Analysis*

I recorded initial reactions in my journal. I re-read the logs at the end of Phases 1 and 3, coding data as I had done for interview data.

#### (iv) The structured log (‘A Learning Log’)

##### *Description*

The structured log (Appendix 1.1) is a questionnaire which was designed to develop *metacognition* by asking pupils to specify their aims for a lesson, to identify tasks deriving from the aims and to review their work half-way through the lesson and at the end.

##### *Rationale*

I devised the structured log after I concluded that pupils needed support to help them write logs (Journal 8.2.98 “What children need is help to write in more detail, reflecting much more carefully on how they have worked

together and developed their work. I have said a few things as pointers, but this does not seem to have had much effect. I need to consider what scaffolding to provide, perhaps in form of pro-forma (with sub-headings) or could I provide an example?”).

### *Procedures*

I tried out the structured log with two pupils to whom I had given the task of writing a story. When the pupils were hesitant in answering the first question (‘What is your aim for today’s session?’), I gave them some suggestion about how to write the aim. I also used the log with my high ability Year 8 set.

### *Analysis*

I examined the structured logs for evidence of (i) reflection, (ii) benefits of collaboration in facilitating reflection. I also examined the structured logs to determine whether they had been more useful than logs in developing and recording reflection. In analysing the logs I took into account the data in my journal describing how I had helped the pupils get started on completing them. The two pupils’ responses on the logs were so similar (I concluded that they had filled them in collaboratively) that a more detailed content analysis was not needed.

## Findings

### Introduction

When I came to write up my findings at the end of Phase 1, I examined my data sources and data record for evidence of metacognition and scaffolding, looking particularly for any evidence that bore on the inter-relationship of metacognition and scaffolding. It was not a difficult task to collect instances of metacognition and scaffolding and their relationship as I found few, except those which I had consciously planned for. This was because I had not developed a sufficiently clear understanding of my key terms, ‘metacognition’ and ‘scaffolding’, and more particularly because, as I now realise, I neglected looking at the wider context, focusing too much on individual scaffolds rather than the process of scaffolding (Stone, 1998b,

p.412, points out: “There are entities that serve as scaffolds, such as diagrams, and these entities serve an important role in instruction. However, what is more crucial is the process by which these entities are used to foster new understandings”). I had accepted the point made by Maybin et al (1992) that scaffolding “is not just any assistance which might help a learner accomplish a task” (p.188), but I had not formed a working conceptualisation of scaffolding that enabled me to identify it with precision or confidence.

In the case of the scaffolds which I had provided, such as the Thinking Sheet, I was looking too narrowly for ‘thinking about thinking’. My concept of metacognition had not developed sufficiently to take account of the distinction between metacognitive knowledge and metacognitive control (Brown, 1987) and of the role of metacognition in self-regulation (such as in planning).

I give below a summary of my findings (and discussion of them) as made at the end of Phase 1, followed by a re-interpretation of my data in the light of Phases 2 and 3. I have decided to present my findings in this way (rather than provide a composite view of ‘then’ and ‘now’ or a view of ‘now’ alone) because my perception of my findings as they were at the end of Phase 1 influenced my subsequent work and part of the story of my research is how my decisions as to the development of the action research were influenced by my view of findings at different points in the study. Graue and Walsh (1998) point out that the researcher needs to make his own views and theories explicit.

#### 1. In the first part of the study (before I focused on writing):

Able pupils could identify what they had learned in English in the preceding weeks when asked (in an interview) to provide examples of learning. When I asked one pupil for a written description of his learning, he gave me a more precise answer than the interviewed pupils provided (“I think I’ve improved on my joined writing but I still need to improve. I’m using a wider vocabulary. I think I’m better at using paragraphs”). This

encouraged me to make more use of written responses, on the assumption that writing facilitated reflection.

2. In the second part of the study (after I focused on writing):

a) Initially, able pupils did not seem able to reflect readily on work they had just undertaken except in general terms. Examination of the log completed at the end of each session by the boys working on the science fiction story showed that, in spite of verbal encouragement from me to think about how they had worked individually and collectively, reflective comment did not go beyond “We have written about clothes, hair colour and names” or “We worked well together”. Encouraging the pupils to discuss first how they had worked and then complete their logs had not produced more detailed reflection (The transcript of the pupils’ talk shows that they had a brief discussion about how they had worked, but I did not find evidence of metacognition in the transcription of the boys’ collaborative writing.).

The provision of structured instruments to support metacognition (such as the ‘Learning Log’, Appendix 1.1) yielded more evidence of metacognitive activity than merely asking pupils to keep a log. I had, however, asked only two Year 7 pupils to use the structured logs, and, as I indicated above, they seemed to have completed their logs jointly, so my evidence base was not strong. Nevertheless, it seemed likely that the two pupils had had to engage in reflection that they would otherwise not have done.

The structured log seemed to help pupils clarify their learning aims and identify key tasks. I noted in my journal that some able Year 8 pupils using the log seemed to maintain greater focus on their learning: I thought that those who might have concentrated less well than the others stayed more on task than usual (but I admit that this could have been because they felt that I was keeping a closer eye on their learning and that I was going to use their responses in the log as part of my watching).



The responses of both Year 7 and Year 8 pupils did enable me to develop one-to-one dialogue with them about their work more readily than usual. Freeman (1991) points out that able pupils welcome such dialogue but teachers often do not provide it. Reflecting on this finding of Freeman, I decided that I usually found it more difficult to enter into a sustained dialogue about a piece of work with an able pupil than with an average or less able pupil, perhaps because the able pupil seemed to need less assistance. The scaffolding which I had provided in the form of the logs thus appeared to encourage pupils' self-regulation and metacognition which in turn enabled me to provide scaffolding in the form of individual help (for example, one Year 8 pupil had asked for assistance in how to structure an essay).

*b) I found from class observation and study of the completed Thinking Sheets' that*

- (i) Able pupils readily used the 'Thinking Sheets' (completing all 'Reflect boxes' and 'Help boxes' when necessary).
- (ii) Their 'Reflect boxes' gave them opportunities to consider how they were progressing in terms of each of the subtasks, eg one able pupil wrote in the Reflect box for subtask 1: "My audience research was quite successful but I might need a bit more, so I shall ask someone to fill in a questionnaire."

The pupil was clearly reflecting on her work and identifying a need to use an information-collecting tool: so she is thinking metacognitively about how she can increase the amount she knows.

The more able pupils did not show evidence of more developed metacognition in the 'Reflect boxes' than pupils of average ability. This may be because the able pupils had been able to perform the subtasks relatively easily and simply noted that they were on track in most of their boxes.

Interview data shows that pupils saw the 'Reflect box' principally in terms of enabling them to check what they were doing, eg "Well, it helped me think about whether my questions were OK or not" (Interview 30.3.98, l. 12: Appendix 1.8).

Pupils were able to recognise the value of using writing to reflect:

BD Do you think sometimes writing down a problem helps you to solve it yourself?

L Yes. You can look over a lot more times instead of thinking about it in your head.

(Interview 23.3.98, ll. 7-8 : Appendix 1.9).

They were also able to recognise how their own reflection might help a teacher:

BD So far you've seen the Reflect Box and Help Box in terms of your own thinking and learning. How can they help the teacher teach better?

M The teacher knows what you think and what they need to teach you about it.

C The teacher can see what you need help on.

(Interview 23.3.98, ll. 15-17: Appendix 1.9).

These comments by pupils seemed to indicate an ability to think about their own learning and an awareness of how strategies might help them learn.

As interviews about the 'Thinking Sheets' broadened out into more general questions about thinking, able pupils had a variety of opinions: for instance, they disagreed on whether teachers gave them enough time to think about their work while they were doing it, but agreed with pupil L when she said, "Teachers don't ask you when you've finished to think about your work. They say 'Well done' and give you another piece of work".

(Interview 23.3.98, l. 24: Appendix 1.9).

Some able pupils saw the ‘Thinking Sheets’ as helping them not only in the task of preparing their booklet but also in terms of improving their skills. When I asked pupil C what she had learnt (Interview 27.4.98, Appendix 1.10), she said, “To plan things out better. I don’t tend to plan things very well”.

She now knew “how to break things down”. She added that in future she would think about ‘audience’ when writing; she distinguished between the act of writing words down which she called ‘the task’ and a wider sense of what lay beyond: “I’ll probably go beyond the task to think more about audience and different aspects”.

A key question, of course, was the impact of the scaffolding and metacognition on the quality of the pupils’ work. It was difficult to judge because they had not written a booklet before, but finished booklets were more focused and coherent than those completed in the previous year by a similar class.

Another device to encourage pupils to reflect during the process of writing (rather than at the end) was the Thought Commentary. Year 7 pupils (including the more able) tended to use the commentary space to jot down spellings which they were unsure about; a few noted an idea. Responses were disappointing, especially as Year 8 pupils (in a high ability set) with whom I had piloted the idea had used the commentary space in ways which suggested that it had helped them to reflect. When asked what had helped them in the lesson most, several pupils named the ‘Thought Commentary’ and gave reasons (eg “The thought commentary helped me learn most because I was asking myself questions”, Appendix 1.7). The Year 8 pupils’ poems collectively were of a much higher standard than those written by them three months earlier, but factors other than the ‘Thought Commentary’ could have been influential, such as the sharing at the start of the lesson of what each learner, including me, found difficult about writing poetry and the detailed examination of a model (Ted Hughes’ ‘The Thought Fox’), features similar to characteristics of the workshop approach of Reynolds et al (1984)

with able writers (and features which could themselves be examined in terms of metacognition and scaffolding).

### Re-interpretation of data

Having re-examined my Phase 1 data, I decided to use two questions to structure my re-interpretation:

- (i) What did I find out about my teaching of more able pupils (including the provision of scaffolding) and myself as a teacher of more able pupils?
  - (ii) What did I find out about my able pupils' metacognition?
- (i) What did I find out about my teaching of able pupils (including the provision of scaffolding) and myself as a teacher of able pupils?

My initial concerns about identification had given way, particularly in response to the point made by Eyre (1997a) and Koshy and Casey (1997a) that identification should spring from provision, to a realisation that able pupils would reveal themselves if I provided challenging teaching with scaffolding well matched to pupils' needs.

I realised that I had to know the pupils well to provide such scaffolding and that I needed to develop my teaching approach to find more opportunities for getting to know pupils well. This realisation tied in with Denton and Postlethwaite's (1985) finding that the identification of able pupils depended on the methods of teaching.

I had also learned that I needed to have clarity over learning objectives if I was going to provide appropriate scaffolding. Several of my journal entries refer to a growing realisation of the importance of my having clearer objectives. Discussions with colleagues had also helped me realise the value of the link between scaffolding and clear objectives (eg Journal 8.12.97, describing a discussion I had with a subject leader: "We discussed scaffolding and how specification of levels (in 'pupil-speak') can assist this"). But I did not want to focus too narrowly on National Curriculum objectives (Journal 14.12.97 "I am thinking more and more that my study

needs to be looking at ways of helping able pupils function more effectively as learners rather than considering how to push them on as fast as possible through the N.C. levels”).

I saw more and more that I needed to be *explicit* about what I wanted pupils to learn but that this included what I wanted them to learn about how to learn and about themselves as learners. On the other hand, I did not want to be so explicit about metacognition that I might encourage pupils to read my mind and *pretend* to be reflecting.

I had begun to make explicit references to scaffolding, (eg Journal 9.11.97 “I needed to provide more scaffolding ... I had read out a report from the local newspaper but I should have put the report in front of the pupils and analysed it with them”). I found that I had responded to this realisation (eg Journal 5.12.97 “I have been consciously injecting structure into suggestions for redrafting”).

I had also become concerned with the language of pupil-teacher interaction (Journal 8.1.98 “I need to consider how the teacher uses language to provide scaffolding”, Appendix 1.11). This suggests that I was beginning to *consider the context in which a scaffold is used. I had also considered my use of language in relation to metacognition* (Journal 25.1.98, Appendix 1.11: “Looking at J.’s drafting book, I noticed how often my comments are statements (rather than questions). To encourage metacognition I need to use more questions to open up children’s thinking”). I had not, however, developed a coherent conception of how the teacher’s language, the use of scaffolding, the explicit sharing of learning objectives and metacognition might fit together.

Edwards and Mercer (1987) have helped me form such a conception through their emphasis on the importance of the teacher’s developing in the classroom an explicit ‘common knowledge’ of classroom language and learning including the rationale of activities. Edwards and Mercer’s contrast between ‘ritual’ and ‘principled’ knowledge (1987, p.97) helps me see that a

prompt can be used mechanically and not involve the kind of metacognition that helps ensure a greater depth of understanding and increase the likelihood of a transfer of learning to other situations. Edwards and Mercer give an example of a 'ritual essay plan' which provided a scaffold and allowed a task to be completed but did not help real understanding to develop. It is clear that the teacher who issued the essay plan did not attend to the process through which the scaffold could have led to principled knowledge, which they see as "essentially exploratory, oriented towards an understanding of how procedures and processes work", p.97). I realise that the context in which a scaffold is likely to succeed includes not only an explanatory introduction but also an opportunity for reflection on the learning task and the learning gained from it. Edwards and Mercer argue that there is often a failure in the final handover of knowledge and control to pupils, so that pupils remain "embedded in rituals and procedures, having failed to grasp the overall purpose of what they have done" (p.130). Edwards and Mercer believe that principled knowledge "lends itself to reflective self-awareness, to 'metacognition'" (p.165).

Edwards and Mercer argue that: "Good teaching will be reflexive ... It may be pursued through the careful creation of context, a framework for shared understanding with children ... This contextual edifice is the 'scaffolding' for children's mental explorations, a cognitive climbing-frame - built by children with their Vygotskian teacher" (p.167). Edwards and Mercer see interaction between teachers and children as helping to build the scaffolding.

(ii) What did I find out about my able pupils' metacognition?

I found from interview data that some of my able pupils were of the opinion that they did most thinking (when writing) during redrafting. This surprised me, as I was often disappointed by the lack of development in second drafts, even though I was committed to the value of redrafting. I had naively assumed that pupils would see planning and the writing of first drafts as involving a substantial amount of thinking.

Now that I have a clear conception of metacognition, seeing it as comprising metacognitive knowledge and metacognitive control, I have been able to recognise that my more able pupils were revealing and developing more metacognition than I had realised; for instance, from one pupil's references (in an interview) to the variables of self, tasks and materials I concluded that she was developing metacognitive knowledge.

I found out from observation of their responses in class and examination of their written work that in terms of metacognition the more able pupils did not function as a homogenous group. The most able, as judged on the Suffolk Reading Scale (Hagley, 1987), did not seem to be the most reflective. The pupil most reflective and responsive to scaffolding in terms of how she redrafted was an average reader, less than average speller but seemed to have considerable potential as a writer.

In terms of the use of metacognitive control I could see that the Thinking Sheet had engaged pupils in the planning, monitoring and evaluating aspects of it: for example, pupils had had to consider audience as part of their planning. One pupil gave, as an instance of how the Thinking Sheet had helped her, the writing of questions to which the audience want to know the answers ("the questions we had to do. If I hadn't done them, I wouldn't have known what I was looking for").

Whether pupils' use of metacognitive control in the Thinking Sheet activities had increased their metacognitive knowledge was difficult to tell from interview responses. Aware of what Miles and Huberman call the danger of 'holistic bias' (1984, p.231), I am cautious about the seeing of a more meaningful pattern than the data warrants.

The pupil's response in the following exchange could be taken to indicate that he had developed metacognitive knowledge about the value of reflecting as a means of checking, but it may be that he is simply thinking of the Reflect box and not linking it to reflection:

BD What can you tell me about the Reflect Box and how

you used that?

- S I think it's quite good because if we didn't have a Reflect Box we wouldn't have been able to look over and decide if it was OK.

But I cannot be sure. The best proof, of course, is whether the pupil reveals such knowledge in future and uses it. I did not envisage that pupils would make their own Reflect boxes in future; rather that they would reflect more (about audience, for example). The interview with the pupil whom I had identified as particularly reflective provides, perhaps, the best evidence of how any of the activities and devices I used in Phase 1 helped develop metacognition. The interview (Appendix 1.10) was conducted at the end of Phase 1. It is particularly valuable because I seem to have learned from the transcription of earlier interviews that I tended to ask leading questions (Appendices 1.8 and 1.9 contain examples) and needed to avoid doing so. The pupil reveals metacognitive knowledge about her use of planning and consideration of audience. She refers to the value of having 'checks' to help a writer stay focused. Her final comment suggests to me the 'meta' of metacognition: in response to my question "Do you think that you've done more thinking about your learning?", she replied: "Yes. I'll probably go beyond the task to think more about audience and different aspects".

### Evaluation

At the end of Phase 1 I had concluded that my study had evolved to a point at which I felt that I had identified concepts (scaffolding and metacognition) that could be important to the development of the teaching and learning of able writers.

*I believed that the literature had enabled me to form a picture of the able learner: as cognitively not essentially different from other learners in kind but rather in degree (Rogers, 1986), including in the degree of metacognitive capability; and as likely to benefit from teaching approaches which encouraged interaction between teacher and learner (Freeman, 1991)*



and which did not rely on merely setting pupils differentiated tasks for pupils to do on their own.

The setting of individual or small-group tasks for more able pupils, even those which took account of the pupils' particular interests, had not guaranteed high-quality work (the pupils who collaborated on a science fiction story had produced *some* good quality writing; the pupil given an activity in response to a novel had produced writing only slightly better than usual). Able pupils had seemed to benefit, however, from the explicit attention to planning which the Thinking Sheet entailed; and I believed that the Thought Commentary offered scope for helping able pupils if I introduced it adequately (perhaps modelling how it could be used).

In the concept of scaffolding I had found a tool for putting the teacher in an active interventionist role – a role which demanded from the teacher a clear understanding of learning objectives. I had concluded that metacognition also depended on clarity: the learner needed to develop clear understandings of learning tasks. But I had not explored how this related to key aspects of planning and revision. I saw the learner's engagement as active, but I had not investigated the potential of the idea of metacognitive control.

In terms of methodology I believed that action research suited an exploration of a relationship such as that between metacognition and scaffolding because it allows flexibility of research design in response to emerging theory. At the end of Phase 1 I saw my study as focussing on the inter-relationship of scaffolding and metacognition, but I felt that my focus should be sharper still. When, in Phase 2, I realised that there was considerable scope in examining how scaffolding could develop metacognition (in the service of helping pupils to write more effectively), I sensed a clear path ahead. My trying out of activities and devices in Phase 1 contributed importantly to my realisation.

I needed, however, to:

- i) Develop greater rigour in my methods of data collection and analysis so that they were less susceptible to bias.
- ii) Increase the number of more able writers in the study (and be able to show that the writers were 'more able').
- iii) Develop the precision of my definitions of scaffolding and metacognition, to help me in their identification (and to enable teachers with whom I shared my findings to have a clear understanding of my research).

At the end of Phase 3, I see Phase 1 as important, in the overall context of my study, principally because it enabled me to identify key concepts, narrow my focus and trial materials which I could develop further in the next Phase.

## Phase 2

### Introduction

On the basis of my findings in Phase 1 I had concluded that the more able pupils with whom I had worked needed me to provide them with structures which would enable them to reflect productively on their emerging and finished written work. In Phase 2 I sharpened my focus on metacognition and scaffolding, deciding to examine not their inter-relationship but more specifically how I could use scaffolding to *develop* pupils' metacognition (rather than draw out what was already there) in such ways that the metacognition would help the pupils improve their writing skills. I began Phase 2 with the aim of providing a number of structures and evaluating their effectiveness in terms of how they helped pupils develop and use the kind of metacognition that aided their writing.

In planning Phase 2 I set out to address the three issues which I had identified in my evaluation, at the end of Phase 1, as needing attention. The description of data sources, procedures and analysis, as given below, should indicate that I applied greater rigour to data collection and analysis. I increased the number of more able pupils whom I was studying. I developed my understanding of scaffolding and metacognition, devising precise working definitions which supported the evolution of the action research.

The timetable for Phase 2 is given overleaf.

## Timetable for Phase 2

	1998				1999							
	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	July	
	<b>PHASE 2</b>											
Pupils' Journals	*	*	*	*	*	*						
Questionnaire	2.1	2.2		2.3	2.4	2.5		2.6	2.7, 2.8		2.9	
Interview					*	*			*	*	*	
Incidental observation of pupils	*	*	*	*	*	*	*	*	*	*	*	*
Discussion with pupils in lessons	*	*	*	*	*	*	*	*	*	*	*	*
Major writing tasks		Writing in role		'Macbeth' essay	Discovering John Trenchard	The Perspective of Another Character		'Moonfleet' essay	Writing of own choice	Writing of own choice	Writing of own choice	
Prompts						'Thoughts on Planning'				Checklist		

## Setting

I undertook my action research with a group of twelve Year 8 students (aged 12-13). I taught the students for a weekly double period (70 minutes). The curriculum for the group was based on classic literature, including Shakespeare. Writing largely took the form of essays about the literature. I decided to introduce more opportunities for imaginative writing of the pupils' own choice as I wished to use a writers' workshop approach (as described below) in which student choice is important. The students had two other double periods and one single period of English each week taught by a specialist teacher of English; these periods were taught in four mixed ability classes of thirty two pupils each. I thus taught the group of more

able Year 8 pupils for less than a third of their English time (whereas in Phase 1 I had taught the more able pupils in a mixed-ability class for all of their English).

At the time of the week that I taught the students (Tuesday, periods 1 & 2), all the other students in Year 8 were being taught English in ability groups. There were six groups in all, including mine. This weekly grouping of students for one double period had been a feature of the timetable for Year 8 English for a number of years. I had taught the most able group in Year 8 in each of the two previous years.

I decided to adopt a writers' workshop approach, having read the description of the effectiveness of this approach by Atwell (1998), Calkins (1986) and Graves (1983, 1991, 1994). I was struck by how Atwell (1998) charted her own movements towards incorporating more explicit teaching (such as mini-lessons, given to the whole class) and relying less exclusively on individual writing conferences. I realised that the kind of scaffolding I wished to provide had become legitimate within the writers' workshop tradition. I had also been impressed by the meta-analysis of research evidence of Hillocks (1987, 1995), suggesting that a problem-solving approach (which is a characteristic of the writers' workshop) is highly effective in the teaching of writing. I had noticed the point made by Ernst (1997) that a workshop approach "places thinking and learning – not product alone – at the centre of what children can do" (pp. 355-356). Ernst encouraged her students to think explicitly about the process of writing. I had also noted the view of Beamon (1997): "A structured writing workshop can give young adolescents ... many opportunities to practise their developing metacognitive and evaluation skills." In my first lesson I described the writers' workshop approach to the pupils (Journal, 8.9.98 "I launched idea of workshop approach, outlining key attributes: openness, flexibility, honesty, mutual support ... I referred to need for feedback to me from pupils: I wanted myself to be a better teacher and them to be better learners. We needed to help each other").

I found that the writers' workshop approach had been used with more able pupils (Tangherlini and Durden, 1993) and that claims for its success with such pupils had been made (Reynolds, Kopelke and Durden, 1984).

### Subjects

The students comprised eight boys and four girls. They had been selected by their Year 7 English teachers to form a group which would be able to deal with classic adult texts (eg 'Jane Eyre', 'Macbeth') and produce writing well in advance of the average of their Year group. In choosing three students to recommend from his or her English class each Year 7 teacher had considered reading scores obtained at the end of Year 7 by using The Suffolk Reading Scale (Hagley, 1987), their own assessments of the students' reading and writing based on the National Curriculum and their general view of how the students could cope with challenging work. I had been one of the four Year 7 teachers who had selected three students each, so three of the students had been in the more able group with whom I had worked in Phase 1. All but two of the children scored 110 or over in the Suffolk Reading Test, taken at the end of Year 7, one scoring 109 and another 99. The pupil who had scored 99 performed much better in writing than reading. She was assessed for writing by her Year 7 teacher as Level 5 and by her Year 8 teacher as Level 6, whereas her assessments for reading were Level 4 (Year 7) and Level 5 (Year 8). The average score for the twelve students was 116.17. The range of possible scores in the test is -70 to 130+.

Teacher assessments made near the end of Year 8 and results from the Suffolk Reading Test confirmed the students' superior level of attainment. Teacher assessments placed one of the pupils at National Curriculum Level 7, nine at Level 6 and two at Level 5. Average-attaining students are expected to reach Level 5/6 at the end of Key Stage 3, a year later (Year 9). On the Suffolk Reading Scale test, taken when the pupils were at the beginning of their second term in Year 8 (which corresponded with the second term of Phase 2), all of the pupils except one gained a score over 110. The pupil who was the exception was the pupil described in the

previous paragraph who performed much better in writing than reading.

Two pupils achieved the maximum score of 130+. The average score of the twelve pupils was 116.75.

The pupils were 13 years old during the school year. Eleven of them were of British descent and one was Chinese. Pupils were selected without regard to gender; the imbalance of boys partly reflected the imbalance in the Year group (boy:girl ratio of 4:3).

## Data Sources

### Introduction

I used the same data sources as in Phase 1, but I made much greater use of questionnaires (having used only one, the structured log, with my Year 7 class, although I did not view it as a questionnaire in Phase 1). I made more use of observation and of interviews. My journal remained fundamental as the repository of my data record and as the principal device for developing analytical thinking.

I provide details, under each data source, of how I analysed the data from the source. I found it useful to write narrative accounts of certain aspects of Phase 2, including episodes of scaffolding (Appendices 2.19 to 2.21) and how my conceptions of scaffolding and metacognition, as they applied to writing and led to the use of checklists, developed (Results, question 4): the writing of these accounts helped me to pull data together from different sources and clarify my understanding.

## Questionnaires

### *Description*

During the year I used nine questionnaires (Appendices 2.1 - 2.9) as my timetable (above) shows. Questionnaires (i) and (ii) related to pupils' imaginative writing (writing in role) and (iii) to (viii) to their writing about classic texts ('Macbeth', 'Moonfleet'). Questionnaire (ix) asked students to reflect on certain aspects of their work in the year.

## *Rationale*

The questionnaires are examples of external prompts which have been used in a number of studies into students' composing processes (Bereiter and Scardamalia, 1987). Swanson-Owens and Newell (1994) point out that such prompts can derive from particular aspects of classroom instruction and not necessarily from theoretical accounts of the composing process. The questionnaires which I devised were responsive to the evolving action research; they were created during the course of Phase 2, usually a few days before use and were influenced by pupils' responses.

They were, however, also influenced by my developing conceptions of scaffolding and metacognition and my reading of the literature on research into the processes of composition (particularly Bereiter and Scardamalia, 1987; Flower and Hayes, 1981a, 1981b, 1984 and Flower, Hayes, Carey, Schriver and Stratman, 1986; Hillocks, 1984, 1995; Kellogg, 1994; Nold, 1981).

My reading of research on the recursive nature of writing (Emig, 1971; Hayes and Flower, 1980a), for example, challenged increasingly my reliance on drafting as the principal means of providing teacher input and made me pay more attention to planning (Stotsky, 1990; MacArthur, Harris and Graham, 1994; McCutchen, 1994) and to revising (which Nold, 1981, helped me see was crucially dependent on planning). My questionnaires became more focused on particular aspects of writing (such as planning).

Swanson-Owens and Newell (1994, p.145) see the use of external prompts as facilitating the investigation of "the intersection of instruction and process when researchers provide contexts that support writers to do more than they can do on their own". But they believe that such prompts can also have the second purpose which I identified in the diary extract below, namely that prompts can have a "procedural effect" (op cit., p.147) in involving students in the practice of metacognitive control, especially when, Swanson-Owens and Newell suggest, students' responses are discussed with them.



The extract from my journal, 29.9.98, written when I devised the first questionnaire, shows my conception of its purpose:

“I ... was trying to focus more specifically on an aspect of writing. I wanted to (i) get information on pupils’ experience, thoughts, attitudes to help me provide appropriate scaffolding; (ii) give pupils opportunities for metacognition.”

My first purpose (in the journal entry) referred to collecting data on pupils’ thinking. Within ‘thinking’, of course, lay metacognition. Gathering information on pupils’ metacognitive knowledge and developing *metacognitive control* was an important part of the rationale for the use of the questionnaires.

I saw both purposes as likely to yield data that would inform subsequent action research, including scaffolding. Considering Vygotsky’s view (Wertsch, 1985) that instruction was only good when it proceeded ahead of development, which implied to me that a teacher needs the knowledge of a child’s level of development to be able to pitch teaching ‘ahead’, added to my growing realisation that effective scaffolding depends on knowing pupils well (including knowing their metacognition). A third purpose quickly became apparent when I started to deploy the questionnaires: a means of gaining information on the efficacy of the prompt as a scaffold.

To help explain my rationale in designing questionnaire (ii) I need to provide an explanation of the choice of writing activity, writing in role.

I had chosen writing in role as I thought that it would involve the pupils in a deep engagement with a known text through empathy with a character and encourage reflection on both the original text and their own writing (and the relationship between the two, such as in the use of a particular style of language). Freeman’s (1992) suggestion that more able children empathise with other children more strongly than average children had led me to

wonder whether able children were potentially better at writing based on literature and so might be expected to be able to empathise and understand characters in fiction. I hoped to be able to explore with pupils how their writing in role enabled them to reflect on the experience of writing, so I used questionnaire (ii) to probe pupils' responses part-way through writing their first draft. As with questionnaire (i), I was using the questionnaire to give me information on pupils' metacognitive knowledge *and* give them an opportunity to practise metacognitive control.

Questionnaires were developed to be integrated with teaching; for example, question 5 in questionnaire (ii) asks for pupils' expectations of the teacher's comments on a draft and question 6 (which was answered in a subsequent session) for pupils' opinion on how the teacher's comments on the draft have helped.

As the questionnaires were developed, I became aware of the distinction between metacognitive knowledge and metacognitive control (Brown, 1987), but I had not translated this distinction into my thinking about the kinds of information about pupils' metacognition that I was aiming to collect. It would be wrong, therefore, for me to claim that I designed certain questions to tap metacognitive knowledge and others to facilitate metacognitive control and collect data on that.

Flavell's (1979) description of variables (such as knowledge of one's own cognitive skills and knowledge of tasks) that act and interact to form metacognitive knowledge has helped me to realise that my questions were tapping into a wider range of potentially metacognitive knowledge than I had previously thought they would. Similarly my understanding of metacognitive control as including planning, monitoring and evaluating (Brown, 1987) helped me see that a number of key processes in writing were likely to depend on metacognitive control.

When I chose questions for the questionnaires my purposes were simpler than 'How will this question give me insights into the pupils' metacognitive

knowledge?’ or ‘How will answering this question engage the pupil in the evaluating aspect of metacognitive control?’ When, for instance, I asked ‘What are your aims for today’s lesson?’ (question 7, questionnaire (ii)), I was *intent on encouraging the pupils to focus on the work ahead, to reflect on how far they had got with the activity, to start planning, in other words to practise self-regulation* (which Borkowski (1992, p.253) calls “the heart of metacognition”).

I realise now, of course, that it would be have been useful to have had a clearer conceptualisation of metacognition at this point in Phase 2 because I would have been able to tailor questions more specifically to probe. But it would still have been important to keep questions readily intelligible.

I designed the questionnaires to encourage reflection so the majority of questions are open-ended and require pupils to engage in higher-order thinking (as in Barrett’s well-known taxonomy: Melnik and Merritt, 1972). The use of higher-order questions has been shown to lead to improved attainment (Redfield and Rousseau, 1981). Gallagher and Gallagher (1994) suggest that such questions are particularly appropriate for use with able pupils. Wilson (2000) reports that the distinguishing characteristic of five teachers identified as effective teachers of able pupils in current research being undertaken at ReCAP (Research Centre for Able Pupils), Westminster Institute, is their attention to the development of higher-order thinking skills based on their knowledge of Bloom’s taxonomy (1956).

I did not model the questions on any published source. They are derived *from my experience as a teacher as to how to phrase questions to children, particularly written questions*: so, for example, in question 6 of questionnaire (ii) I ask for reasons as pupils often do not provide them without being asked. I decided to keep the questions simple and short, knowing that children can easily interpret questions differently from an adult’s intention (Cohen and Manion, 1994, point out that adults often misunderstand questions in questionnaires even when the researchers think that the questions are clear and unambiguous). As the questionnaires were

not all devised at the same time but each (except the first) developed in the light of students' responses to previous ones, I was able to continually reduce the possibility of ambiguity.

In ethnographic research questionnaires are sometimes regarded as preliminaries to interviews to the extent that they can highlight areas for deeper exploration (Kantor, 1984; Bird, 1992). I have found this to be true in part in that I have been alerted by questionnaire data to issues that it has been useful to raise in discussion or interview, but the questionnaire data proved valuable in itself (as my findings should demonstrate).

As my study progressed, the questionnaires became more focused on particular aspects of writing and also more detailed, as I became more aware of what exactly I required data on. I found it useful to ask some specific closed questions about aspects of the students' behaviour when writing (eg They were asked to tick a number of statements if they were true, an example being "When I was writing, I stopped now and again to refer to the text"). The danger of such closed questions is that they may constrain and distort responses, but I have been able to use observation (eg I noted down which students were referring to their texts) and examination of written work to verify students' responses to a number of the closed questions. I included on the questionnaires open questions that sought to explore students' understanding of my use of terms so that I could check whether the students were interpreting them differently from me, eg "What do you think your teacher meant when he asked you to write down your 'thoughts on planning'?" (I had asked the students to use the words 'First thoughts on planning' as a sub-heading in a writing assignment).

In the final term of Year 8 I gave the students four further questionnaires (Questionnaires (vi)-(ix) in Appendices 2.6-2.9).

The first questionnaire was designed to help students focus on the wording of the essay question and on the key features of the essay. It was also intended to help students plan their approach to the essay. It could thus be

regarded as containing a number of prompts to metacognitive activity. The questionnaire was also designed to give me information on students' planning and understanding of essay features; in addition I hoped that it would give me *insights into students' metacognition*.

Questionnaire (vii) took the form of a checklist which students could use to assess the first draft of their essay before beginning their second draft. It was designed to help students reflect very specifically on aspects of an essay which we had discussed in class. I decided to introduce questionnaire (viii) to review the *process* of working on the first draft rather than just the first draft itself. Questions were based on the questions in questionnaire (v): students had been asked their intentions in the first questionnaire; now they were asked what they actually did. They were also asked whether the questions in the first questionnaire had helped them write their first draft. As in the case of questionnaire (v), questionnaires (vi) and (vii) served both teaching and research purposes.

Questionnaire (ix) encouraged students to review the written work they had done during the year, especially in terms of what might have helped them write more effectively. In the questionnaire I sought information on the use of checklists because I had introduced them (and students had used them) for a major piece of writing, but most of the questions were open-ended, asking students to identify what they had learned about writing and what helped them to write well.

I paid particular attention to the order of questions, following the advice of Oppenheim (1966, p.37) to "avoid putting ideas into the respondent's mind" at the beginning of the questionnaire (I failed to do this in questionnaire (ix) when I redrafted it, removing some early questions and forgetting to resite the first question).

### *Procedures*

Questionnaires were administered in class, as part of the business of teaching. I explained to pupils that the information which they supplied

would help me teach them better. I made it policy to study the pupils' responses before the next lesson and show the pupils that I was taking account of what they had written. The use of the questionnaires was spread out fairly evenly across the school year.

Sometimes I gave class feedback (eg in response to pupils' answers to questionnaire (iv) which concerned the genre of 'Moonfleet') and sometimes individual feedback (eg a pupil on questionnaire (ii) ('Thinking about a draft during its production') had written that he wanted to make his diary more exciting; I had been able to discuss with him the different sorts of writing diaries contain: accounts of events, description of feelings, sudden thoughts, etc).

### *Analysis*

Questionnaires were analysed on a number of levels. First, as I have indicated above, I read them through after the lesson in which they were completed and before the next lesson. This reading began the process of analysis because I was creating meaning from the data (Grant-Davie, 1992). I noted down key points in my journal; these points contributed to my planning for the next lesson which I also wrote out in the journal. As the group contained only twelve pupils, it was easy to read the answers and get a grasp of the main issues. I created a data record (Graue and Walsh, 1998), following Walsh's advice to construct it as soon as possible after the event.

The data record allowed me to add a commentary about how I had collected the data and other details about the lesson in which it had been collected, including reactions of pupils. I also documented how the questionnaire connected with both my developing plans for my work and my behaviour in the lesson (eg sometimes I made an immediate response to what a pupil had written if I saw it before the end of the lesson, perhaps to clarify a point or to use the pupil's response as an opportunity for teaching, including for scaffolding). I was producing what Denzin (1989, p.83) calls "thick description" which he saw as presenting "detail, context, emotion" and

which Graue and Walsh (1998) see as being built into a narrative description on the basis of field jottings.

I decided, however, that I needed to make a content analysis of the open-ended items, not least because I wanted to be precise when writing up my work. I also thought that content analysis would reveal themes and patterns which could easily have been missed when reading through. I would, in addition, be able to compare pupils' responses on particular questions more readily.

I employed the method of analysis devised by Atkins (1984) and used by him for handling open items on questionnaires. Essentially, the method consists of identifying categories and grouping responses according to them. As far as possible I wrote out the pupils' actual words, to form the categories, to reduce the danger of bias and misinterpretation and prevent "premature closure" (Miles and Huberman, 1984, p.221).

Appendices 2.1 to 2.3, 2.5, 2.6, 2.8 and 2.9 contain analyses of questionnaire data. I have not presented an analysis of questionnaires (iv) and (vii); in terms of relevance to my study the answers can be easily summarised (answers to questionnaire (iv) show that pupils had a good understanding of the genre of the novel ('Moonfleet') and the answers to (vii) that pupils were able to use a checklist).

### Students' journals

#### *Description*

Students were provided with an exercise book to use as a journal at the start of term. I explained that the pupils could use their journals to record ideas, reactions, reflections and questions. I also explained that I would not be marking them although I would read them.

#### *Rationale*

In Phase 1 I had asked pupils to keep a log. The idea of a journal was an extension of this. I had been disappointed with pupils' responses to logs in

Phase 1, but I decided that introducing the journals in the first lesson, linking their use to a writing workshop approach and providing some time for pupils to use them, would ensure a better outcome.

### *Procedures*

At the end of some lessons (and occasionally during lessons) I provided time for the students to use their journals. To help pupils appreciate the range of possible uses of their journals and to help them reflect I asked them to record some specific items, eg I asked them to note down something that they had learned in the lesson or record their reactions to a particular character.

Disappointed by the brevity of the responses, I decided, as in Phase 1, that the students needed structured support to help them reflect and record their reflections. The questionnaires that I subsequently devised provided structure.

The journals continued to be available for the students to use but most of the pupils did not use them unless I asked them to do so.

### *Analysis*

I collected journals in at the end of each session and read them, making a summary of what I found (in my own journal). I was particularly looking for evidence of metacognition and responses to scaffolding. Half way through the second term I wrote in my journal a review of pupils' journal entries and how I had managed the pupils' use of their journals: this was an important part of my analysis, helping me to identify key evidence that bore on substantive and methodological issues. I agreed with Miles and Huberman (1984, p.91): "Writing does not come after analysis; it *is* analysis, happening as the writer thinks through the meaning of data."

When I made my analysis of journal data, using the codes referred to below (Students' Journals, *Analysis*), I included in the analysis both my regular summaries of pupils' journal entries and my major review.



## Written work of students

### *Description*

During the year pupils undertook two major creative writing assignments:

- (i) Writing in role (early Autumn Term)
- (ii) Writing of own choice (Summer Term).

They completed three major assignments based on classic literature:

- (i) Essay on 'Macbeth' ("‘Macbeth is the victim of his wife and the witches.’ How far do you agree with this statement?")
- (ii) A re-telling of part of the story of 'Moonfleet' from the perspective of a character other than John Trenchard, the narrator.
- (iii) Essay on 'Moonfleet': "‘How does the author of 'Moonfleet' put the reader on the side of the smugglers?’"

### *Rationale*

The assignments were chosen to develop pupils' writing skills. For the literature-based work I had used very similar assignments when teaching comparable groups in the previous two years. Teaching essay-writing skills is largely done in Key Stage 3 in English in the school; the Scheme of Work for English provides for pupils to write one or two literature-based essays in Year 7.

I chose the re-telling of the story from another character's perspective to encourage pupils to understand how first-person narrative works, including how it affects the reader's responses. I hoped that pupils would be helped to see the conscious hand of the author, making specific choices rather than simply telling the story. I thus aimed to move pupils towards appreciating the difference between 'knowledge telling' and 'knowledge transforming' (Bereiter and Scardamalia, 1987), although I did not use these terms with them. In my planning I tried to link pupils' gaining an understanding of how an author operates with developing their writing. I wanted them to develop the capacity to read their own writing critically, in the same way that I was leading them to read 'Moonfleet'. I wanted them to be their "own

best reader” (Beach and Liebmann-Kleine, 1986), so that they thought *as* readers rather than just *about* readers and developed the kind of “conversation” with themselves that Murray (1982, pp. 40–41) saw the teacher of writing being able to develop:

“The act of writing might be described as a conversation between two workmen muttering to each other at the workbench. The self makes, the other self evaluates...the self writes, the other self reads...it is...reading that monitors writing before it is made, as it is made, and after it is made.”

I saw, then, the development of a critical understanding of how an author operates as a means of helping pupils develop the “reflection” that Pianko (1979) concluded from her research “stimulates the growth of consciousness in students about the numerous mental and linguistic strategies they command and about the many lexical, syntactical, organisational choices they make – many of which occur simultaneously during the act of composing” (p.277). Pianko had concluded (ibid.): “The ability to reflect on what is being written seems to be the essence of the difference between *able and not so able writers from their initial writing experience onward.*”

The creative writing assignments were chosen to allow pupils to develop their writing skills through a writers’ workshop approach. The rationale for the first assignment (writing in role) was given above, in the description of the rationale for questionnaire (ii).

The second creative writing assignment was chosen to give pupils scope “to draw on their developing metacognitive knowledge” (Journal, 31.5.99). I decided to give pupils the choice of subject and genre, as in the writing workshop approach of Graves (1991, 1994), Calkins (1986) and Atwell (1998).

### *Procedures*

Students produced written work in class, using homework time of about half an hour a week on average in addition to class time. Most lessons included a mixture of reading a shared text, discussing aspects of it and writing in response to it, but some lessons were given over to a writers' workshop in which pupils chose their own subject and genre. Some written work took the form of notes. Major assignments were planned, written as a first draft and then redrafted in the light of comments from me and sometimes from peers.

### *Analysis*

Apart from marking pupils' work for how well they had answered the question or completed the task, I examined it in terms of evidence of metacognition, particularly in planning and the use of 'thinking spaces' (described below). I tried to compare work with that produced by pupils of the same ability to whom I had given similar tasks in the previous three years, but this was not as easy, as I was relying on memory (having preferred to give pupils detailed comments on their work rather than marks). I felt more secure in making comparisons within the current Year 8 group in terms of how, for example, a pupil's 'Macbeth' essay compared with her 'Moonfleet' essay.

### Observation of students

#### *Description*

This source represents a minor part of my recorded data; on ten occasions I felt that something that I had observed was significant enough to be recorded in my journal as a specific observation. Most of my observation was unstructured in that I did not collect it systematically. Most of it was incidental, but occasionally I deliberately watched pupils as they undertook a particular task.

#### *Rationale*

Observation is part of the business of teaching. Effective teachers draw on observation to inform their teaching (Cooper and McIntyre, 1996); they use

it to help them make formative assessments and plan subsequent teaching (Black and Wiliam, 1998). Good scaffolding depends on the kind of knowledge of pupils that observation can help build up (Observation is an important aspect of the “contingent teaching” which the metaphor of scaffolding describes: Wood, 1988, pp. 79-80). Effective teachers of literacy have been shown to value observation of pupils and do more of it than other teachers (Medwell, Wray, Poulson and Fox, 1998). Calkins (1986) considers that observation is central to good teaching of writing: she makes an analogy with a sports coach who observes and works on process (p.14).

Unstructured observation allows for the collection of “unexpected data” as Clark (1996, p.36) notes, in her report on a study of the classroom teaching of able pupils.

### *Procedures*

Incidental observations were recorded in my journal either in the lesson or shortly afterwards. When I watched pupils deliberately, I wrote in my journal or used a proforma (such as the sheet on which I recorded observations in the right-hand column, Appendix 2.10).

### *Analysis*

Observation data in my journal was coded in the same way as other journal data (described below).

Data on proformas was analysed in the same way as questionnaire data (method of Atkins, 1984).

### Discussion with students during lessons

#### *Description*

By ‘discussion with students’ I mean incidental discussions about learning tasks. I describe interviews with students in lesson time separately (below).

### *Rationale*

Discussions with students were part of the business of teaching. Sometimes I probed a pupils' metacognition and sought data which bore more, perhaps, on my research than on the individual pupil's learning (although it is difficult to make this distinction in action research).

### *Procedures*

Details of incidental discussions were recorded in my journal either at the time or shortly afterwards (I was usually able to make notes immediately after the lesson; if I could not, I wrote down my recollection in the evening).

### *Analysis*

Data was analysed as for other data recorded in my journal (described below).

### Interviews with students

#### *Description*

As in Phase 1, interviews were semi-structured. I conducted sixteen interviews during the Phase. The broad topics on which questions were asked are listed in Appendix 2.13. Interview questions became more specific as the study developed and mirrored the "progressive focusing" (Ball, 1991) which led to the examination of the use of checklists.

Some interview questions were based on pupils' written responses (on questionnaires and in assignments), some of which I had available during interviews. Some questions arose from other data obtained during the study or from my reading of the substantive literature.

Examples of interview transcripts are provided as Appendices 2.14 to 2.18.

### *Rationale*

I decided to make greater use of interviews in Phase 2 so that I could explore issues in greater depth than questionnaires would allow. As Gall, Borg and Gall (1996) point out, a respondent's answers can be followed up

to obtain more information and gain clarification. My rationale for the choice and use of interviews remained as set out in Phase 1.

### *Procedures*

In preparation for an interview I wrote out in my journal the areas that I intended to focus on and what I needed to examine (such as pupils' recent work); then I listed the main questions I would use (Appendix 2.12 provides an example of my planning and questions).

For the first two interviews I decided to interview two students together as it would be less threatening and less intense than if they were on their own (Graue and Walsh, 1998). The same two students were interviewed each time, the second interview occurring five weeks after the first. I chose these students as they seemed amongst the most able and articulate in the group and they usually worked together.

I surmised that each student would have more 'thinking time' if he was not continuously either listening to a direct question or answering it. I also thought that the response of one student might trigger ideas on the part of the other, although I recognised that the words of one might influence the other. I decided to examine the transcript carefully for the latter possibility. I discovered some instances where one student might have been influenced by the other's response (as Stallard, 1974, found when interviewing able students about their writing), so I decided to conduct subsequent interviews with individuals.

The tendency of pupils to provide the answers that they think a teacher wants (rather than what they really believe) is well known (Black, 1999). Tomlinson (1984) has argued that student writers give a performance rather than report what they have done when they describe how they have gone about writing; and Greene and Higgins (1994) point out they may perform more when they want to impress the researcher. I decided that my best safeguard against pupils 'performing' would be to ask them for *reasons* for their thinking and for *particular examples* of general points. Asking writers

to reflect on concrete examples of writing rather than writing in general is, of course, more likely to yield more detailed information (Greene and Higgins, 1994). Obtaining reasons and examples was not difficult in the interview, as the students were able to make detailed reference to their work, other data I had collected and their learning in other lessons (the background to which I knew).

The longer interviews (two with the pair of pupils and a third later on with one of the pupils from the pair on his own) lasted about half an hour each and took place in my office. They were recorded and transcribed. The shorter interviews (about a quarter of an hour each) were written down verbatim, word-processed and given to the pupils for verification. Two thirds of the interviews took place in lessons, one third at lunchtime in my office. The shorter interviews involved all of the twelve pupils individually. Appendix 2.13 lists the dates of interview and pupil codes.

### *Analysis*

Interview data was analysed initially by using the same system of coding as I used for analysing journal entries. It was re-analysed using codes for metacognitive knowledge and for planning, monitoring and evaluating (metacognitive control) after I had come to see metacognition as comprising these elements.

### My research journal

#### *Description*

As for Phase 1, my journal contains a wide range of data, including the kinds mentioned above (such as notes of incidental observations), “theoretical memos” (Strauss, 1987), a large number of questions to myself, summaries of key issues and notes on particularly striking readings. I grappled frequently with the meaning of metacognition and scaffolding. I tried to write reflexively about my methodology. A new element in my journal was the recording of some lesson plans.

### *Rationale*

My rationale remained the same as in Phase 1. I had found my journal to be an essential means of documenting the development in my thinking and the issues which I had still to grapple with.

My journal continued to provide the kind of “ongoing documentation for analysis and evaluation” that Holly (1987, p.9) saw as a key feature of a personal-professional journal.

### *Procedure*

I used my journal as in Phase 1.

### *Analysis of data*

Data was analysed in the same way as in Phase 1. Much of the analysis was ongoing. As in Phase 1, I sometimes constructed diagrams and tables in my journal to help in the analysis.

For the final analysis of data (which took place after Phase 3) I used the same categories for coding data as I chose when I re-examined the Phase 1 data, with the addition of the following categories: audience, checklist, data analysis, journals, observation, planning, reading/writing inter-relationship, thinking space.

### Results

I decided to analyse my data by means of ‘organising questions’. The questions are ones to which I wanted my data to give me answers, to help me analyse the teaching and learning that had been undertaken. The questions are also, of course, focused on the key issues that had emerged through my action research.

#### 1. How did I provide scaffolding for the development of pupils’ metacognition?

Following Stone’s (1998b) distinction between ‘scaffolds’ and ‘scaffolding’ (the process), I have divided the answer to this question into (i) particular



scaffolds that I provided on the one hand and (ii) episodes of scaffolding on the other. Of course, when a scaffold was introduced, it was explained through a process of teaching that was likely to involve some scaffolding, but by 'episodes of scaffolding' I refer to a sequence of teaching and scaffolding that occurred over a significant part of a lesson or a series of lessons. Cazden (1979) proposed a wide definition of scaffolding, including individual pupil-teacher exchanges that moved a pupil's learning through a zone of proximal development. I have not included such exchanges within my category of particular 'scaffolds'.

(i) *Scaffolds*

I described above (Data Sources) pupils' journals and the questionnaires I used. The thinking space was the same as the 'thought commentary' which I encouraged pupils to use in Phase 1: it was a wide margin ruled off on the right hand side of a page. I decided that the term 'thinking space' was simpler than 'thought commentary' and might encourage a more varied use of the space. The checklist was a device used by pupils in the third term (in their creative writing work). The pupils devised their own checklist, to match the genre in which they had chosen to write (Appendix 2.21 provides a description of how I introduced checklists and Appendix 2.22 contains examples of pupils' checklists).

- Pupils' journals
- Questionnaires (Appendices 2.1 - 2.9)

(As Reid (1998) points out, scaffolds exist within scaffolds. It might be possible to see individual questions as scaffolds. But not all of the questions on each questionnaire are necessarily scaffolds to metacognition.)

- Thinking space
- Checklist

(ii) *Episodes of scaffolding*

I identified three particular episodes:

- (a) 'The Perspective of Another Character' (Appendix 2.19)

- (b) Developing awareness of how a plot is advanced (Appendix 2.20)
- (c) Teaching checklists (Appendix 2.21)

(Appendices 2.20 to 2.22 contain descriptions of the episodes, written as a *stage* in my analysis of data. I have decided to include them as appendices (and not in the main text) as my findings are *based on* the descriptions rather than being the descriptions themselves. Writing them showed me that I had used a process of scaffolding that was interactive in that it had involved the pupils and had been shaped by their responses. The scaffolding contained interaction between my developing *conception* of metacognition and their developing metacognition.)

## 2 What did the scaffolding that I provided seem to produce in terms of evidence of

- (i) *pupils' (a) metacognitive knowledge*  
*(b) metacognitive control?*

### *(a) pupils' metacognitive knowledge*

Pupils' responses to the nine questionnaires (Appendix 2.11) seems to indicate that pupils could express knowledge of the variables of person, task, strategy and materials that Flavell (1979) and Brown, Campione and Day (1981) believed interacted to produce metacognitive knowledge.

Of course, whether pupils expressed knowledge of the variable is partly a function of the questions which I asked. But pupils' failure to mention a variable (when given the opportunity in response to open questions to do so, eg Appendix 2.1, questions 4 and 5) could be illustrative.

When pupils made few references to the variable of 'strategy' (Appendices 2.1 and 2.2; Appendix 2.11), I focused on strategy in terms of planning (eg questionnaire (iii), Appendix 2.3) and methods of keeping the wording of the task in mind (questionnaire (v), question 4, Appendix 2.5; questionnaire (vi), question 1, Appendix 2.6).

Pupils showed metacognitive knowledge in interviews; for example, when they referred to what had helped them create good first drafts in the past:

BD If you think about your English lessons in the last three or four years, what has helped you create a really good final draft of written work?

B I think having lots of background material about what we've got to write about and also being interested in the subject that you are writing about and having people to proof-read it for you and being able to make lots of drafts before your final draft.

N Just checking it with all your friends and enjoying the subject that you're writing about tends to make the written work better than if you don't enjoy it or you're writing it on your own.

(Appendix 2.14, ll. 1-7)

*(b) pupils' metacognitive control*

Following Brown's (1987) subdivision of metacognitive control into three components (which I incorporated into my model of metacognition, Figure 1.3). I will examine metacognitive control under headings of planning, monitoring and evaluating. The following table contains data from the questionnaires completed by pupils.

Figure 2.1: Analysis of metacognitive control in questionnaire answers

Questionnaire	Planning	Monitoring	Evaluating
(i)	(Answers to questions 4 and 5 could have referred to planning and monitoring but did not)		
(ii)	Answers to question 7 may be evidence of planning. Pupils gave their aims for the lesson	Q6: one pupil wrote that the teacher has "given me more things to think about as I write"; another wrote: "...now I am thinking about my audience".	Q2: pupil could name what they wanted to improve or develop.
(iii)	<p>Q1: one pupil named referring to a plan during writing.</p> <p>Q2: nine (out of ten) pupils wrote that they made plans at least occasionally (without being told to do so); only one pupil usually made plans; eight said that teachers always or usually told them to make plans.</p> <p>Q5: eight pupils said that making a plan of the structure helped them.</p>	Q1: six (out of ten) pupils wrote that they thought, at least sometimes, about the structure of a piece of writing during the writing of it; four pupils thought they just kept writing.	Q4: six pupils said they changed structure (when redrafting) half the time or occasionally; three said usually or always.
(iv)	(not applicable)		
(v)	<p>Q4: six (out of eleven) pupils said that they had made notes before writing first draft; two pupils thought they should have spent more time planning; one that he should have looked at plans more <i>as he wrote</i>; one that plans were too vague.</p> <p>Q5: pupils had wide variety of interpretations of my phrase "thoughts on planning".</p> <p>Q6: most pupils (eight) saw planning as both how a task is organised and how a piece of writing is structured.</p>	<p>Q3: one pupil wrote that he could improve first draft by "keeping both aspects of the task in mind".</p> <p>Q4: half of the pupils kept both aspects of the task in mind when writing the first draft; half did not; pupils who kept both aspects in mind had variety of methods for doing this (some pupils clearly metacognitive, eg "I kept referring to the task in my head").</p>	<p>Q2: pupils evaluated their work done in the lesson; half the comments were general, half more detailed; one pupil: "I made good use of my thinking space".</p> <p>Q3: pupils said how they could improve their first draft.</p>

(vi)	<p>Q1: two pupils referred to making a plan as a method of keeping the question in mind.</p> <p>Q2: most pupils (eight) could name the structure they intended to use for their answer.</p> <p>Q6: five pupils detailed how they were going to organise themselves (eg make notes) and gave a plan for structure of essay; six gave plan of structure only.</p>	<p>Q1: asked pupils how they were going to keep the question in mind; pupils named a variety of strategies (eg "Have a thinking space", "Put question on a separate piece of paper to remind myself").</p>	
(vii)			<p>Pupils were asked to evaluate their first draft (of 'Moonfleet' essay).</p>
(viii)	<p>Q6: of pupils (seven) who made a plan for the structure of the essay all said they kept to it; of pupils (five) who made plan for going about the task all said they kept to it.</p>	<p>Q1: pupils used different methods for keeping the question in mind.</p>	<p>Questions 1-6: pupils evaluated aspects of their first draft, how they had worked on it and whether they had kept to their intentions.</p> <p>Q8: most pupils (seven) said they found reviewing their work (answering questions 1-6) had helped them in writing first draft.</p>
(ix)	<p>Q1: five pupils (out of twelve) said checklist had helped them at planning stage.</p> <p>Q4: four pupils named 'plan' as what they had learned about process of writing; two pupils named 'checklist'.</p> <p>Q5: six pupils named 'plan' as what they would use to help themselves write well at High School; eight named 'checklist'.</p>	<p>Q1: four pupils (out of twelve) said checklist had helped them during writing.</p> <p>Q4: three pupils named 'thinking space' as what they had learned about process of writing; two pupils named 'checklist'.</p> <p>Q5: eight pupils named 'checklist' as what they would use; three named 'thinking space'.</p>	<p>Q1: two pupils (out of twelve) said checklist had helped them to evaluate.</p> <p>Q2: pupils were asked to compare 'Macbeth' and 'Moonfleet' essays (variety of reasons given for differences).</p> <p>Q3: pupils were asked to compare current writing with previous in same genre (various reasons given for differences).</p> <p>Q4: two pupils named 'checklist'.</p> <p>Q5: eight pupils named 'checklist'; one pupil said "Review previous work".</p>

### *Planning*

Pupils' reported use of checklists showed that they found them helpful when planning. As data from questionnaire (ix) (Appendix 2.9) shows, five (out of twelve) pupils thought that the checklist had helped them at the planning stage to identify important features to include in their writing. One pupil wrote: "I can add things I think are useful" which suggests that he was taking a recursive approach to planning (Hayes and Flower, 1980a).

Figure 2.1 above provides a number of other instances of pupils' references to their use of planning.

When asked in the third term to say what they would do to help themselves write well, if given a writing task in their first week at High School (in the following term), half (six) of the group wrote that they would make a plan (questionnaire (ix)). This showed a greater commitment to planning than the pupils had indicated earlier in the year, when, in response to questionnaire (iii) (Appendix 2.3), only one pupil had indicated that he usually made a plan.

### *Monitoring*

Figure 2.1 above shows pupils' use of monitoring. An aspect of this was the use of checklists (eg a third (four) of the pupils had found a checklist useful during composing, reminding them of important features). Some pupils indicated in interview that they found the checklist helped them monitor: eg

"...it is helping me to think about my writing...include certain things...characters...whether or not I've put enough about each one"

(Appendix 2.16, ll. 14-15).

Pupils (two) who indicated that their 'Moonfleet' essay was better than their 'Macbeth' one, because they had learnt to keep to the point, could be seen as having exercised and improved their monitoring skills by virtue of having made this judgment and given their reason.

## *Evaluating*

Figure 2.1 above gives instances of pupils' use of evaluation in their responses to questionnaires: for example, two pupils, in reply to questionnaire (ix) (Appendix 2.9), referred to the checklist as helping them to evaluate. Some pupils referred explicitly, in interviews, to the use of the checklist in evaluation, eg "When I come to the end, my checklist will help me evaluate what I've done so I can take out anything inappropriate that won't fit" (Appendix 2.17, ll. 5-7).

### *(ii) Development in pupils' writing as a result of metacognitive activity*

It is difficult to separate the impact of the metacognitive activity (which my scaffolding was designed to encourage) from the impact of other scaffolding (provided to help pupils develop their writing by a route that was not deliberately planned to be metacognitive) and teaching, but the following may provide some indications.

#### *a) evidence from pupils' perceptions*

Most pupils believed that their writing had improved: nine (out of twelve) pupils thought that their 'Moonfleet' essay was better than their 'Macbeth' essay. Pupils gave a wide range of reasons for the improvement, but the following ones may indicate the effect of metacognitive activity: improved essay technique (2 pupils); keeping to question (2); used more planning (1); used thinking space (1).

Eight pupils thought that their imaginative writing (done in the third term) was better than previous writing in the same or different genres. But it was less easy to link the reasons which they gave for the improvement with metacognitive activity (Appendix 2.9). When I asked about what they had learned overall about the process of writing and what they would do to help themselves write well in their first assignment at High School, all but one pupil referred to planning or the use of a metacognitive support such as a checklist or thinking space. For example, pupil X wrote:

"I have learnt that there are certain things which can make your writing better and that if you use a thinking space or

make a checklist then your writing will be better constructed.”

Pupil D referred to “learning a wide range of ways to keep the plot or plan” in her head; and pupil B wrote that he had learned that planning and evaluation were essential to develop writing.

Pupil B’s interview answers give evidence of his opinion on whether questionnaires have helped him write (Appendix 2.15, ll. 31-36). He had written in response to being asked ‘Have I outlined my approach to the question?’ (question 1a) (i), questionnaire (vii)): “To some degree. Will require elaboration.”. In the interview he says that he started his second draft after completing questionnaire (vii), doing which he found “quite useful in amending...[his] first draft” (Appendix 2.15, ll. 35-36).

As I have indicated in answer to my question 2(i) above, pupils referred (in both questionnaire and interview) to finding checklists and thinking spaces useful (in helping them write) in a variety of ways, including planning, monitoring and evaluating.

When I asked pupil B (who was probably the ablest writer and who perhaps showed the most metacognitive activity) whether he thought he was more aware of his “thought processes as a writer” at the end of the year than the beginning, he said:

“I think that I’m more aware of the fact that when you write you get into a flow of writing and when you get to the end it’s a good idea to check over the content.”  
(Appendix 2.17, ll. 23-24)

The idea of “flow” had come up briefly in an earlier interview with pupil B (Appendix 2.14, ll. 10-12). Now he seemed to have developed his concept of flow, relating it to ideas of critical awareness:



“I think if I was writing a piece and I came to a point where I thought what I was writing might not join up very well with what might happen later, I’d bypass that awareness and keep straight on and try to join them up later on. And then in that way I’d be quite involved in what I was writing and when I came to read it I’d be quite critical and want to change it. I think I’m more critical of my own writing than someone else’s, because I compare my own writing to an idea I have of the way it should be written.”

(Appendix 2.17, ll. 30-35)

*b) evidence from my perceptions*

When I came to assess the pupils’ overall progress at the end of the year, my own perceptions were that their writing had improved more during the year than the writing of similar groups that I had taught in the previous two years. I had noted, in my journal, a number of improvements in the work of individual pupils, when I compared pupils’ ‘Macbeth’ and ‘Moonfleet’ essays, eg Journal 4.7.99:

“Pupil D – In ‘Macbeth’ essay spent too long telling the story [ie not answering the question – ‘telling knowledge’ rather than ‘transforming’]. In ‘Moonfleet’ she focused on title.”

I did not have numerical data to support my view, as I had not assigned marks to pupils’ work. I attributed the greater improvement to pupils’ increased use of planning, more developed understanding of the features of genre and a more metacognitive approach to tasks. I was aware, however, that I had taught much larger groups in previous years and had had less time to work with the pupils individually.

When I made informal observations of pupils working on their writing in the Summer term, I noted in my journal that they seemed more confident initiating writing activities and in redrafting (the latter perhaps because they

had a plan or checklist to which they could track back to help them evaluate). They had, no doubt, benefited from their lessons with their main English teacher during the year, so it would be difficult to attribute improvement on the basis of examining the pupils' work alone.

3. How did I use the information I gained about pupils' metacognition to provide subsequent scaffolding?

(i) *information about pupils' metacognitive knowledge*

Information provided by pupils about their knowledge and experience of genre helped me to teach the pupils. I am not claiming that a pupil's telling me that he has previously written a diary extract in role is evidence of metacognition; rather, I see it as one of the variables identified by Flavell (1979). If the pupil expresses his feelings about such a task and refers to the text on which the writing in role was based, more variables are brought into play. If the pupil then talks about a strategy he used to do such writing and comments on its efficacy, we can see several variables interacting. We might then agree that metacognitive knowledge has been demonstrated.

Nor am I claiming that all of the teaching that made use of the evidence of pupils' metacognitive knowledge took the form of scaffolding. Even if I have an intent to use the evidence of the knowledge to move the pupils through Vygotsky's zone of proximal development, I may not necessarily provide scaffolding. As Tanner and Jones (1999) show, there is likely to be a continuum amongst teachers who set out to 'scaffold metacognition', some being over-directive and hardly scaffolding at all.

Having said this, I believe that I can provide examples of how I used *information of pupils' metacognition to provide scaffolding*.

Three of the group had expressed in questionnaire (i) negative feelings about the task of writing in role. Like Harris and Graham (1996), as a teacher of writing I regard responding to such attitudes as important. I spoke to the pupils individually to explore the reasons for this, taking into

account other information that pupils had supplied on the questionnaire about writing in role. The main reason given when I talked to the pupils was that they saw writing in role as limiting; they preferred to have *carte blanche*. I helped the pupils see that writing in role was about the perspective of an individual character, not about genre. To decide whether or not I was scaffolding we would need a recording of the interaction which I did not make, but the pupils' conception of writing in role and perhaps of the nature of perspective seemed to develop in response to the kind of "supportive intervention" which Mercer (1995, p.74) sees scaffolding as providing.

That one of the pupils then chose a different genre (from that of the text containing the character whose perspective he had chosen to give) seemed evidence of the internalisation (or 'handover', as Bruner (1983) calls it) which characterises the notions of scaffolding and the zone of proximal development (Edwards and Mercer, 1987).

Information gained from a pupil's expression of the variables of person and task during the course of a writing activity (from questionnaire (ii), 'Thinking about a draft during its production') enabled me to provide scaffolding. The pupil had written 'I want to make my diary more exciting'. We discussed the kinds of writing that diaries contain, such as descriptions of events and expressions of feelings, plans and questions. Had I *told* the pupil that diaries contain such kinds of writing, I would not have been scaffolding. We made our list of kinds by discussing diaries we had read or written ourselves. *After the discussion and armed with the list, the pupil seemed confident that he could make his diary more exciting.*

Much of the information provided on the questionnaires and from other sources (journals, discussions, observations, for example) did not lead to scaffolding with individual children but informed my teaching of the class as a whole. For instance, pupils' responses to questionnaire (iv) showed me that they had a good knowledge of the likely features of a story about smugglers written a hundred years ago and set in the 18<sup>th</sup> century. The

pupils' answers do not constitute metacognitive knowledge, as I see it; again, they reflect the variables which Flavell (1987) identified as leading to metacognitive knowledge through their interaction. My encouraging the variables to come into play could be seen as starting off an episode in which metacognitive knowledge was developed through scaffolding. I drew on the pupils' answers to focus on stereotyping. Our discussion of this involved pupils in drawing on metacognitive knowledge (of stereotyping and their reactions to it) and practising metacognitive control (such as the component of evaluating).

*(ii) Information about pupils' metacognitive control*

*Planning*

When it became apparent that pupils did not readily refer to planning when thinking about what had helped them to write previously and how their teacher could help them (responses to questionnaires (i) and (ii)) and about a draft during its production (Appendices 2.1 and 2.2), I decided to probe further, using questionnaire (iii) (Appendix 2.3). Answers confirmed the relatively low value pupils seemed to place on planning, although when asked to think about a piece of writing which had a shape or structure that pleased them, eight (out of ten) pupils saw making a plan of the structure first as having helped them. This suggests, perhaps, that pupils had latent knowledge about the usefulness of planning which needed to be made explicit through reflection, or that the act of reflecting created metacognitive knowledge from the memory of experience.

I was conscious of the research of Emig (1971), who found that pupils gave little attention to planning, and Stallard (1974), who made the same finding when studying able pupils.

Thereafter I devised activities to help pupils develop the planning component of metacognitive control; for example, I discussed with pupils the distinction between a plan for a piece of writing (eg introduction, main points and conclusion) and a plan for going about the *task* of undertaking a

piece of writing (starting, perhaps, with deciding on the audience and collecting information) (Flower and Hayes, 1984).

### *Monitoring*

As in the case of planning (above), I devised activities to help pupils develop their skills of monitoring when they seemed to pay little attention to it (questionnaire (i)). An example is the drawing of the match-stick figure of John Trenchard and listing the ways the author of 'Moonfleet' used to 'reveal' the character (Appendix 2.19).

### *Evaluating*

Six (out of ten) pupils had written (in answer to question 4, questionnaire (iii), Appendix 2.3) that they changed the structure or shape of a piece of writing (when redrafting) at least half the time, but the evidence of their first and second drafts did not support this: changes tended to be at the word or sentence level. Less than a third of the pupils (question 5(vi), questionnaire (iii), Appendix 2.3) saw feedback from a teacher on their first drafts as having helped them create the structure of a piece of writing that pleased them.

I decided to direct more of my attention to helping pupils develop their own skills of evaluating and less to giving them written comments on their first drafts. An example of how I did this was the matrix which pupils drew to assess whether their first draft of 'The perspective of another character' contained a variety of ways of revealing the character. Pupils listed the ways which we had identified, in a class discussion, that the author of 'Moonfleet' had used to 'reveal' John Trenchard and against each way they put evidence for their having used the way themselves. Blanks in the matrix showed pupils what they needed to work on. They filled in the blanks with plans for dealing with the missing ways. When pupils had completed their matrices, they wrote underneath them what they had learned. They saw their learning in terms of the activity on which they were working (eg pupil N wrote: "I have learned from the matrix...there are a lot more ways of expressing my character than I first thought in my 'second thoughts' on

planning”). I pointed out to the pupils that I wanted them to learn also that devices like the matrix are useful for evaluating (Now, in retrospect, I realise that I should have made more of this point: too often teachers of writing and learners see writing tasks as ends in themselves rather than as vehicles for developing skills and strategies. I have come to believe that teachers need to make strategies of evaluation (and planning and monitoring) *explicit*, if they are to develop pupils’ metacognitive control).

4. How had my conceptions of scaffolding and metacognition (as they applied to writing and led to the use of checklists) developed?

At the start of Phase 2, I had not decided on particular aspects of the writing process to examine in terms of scaffolding and metacognition.

When I devised questionnaire (i) I noted in my journal (29.9.98) that “ I was trying to focus more specifically on an aspect of writing.”

Giving pupils the opportunity to work on a creative writing assignment (writing in role) enabled me to explore further the use of thinking spaces which I had used in Phase 1. I found that pupils’ notes in their thinking spaces gave me opportunities to provide scaffolding to develop their metacognition.

Questionnaires also became a useful source of material for ideas for scaffolding. I wrote in my journal (13.10.98): “Note how these sheets do give me insights into pupils’ thinking and allow me to scaffold. Note how a dialogue can be established.”

My reading of Wertsch (1991) on the development of intramental speech from intermental speech reinforced the importance of such dialogue. I noted in my journal (14.10.98): “Clear evidence of how structures can be laid down: so metacognition is helped by dialogue that develops thinking. Pupils internalise structures of language that aid metathinking. Consider implications for scaffolding/peer collaboration.”

I began to list the aspects of writing which I could hold dialogues with students about, including their use of such strategies as thinking spaces and their understanding of purpose and audience (all of which I had looked at in Phase 1).

But rather than focus exclusively on these I decided to try to deepen pupils' understanding of how writers go about the process of writing. Ernst (1997) reminded me that the workshop approach "places thinking and learning – not product alone – at the centre of what children do" (pp. 355-6). I realised that my teaching of writing in the past had concentrated on product (pupils' first and final draft), even though I had thought I was following a process approach.

Ernst's method of modelling her own writing with her students encouraged me to think of how I could model a metacognitive approach. I also noted Ernst's model of questioning students about process and asking them to write about what they discovered, as a way of getting them to focus on thinking and learning.

Although I was not conscious of it at the time, I see now that I began a two-fold approach to scaffolding opportunities for developing metacognition:

- (i) helping pupils understand how writers (including themselves) use particular techniques (to prepare for writing as well as write)
- (ii) helping pupils develop their own writing by using some of the techniques that writers employ.

In terms of (i) the notion of Tikhomirov (1981) that writing is "mankind's artificial memory" (p.271) reinforced the importance to me of notes, plans and thinking spaces, especially such methods as can help to reduce cognitive overload (Kellogg, 1990).

The study of 'Moonfleet' gave opportunities to develop (i) and (ii). I tried to help pupils focus on the author's techniques rather than on the characters

or plot. The main essay I set 'How does the author of 'Moonfleet' put the reader on the side of the smugglers?' was part of this focus.

Gallagher and Gallagher (1994) made me keen not to neglect explicit analysis with my students as they suggest that able children may not necessarily understand the underlying structure of stories (and be able to use such structure in their own creations) because they tend to read all stories quickly.

I tried particularly to get the pupils to ask questions about features of the story, such as the depiction of the central character (John Trenchard). I hoped that the pupils would adopt such questions when producing their own writing (Graham and Harris, 1994, p.206: "Students who use writing criteria in the form of questions to evaluate their own and others' writing appear to eventually internalise at least some of these criteria, resulting in improvements in their own writing."

I noted in my journal (26.1.99): "Key issue emerging seems to be making the connection between **READING** and **WRITING**. Atwell (1998) stresses the importance of this connection: she makes it explicitly, over and over again. She wants her pupils to analyse reading as the product of the writer's craft."

At this stage in my thinking I began to pay more attention to planning, as an important technique in writing. I realised after discussing planning with pupils that I needed to clarify for myself what the term meant in the context of writing. I came to see it meaning both the plan for the process of going about the business of writing and the plan of what to put in a piece of writing (a distinction I later found to have been made by Flower and Hayes, 1984, p.124).

I explored pupils' use of planning in my interviews with them and in lessons. It seemed to me that the pupils needed help to gain greater benefit from planning. I began to sense a possibly strong link between the making



of plans and the development of metacognition, not least because, as I noted in my journal (7.2.99): “reflection helps students measure the quality of their own writing, especially when they refer (back) to their plans.”

Discussion with pupils showed that they had found it useful to make a matrix to discover whether they had used a variety of ways to reveal the character chosen to retell part of the story. The matrix was similar to a checklist, but it allowed pupils to insert plans for including material to cover gaps revealed in the process of assessing.

I saw the matrix as a kind of scaffolding that aided pupils’ metacognition. The activity of retelling the part of the story from the perspective of a character other than the main character who narrates the story had been designed to help the pupils see how the technique of first-person narrative affects how the reader sees the events and also how it does not prevent the character of the narrator being revealed in a variety of ways. The matrix had examined how the pupils had managed a similar ‘revelation’.

I decided that the pupils would benefit from looking at other techniques the author used, to help them understand them and add them to their own repertoire of writing methods.

As I described above, I asked pupils to tell me what they had thought about when reading a particular chapter. Pupils’ responses showed a clear distinction between the ablest pupil (assessed as National Curriculum Level 7 for both reading and writing by his main English teacher at the end of the year) and the rest of the group. The ablest pupil wrote: “I tried to evaluate the way in which events would lead to further advances in the plot”; a typical response of other pupils was: “I was considering if the two of them were going to escape.”

As I have reported, my work with the pupils led most of them to be able to view subsequent chapters in terms of the writer’s strategies rather than just

as interesting narrative. I saw my scaffolding as having helped pupils develop a “meta” approach to their reading.

Reading McCutchen (1994) brought me back to thinking of another reason why planning could help metacognition develop and flourish: McCutchen sees the energy (“resources”) put into lower level processes (such as word or sentence level issues) preventing energy going into higher-level processes such as planning and reviewing. Many researchers (eg Meichenbaum and Biemiller, 1992), of course, see planning and reviewing as metacognitive, but it occurred to me that if pupils have plans written down they have less strain on working memory and can reflect more easily on how their emerging text matches their plans (and also perhaps how adequate their written plans are in helping them realise their intentions).

I noted in my journal (25.4.99): “My able writers should have ‘resources’ available to put into planning and reviewing, but I need to see planning as involving not just initial plans (in head or on paper) but the whole business of writing because the skilled writer is aware of his/her plans throughout the process of writing. Even in reviewing, the writer is using plans to measure progress/success.”

It struck me that metacognition linked reviewing to planning – and that reviewing happened throughout the process of writing an assignment, not just at the end. I found confirmation in the literature: Dougherty, 1986 (“Writing plans ... provide a strategy for revision”, p.94); Graves, 1994 (“To revise ... requires reflection and some sense of other possible options”, p.225); Wray, 1994 (who sees revision as the most metacognitive part of writing and who suggests that the planning behaviours of good and not-so-good writers may be linked to their degree of metacognition in writing, pp.94-6).

I formulated a range of questions in my journal to help me clarify my developing understanding of metacognition (especially as it related to able writers) and wrote possible answers; for example, Journal 25.4.99:

“So do able children show more metacognition simply because they have better basic writing skills (lower-order skills) and then can move on to higher-order? I think not – because

- (i) some children seem more reflective than others
- (ii) some able writers (who show metacognition) are poor spellers (example in group).”

My journal shows that my mind was also filled with a number of questions about audience, purpose and genre which I wanted to bring into my action research more closely.

I decided to devise questionnaire (vi) to help me “teach through” some of these questions. I laid out as clearly as I could in my journal what the purpose of each question was in terms of helping

- a) pupils develop a metacognitive approach
- b) me discover more about the pupils’ metacognition (especially in terms of the effect of some of the strategies I had introduced).

As I noted in my journal, it had been useful to be very explicit about the purpose of each question in the questionnaire and to record the purposes, linking them to the current line of direction of my action research.

I analysed the questionnaires soon after the pupils had completed them, but my analysis was deepened by discussing the results with the pupils (as a group) in the following lesson. I encouraged pupils to add further thoughts to their questionnaire answers but in a different colour pen, so that I could distinguish them from their first responses. Subsequent examination of the questionnaires showed me that the group discussion had enabled most pupils to add to their answers (eg one pupil had recognised the value of using quotations when providing evidence to back up points).

Using questionnaire (vii) (devised to help pupils make a metacognitive assessment of the first drafts of their main 'Moonfleet' essay) encouraged me to ask (in my journal 11.5.99) the question: "Would it have been better for pupils to have drawn up their own checklists?"

Having done a number of literature-based activities, I decided to spend most of the rest of the year (we were now well into the third term) on pupils' creative writing, giving pupils choice of subject and genre, as in the writers' workshop approach of Graves (1991, 1994), Calkins (1986) and Atwell (1998).

I noted in my journal (31.5.99): "A writing workshop approach ... will allow pupils to draw on their developing metacognitive knowledge ... I can inject inputs in form of a) mini-lessons, b) conferences with individuals (or pairs/groups if appropriate)."

In my journal I then briefly reviewed the work I had done in Phases 1 and 2, finishing with a consideration of how I had "used a variety of scaffolding to help pupils develop their metacognition in the service of their writing."

This led me quickly to the next step in my research design:

"Could I focus on use of checklists? Especially checklists designed by pupils themselves? Into design of checklist could be fed a) consideration of purpose, b) audience, c) structure (especially in terms of genre), d) key points about language (perhaps relevant only to the particular child). Consider how checklist could reduce demands on working memory....

Checklist can be seen as a kind of scaffolding. Presumably, my intention would be that (over a period of time) pupils would internalise the checklist.

The checklist is an aid to metacognition because it gives points against which pupil can check by thinking. The metacognition

comes from matching what pupil has done with what checklist specifies.”

(Journal 31.5.99)

The use of checklists thus enabled me to pull together a number of threads.

### Discussion

By the end of Phase 2 I had developed a clear conception of how I saw the relationship between scaffolding and metacognition: scaffolding could be provided to help pupils develop metacognition in the service of their writing.

I had become less sure than I had been that more able pupils already had plenty of metacognitive knowledge and skills of metacognitive control, but I was sure that such knowledge and skills could be developed in more able pupils quite readily. In other words, I saw my more able pupils as having the *capacity* to develop metacognition rather than their having it and my task being to harness it. When I reviewed the research which had led me to believe that more able pupils should be metacognitive, I paid more attention than I had done to (i) the different kinds of metacognition involved in the research studies, (ii) the variety of ways in which the able population had been defined and (iii) the failure in studies to consider whether subjects had received teaching which had developed their metacognition.

Action research had allowed me to develop my teaching, including the provision of scaffolding, in response to evidence of pupils' metacognition. Sometimes I had felt that I had not had time to reflect adequately on data collected before planning the next teaching session, but when I tracked my developing ideas of scaffolding and metacognition, I could see more clearly how data had impacted on subsequent teaching. As in Phase 1, my journal played a major role in helping me develop my thinking; I used it more, than in Phase 1, to plan lessons, so the link between data (the research) and teaching (the action) became stronger.

A recurring thought during Phase 2 was whether pupils had found the scaffolds and scaffolding that I had provided as useful as they had said.

Their responses from lessons, questionnaires and interviews indicated that they had found a number of techniques useful, particularly thinking spaces and checklists. But I could not tell whether they had been giving me the answers which they thought I wanted.

I considered whether pupils had done this. It occurred to me that they could have made much more use of their journals if they had wanted to please me. I also noted that pupils had been able to give reasons for their responses, which they might not have managed if they had been dishonest. Often, moreover, they had been able to provide examples to illustrate their reasons. I was also struck by how data from different sources triangulated; there was a good match, for example, between pupils' views on checklists as expressed in questionnaire (ix) and what they said in interviews. The pupils had not been afraid to voice their opinions; for instance, when I indicated that I planned to give over a significant part of the summer term to writing, most of the pupils groaned (When I went on to explain that they would have choice of subject and genre, their reaction changed, with surprising speed, from negative to positive). I could find other instances of where pupils had not tried to please: pupil B, for example, had made it clear that he had not found all of the first six questions of questionnaire (viii) helpful ("Some of the questions were unnecessary in reinforcing already cemented ideas") and he backed up his view when interviewed (Appendix 2.15, ll. 16-17).

In terms of checklists I was able to take account of the fact that one of the pupils had told me in an interview in the first part of the second term (some months before I thought of using checklists) that he found it helpful to use lists of criteria and review sheets (which were similar to checklists).

My professional judgement was that pupils' writing had improved more than I would have expected using the approach I had adopted with pupils of similar ability in the previous two years. Their answers, for example, to the

main 'Moonfleet' essay (the exact wording of which I had used the year before) seemed a) more analytical in terms of the understanding of authorial technique and b) better constructed as essays. I realised that I had taught the pupils much more about the use of a writer's techniques, perhaps because my attention to *planning* had focused my teaching onto such issues as narrative structure. I had also taught the pupils more about the construction of an essay.

My wish to develop pupils' metacognition had made me more metacognitive as a teacher: had pupils produced better work because I had developed their metacognition or because I had had clearer learning objectives and taught in a more focused way? Of course, a good number of my learning objectives had concerned metacognition, but my interest in scaffolding had probably made me more focused in both the planning of my teaching and my interactions with pupils even when my teaching had not taken the form of scaffolding.

I decided, however, that I could only be more certain of the value of developing metacognition by trying to measure the impact of particular interventions through the study of pupils' work. Thus it was that I began to plan Phase 3 before the end of Phase 2.

In conclusion, I believed that I had helped the pupils to write more effectively through developing their metacognition, but I considered that I needed to concentrate on fewer strategies and pursue them in greater depth for the purposes of both effective teaching and research. I also yearned for some more objective evidence that real improvement had taken place. In spite of a consistency in the opinions of pupils collected by different methods, I still had some doubts over whether pupils had merely given me answers they thought I wanted.

## Phase 3

### Introduction

In Phase 2 pupils had perceived checklists as the most useful of the metacognitive devices that I had provided. I decided to investigate, in Phase 3, whether asking pupils to devise their own checklists could help them write better stories. I worked with a group of more able Year 7 pupils.

I chose story because pupils were familiar with the genre and all had written stories in Year 6 as part of their English course. I also wanted to try out the kind of strategy instruction advocated by Harris and Graham (1996) because it provides scaffolding and has a strong metacognitive component. Harris and Graham emphasise that students need strategies for planning and revising text AND self-regulation strategies for monitoring and regulating the use of these strategies and the overall writing process (pp.14-15). I quickly realised when planning Phase 3 that I could not teach the use of checklists without paying some attention to what checklists for stories might contain. So examining research on the teaching of story grammar became important for me.

The research of Harris, Graham and colleagues into the explicit teaching of story grammar has been largely done with learning disabled students, as has most of the research in this field (Fitzgerald and Teasley, 1986). But Danoff (Danoff, Harris and Graham, 1993) included normally achieving students in her research on story grammar strategy. She found that normally achieving students improved the structure of their stories after strategy instruction based on the use of a mnemonic, but, as I noted in the Literature Review, it needs to be remembered that her study was based on only six children, three of whom were normally achieving.

The research of Gordon and Braun (1985) suggests that the teaching of story grammar may help pupils of average and above average attainment improve their writing. Gordon and Braun see such teaching as developing what they call "metacognitive processes" (p.1). They conclude that "knowledge of story schema serves as a scaffolding for independently generating"



narratives (pp.44-45). Their claims are, however, weakened by their basing them largely on comparisons between experimental and control groups which were not matched: the experimental group was superior to the control in both reading (mean standardised grade equivalent of 5.8 for the experimental group: 5.1 for the control) and IQ (mean of 116.3: 102.6). Pupils in the control group could have perceived their group as the less able (because of the IQ disparity and because the control group contained fewer pupils (23 to 34), less able pupils being in smaller groups in most schools) and so they could have responded negatively to the post-tests. Gordon and Braun provide statistical data on changes in children's narratives largely in terms of the inclusion of story grammar elements rather than in the quality of the story. They say that a holistic (global impression) approach was also used to examine stories and reinforces the statistical data, but they provide no detail of this except to give the stories of one child.

I concluded from my examination of research on story grammar that, while a number of studies had investigated the usefulness of teaching story grammar to less able pupils, very little attention had been paid to pupils of average or above average attainment.

The timetable for Phase 3 is given overleaf.

### Timetable for Phase 3

	1999				2000		
	Sept	Oct	Nov	Dec	Jan	Feb	Mar
	<b>PHASE 3</b>						
	<b>Part 1</b>				<b>Part 2</b>		
Pupils' Journals							
Questionnaire			3.1 (Grp A)		3.1 (Grp B), 3.2-4	3.5, 3.6	
Interview							*
Incidental observation of pupils			*		*	*	
Discussion with pupils in lessons							
Major writing tasks	'Lost'	Dialogue and Diary		'Abandoned'		'Trapped'	
Prompts			Checklist (Group A)		Checklist (Group B)		

### Setting

The students involved in Phase 3 were withdrawn from their English lessons at a time of the week when less able pupils were taken out for additional help, so the students were used to undertaking activities at that time which were different from those undertaken in their other English lessons. Each session lasted the length of the English lesson (one hour). The number of sessions is specified below (under 'Procedures').

I had not taught the pupils before, except for 'cover lessons' in the absence of regular staff, but I knew the pupils since they had been attending the school for two years.

Phase 3 fell into two sections: Part 1 in which I taught half the pupils (Group A) about checklists and gave them an opportunity to use them; Part 2 in which I did the same with the remaining half (Group B).

## Participants

The thirty two students consisted of fifteen boys and seventeen girls. They represented all of the students from three mixed ability classes (88 pupils) who had reached Level 5 in their writing or reading SAT, the level that is above the nationally expected level. I included pupils who had gained Level 5 in reading and not writing as national figures suggest underachievement in writing (especially among boys): nationally 14% of pupils obtained Level 5 in their writing (boys 10%; girls 18%) and 32% in their reading (boys 28%; girls 36%) in 1999 (QCA, 2000a). Of the thirty two pupils twelve had obtained, in the SAT, Level 5 for writing (three boys and nine girls) and twenty had obtained Level 5 for reading and not for writing (twelve boys and eight girls).

In Teacher Assessments at the end of Key Stage 2 (Year 6) eighteen of the pupils were given Level 5 for writing. Fourteen were given Level 4, six of whom were graded as Level 5 for reading. Of the eighteen who were given Level 5 there were seven boys and eleven girls; the numbers for Level 4 were eight boys and six girls.

On the Suffolk Reading Scale (taken in January 1999) the eighteen pupils achieved a mean score of 108.7. On the Scale, which was standardised in 1986 (Hagley, 1987), a score of 100 represents the national mean; the highest possible score is 130 and the lowest 70. Two pupils in the group of thirty two achieved 130.

The pupils all spoke English as their first language. Thirty were of white British descent, two of mixed descent.

Pupils were divided into two matched groups, as explained below under 'Procedures', a Group A (sixteen pupils, comprising eight boys and eight girls) and a Group B (also sixteen pupils, made up of seven boys and nine girls).

## Data sources

### Introduction

The main data sources were stories written by the pupils. As the Phase developed, I expanded the range of data sources to include questionnaires and interviews to explore the pupils' thinking on how they had tackled the stories and used checklists. So, as in Phases 1 and 2, research design evolved during the study. My journal continued to be a means of recording details of my procedures, planning and the development of my thinking.

### 1. Written work

#### *Description*

All thirty two pupils wrote

- (i) A story entitled 'Lost'
- (ii) A conversation entitled 'The Great Pet Dilemma' and a diary which they were asked to imagine had been written by one of the characters in the conversation
- (iii) A story entitled 'Abandoned'

Pupils wrote plans before beginning the stories, conversation or diary extract. Some of the pupils included a checklist in their planning for 'Abandoned'. The sixteen pupils in Group B wrote a story entitled 'Trapped' (including plans and checklists if they chose to make the latter).

#### *Rationale*

I asked pupils to write the story 'Lost' so that I could establish a base-line of attainment. The conversation and diary extract were written to give me data which I could use (together with pupils' marks for 'Lost' and SAT results for writing) to divide the pupils into groups of equal attainment, as I describe below, under 'Procedures'). The story 'Abandoned' provided the post-intervention measure in Part 1.

The story 'Trapped' was the post-intervention measure in Part 2 for Group B pupils, as explained below. In choosing the titles for the three stories I aimed to select single words that pupils would readily understand and be

able to respond to. Pupils had had experience of writing to such single word titles in Year 6 SATs and practice stories. Coincidentally, 'Trapped' was the title of one of the story options in the May 2000 Year 6 SAT (QCA, 2000c), taken, of course, after the Year 7 pupils had written their 'Trapped' story a term before.

I had ascertained from the pupils' teachers that they had not already that term written a conversation or diary. Pupils in two of the three classes had written kinds of narrative (in one class a fable, in another a fairy tale), but not the sort of story which I thought it likely they would write for the title 'Lost'.

### *Procedures*

Under 'Procedures' here I include a description of the lessons in which pupils were taught about story grammar (all pupils) and checklists (Group A pupils in Part 1 and Group B pupils in Part 2), as well as other information about the procedures of the intervention. I describe the marking (and analysis of pupils' stories, which took place near the end of Phase 3) under 'Analysis' below. Questionnaires and interviews are also described below as other sources of data, following the section on 'Written work'.

### Part 1

All thirty two pupils were asked to write a story entitled 'Lost'. I told pupils that I would be examining their stories to help me plan some subsequent teaching with them. I knew that all the pupils had been given instruction in the writing of stories as part of their Year 6 work, including practice for SATs. They were allowed ten minutes to use for planning and thirty five minutes for writing the story. Pupils were told that they could write anything in their plan that would help them. I deliberately avoided suggesting what form their planning might take. I had learned in Phase 2 that pupils saw planning in a number of ways. Pupils were used to having some planning time before being allowed to start writing assignments, this being a feature of the writing SAT and practice for it. I also told the pupils that, as in their Year 6 writing SAT, spelling would not be taken into

account. Finally, I said that they should not worry if they ran short of time as they could write their ending in note-form or refer to their plan.

Three weeks later I asked the pupils to write a conversation in which the speakers had different views on whether the pet which one of them had been sent as a surprise present should be kept. When some pupils asked whether the writing should be “like a story”, I answered that it could include some story elements such as a setting but that the main features should be dialogue. Pupils were given ten minutes for planning and twenty minutes for writing the conversation. In the same lesson I asked pupils to write a diary extract which one of the two characters might have written after the conversation. Pupils were given three minutes for planning and fifteen for writing the extract.

To be able to create the two matched groups (Groups A and B), three scores were added together for each pupil: the SAT writing score (from the Year 6 National Test), a mean of the marks given by the two markers of the story ‘Lost’ and a similar mean for the conversation and diary (which together were given the same weighting as the SAT and the story ‘Lost’).

In the SAT over half of the thirty two pupils had written a story (eighteen), but some had produced a letter (eight) and some a leaflet (six).

Pupils were matched (Gall, Borg and Gall, 1996) and one of each matched pair was randomly assigned to Group A, the other to Group B. This was done using a number assigned to each pupil, so I did not know, when the assigning took place, which pupils had been assigned to which group. As this produced an imbalance of boys and girls and an uneven distribution of pupils from the three classes, I changed over five of the sixteen pairs. I decided that these changes were not likely to be prejudiced as I moved particular children because of their gender or form group rather than for any other reason. These adjustments produced a Group A with eight boys and eight girls and a Group B with seven boys and nine girls; Group A comprised six pupils from one Year 7 class, four from the second and six

from the third while Group B comprised five from the first, five from the second and six from the third.

Five weeks later I took the thirty two pupils for a lesson on story grammar. I had decided to do this because the pupils needed to have knowledge of the kind of items that might be useful in a checklist. As I indicated above, I also wanted to use Harris and Graham's model of strategy instruction for using story grammar and self-regulation to develop writing.

I finished the session by telling the pupils that I was going to divide the group in half equally and teach one half at a time. I pointed out that whichever group I taught first was not superior to the other. I did not want the second group to feel inferior and so perhaps underperform.

The next step involved Group A only, two weeks later. I gave them a questionnaire (Appendix 3.1) to determine their previous experience of using checklists in story writing. My reasons for wishing to determine this are given below under 'Questionnaires'.

After the pupils had completed the questionnaire, I told them that they were going to create a checklist. I gave them back their 'Lost' story (including their plan) and asked them to suggest possible elements for a checklist for the story. I modelled writing the checklist on the board, using their suggestions. I used columns for 'planning' and 'writing', taking this idea from (i) Martin and Manno (1995), who devised a 'Story Planner Form' which combined plan and checklist and (ii) Graves and Montague (1991) who developed a Story Grammar Checklist with 'Check As I plan' and 'Check As I write' columns. I then asked each of the pupils to construct a checklist which they could use to assess the presence of important aspects of their story. After pupils had made their checklists, they used them to determine whether their stories (and plans, if they had chosen to include a 'planning' column) contained the elements named in the checklists. Pupils then read each others' stories in pairs and discussed whether they agreed with the assessment made by the authors.

In a plenary session three pairs reported on whether they agreed with one another's assessments. Over half the pupils were prepared to disagree with their partner's assessment, which suggested that they were actively thinking about what they had read in their partner's story and noticed in their partner's completed checklist.

I then asked the pupils whether those who had used two columns in their checklist (one for checking off items at the planning stage and the other during or at the end of the writing stage) would keep the two if they were making a checklist for a subsequent story; most said that they would dispense with the 'planning' column.

I finished the session by telling the pupils that they would be writing another story before the end of term and that they would be able to choose whether to use a checklist or not.

I realised that I would not be able to have the thirty two pupils a week later (because of end-of-term activities), so I arranged to take them at the end of the same week (three days later). I gave the pupils the title 'Abandoned' for their story because I wanted it to be a similar kind of title to 'Lost' so that comparison between the two stories would be possible.

I reminded pupils of the lesson on story structure, referring briefly to 'problem' and 'resolution' and such story elements as characters. I added that the pupils I had taught earlier in the week might like to think about that lesson also, but I avoided suggesting that pupils should use checklists because I wanted to see how many might make them without being told to do so. In fact, I avoided using the word 'checklist' altogether until a pupil asked whether she should use one. I told her that she could if she wanted to (she chose not to).

Pupils were given the same amount of time for planning and writing as they had had for the story 'Lost'. Pupils' stories were assessed in the same way as 'Lost'.



In a brief interview (when the questionnaires had been completed and most of the pupils had left the room) I asked two of the pupils about features of their plans which had made me wonder whether they had been using a kind of checklist. I wrote down the responses of the two pupils immediately after they had made them.

## Part 2

I now turned to the Group B pupils. I had told the thirty two pupils that I would be dividing them into two equal groups of sixteen and working with one and then the other, as indicated above. I gave the Group B pupils the same questionnaire as Group A pupils had completed to ascertain their familiarity with checklists.

I then returned their 'Lost' and 'Abandoned' stories and asked them to read them and compare them by completing the questionnaire entitled 'Comparing 'Lost' and 'Abandoned''.

Next I gave the Group B pupils the same lesson on checklists as Group A pupils had received, the only difference being that when pupils made a checklist it was based on 'Abandoned' rather than 'Lost'.

A week later Group B pupils wrote their third story 'Trapped' under the same conditions as before.

Two weeks later pupils completed one of the two questionnaires about 'Trapped' (depending on whether they had made a checklist or not).

## *Analysis*

The story, conversation and diary extract were marked by two teachers; the first was an English specialist who did not teach at the school; I was the second.

I had decided not to rely solely on my own assessment as I knew the pupils and so might be biased. Also, marking creative writing is not an exact

science and I considered two opinions likely to produce greater reliability. I averaged the marks from the two markers (as did Danoff in her study: Danoff, Harris and Graham, 1993). For the marking of the three stories on which my study is based inter-rater reliability is 0.82 (Danoff's markers achieved 0.77, using a continuous scale of 1-8, whereas my markers used a scale with intervals, as explained below). In a range of marks that ran from 18 to 34 in my study the two markers were within one mark for 56.3% of the stories, within two marks for 70%, within three for 91.3% and within four for 97.5%; on two stories there had been a difference of five points.

The assessment was made according to the marking scheme of the National Curriculum Key Stage 2 writing SAT which has categories of 'purpose and organisation', 'style' and 'punctuation' (QCA, 1999, p.24). Marks are awarded for work which matches specified criteria. Markers are told to look at descriptions of writing given for the three categories and "judge which description **best fits** the piece of work" (p.24). It is pointed out that this "will involve balancing those aspects of the performance which **do** meet the mark scheme against those which **do not**" (ibid.).

The marks for purpose and organisation run from 12 to 21 for the writing test (Levels 3-5) in steps of 3, so that a marker can give 12, 15, 18 or 21 but no marks in between. This means that differences between markers are likely to be exaggerated: markers agreed in a discussion which followed the marking that some stories did not easily find a best fit. One marker would have liked, for instance, to have given 13½ for 'purpose and organisation' to a story which fell between the descriptions for 12 and 15. He decided on 12 after much consideration but thought that the work was on the very edge of 15. The other marker would have also liked to have given an in-between mark of 13½ for 'purpose and organisation' for the same story. She had eventually decided on 15 but felt that it fitted the 15 description only very slightly better than the 12. The mean mark for the two markers was 12½ which would seem very fair, but the difference between the markers was 3 which might suggest a low level of reliability.

Marks for 'style' and 'punctuation' ranged from 2 to 7 in one step of 2 (2 to 4) and then in steps of 1 (5, 6 and 7), so possible marks were 2, 4, 5, 6 or 7.

Marks given for 'style' by the two markers ranged from 4 to 7 with 81.9% being 5 or 6. Marks for 'punctuation' ranged from 4 to 6 except for one mark of 2; 83.1% of the marks were 5 or 6.

Apart from a difference of 2 when one marker gave 4 for 'punctuation' and the other awarded 2, no difference between the markers was greater than 1 for 'punctuation' for any of the stories.

The markers again found that for some stories it was not easy to decide the best fit for 'style' and 'punctuation'. The narrow range of marks meant that pupils could have improved (from, say, a 'just a best fit 5' to an 'almost a best fit 6') or declined but it was not possible to show this.

After I had interviewed half of the pupils (sixteen in number), at the end of the data-collecting of Phase 3 (as described below), I re-read the stories (and plans) of each of the sixteen pupils, seeking to find relationships between what each pupil had written in stories and plans and what the pupil said in interview. To help my examination of the data I listed what I thought it would be particularly useful to look for: the relationship of plan and story; influence of the story grammar lesson; effect of the checklist lesson; where development in pupils' stories most evidently lay (eg in the description of characters). My list guided me as I examined the data, but I aimed to be open to other issues that emerged. I also tried to look for relationships with data from other sources, such as the questionnaires.

## 2. Questionnaires

### *Description*

The following questionnaires were used:

- 3.1, undertaken by Group A and Group B pupils on their previous use of checklists (Appendix 3.1)

- 3.2, completed by the eight pupils in Group A who made checklists for the story 'Abandoned' (Appendix 3.2)
- 3.3, completed by the eight pupils in Group A who did not make checklists for the story 'Abandoned' (Appendix 3.3)
- 3.4, completed by Group B pupils comparing their 'Lost' and 'Abandoned' stories (Appendix 3.4)
- 3.5, completed by the five pupils in Group B who made checklists for the story 'Trapped' (Appendix 3.5)
- 3.6, completed by the eleven pupils in Group B who did not make checklists for the story 'Trapped' (Appendix 3.6)

### *Rationale*

I gave pupils questionnaire 3.1 because, as I indicated above (under 'Written work') I needed to know pupils' previous experience of using checklists in story writing, because I could not measure the impact of making checklists if pupils already had substantial experience of making them. I also needed to know whether the pupils' knowledge and use of checklists was equal across Groups A and B.

After examining the results of the marking of 'Abandoned' and comparing them with the results of 'Lost', I decided to ask the pupils who had chosen to make a checklist (eight out of the sixteen) about how the checklist had helped them and the reasons that might account for their 'Abandoned' story being better than 'Lost' (each of the eight pupils had written a better story, as assessed by the two markers). I decided to use a questionnaire (Appendix 3.2) to gather the pupils' responses because I did not want the pupils to be influenced by each other's views as might have happened in a class discussion.

I gave the eight pupils (who had not made checklists) the questionnaire in the first full week of the next term.

Having read responses, I decided that it would be useful to ask the eight pupils in Group A who had not used a checklist why they had chosen not to

do so. I wanted to discover whether the pupils had simply forgotten about checklists or whether they had had other reasons not to write one down (such as keeping one in their heads). I gave the pupils back their stories to help remind them about writing them. Again I employed a questionnaire (Appendix 3.3) in the second full week of term. I also asked pupils whether or how much the lesson on the elements of a story and the lesson on checklists had helped them write their story. I asked them to give reasons for their answers.

I devised questionnaire 3.4 (which involved pupils in comparing 'Lost' with 'Abandoned') to provide pupils with the opportunity to reflect on their plans and stories in such a way that they could identify features to include or develop in their next story. Group A pupils had not been able to do this, of course, because they had only written one story at the equivalent time, but my work with Group B pupils was not intended to be an exact replication of my work with Group A. It could not have been such because Group B pupils had already written a second story ('Abandoned') and several weeks had elapsed since the lesson on story grammar. I surmised that making the comparison between 'Lost' and 'Abandoned' would also help pupils remember the features of story grammar (which I had helped them identify in the story grammar lesson in the previous term) and so prepare them for the lesson on checklists.

The questionnaire given to pupils who made checklists ('Trapped' questionnaire, Appendix 3.5) was different from the equivalent questionnaire for Group A pupils ('Abandoned' questionnaire) because question 2 referred to comparing 'Trapped' with 'Lost' and 'Abandoned' instead of just comparing 'Abandoned' with 'Lost'. It was also different because a fourth question was included: "If you think that your story 'Trapped' was not so good as your stories 'Lost' and 'Abandoned', please say a) what features make it less good and b) why these features occur." I included this question because one of the pupils had not written such a good story for 'Trapped' as for 'Abandoned', whereas all Group A pupils who made checklists had written better stories for 'Abandoned' than for 'Lost'.

The questionnaire for pupils who had not made checklists (entitled 'Thinking about 'Trapped'', Appendix 3.6) was identical to the equivalent questionnaire for Group A pupils who had not made checklists.

### *Procedures*

Pupils were asked to complete questionnaire 3.1 as the first part of the lesson I gave them on checklists (as I described in the Procedures subsection of 'Written work' above). Group A pupils completed the questionnaire in November and Group B in January.

Questionnaire 3.2 was given to the eight pupils (who had made checklists) after 'Lost' and 'Abandoned' had been marked and the results examined, as I indicated above under 'Rationale'; and questionnaire 3.3 was administered to the eight pupils who had not made checklists after I had read the responses to questionnaire 3.2. Pupils completed the questionnaires in a classroom during the extended registration period that pupils had twice a week.

Questionnaires 3.5 and 3.6 were administered in a similar way to comparable sub-groups (ie those who made checklists and those who did not) of Group B after they had written 'Trapped'.

Questionnaire 3.4 had been given to Group B pupils immediately after they had completed questionnaire 3.1 (about their experience of checklists), in the same lesson.

### *Analysis*

Qualitative data was analysed by the method of Atkins (1984) which I had employed in Phase 2.

## 3. Interviews

### *Description*

Interviews fell into two categories:

- (i) brief interview with two pupils in Group A to clarify whether certain features of their plans were a kind of checklist
- (ii) interviews with sixteen pupils to examine how pupils viewed the differences between their pre-intervention and post-intervention plans and stories and the extent to which pupils seemed to take a metacognitive approach to their writing (Eight of the pupils were from Group A and eight from Group B; eight of the pupils had made checklists and eight had not. I selected the pupils on the basis of their having achieved higher scores in their second and/or third stories, as I anticipated that these pupils would be likely to have differences in their plans and stories).

### *Rationale*

The sixteen interviews were semi-structured, based on a set of questions (Appendix 3.7). I used supplementary questions with most pupils, particularly to gain extra information about their use of plans and checklists and their view of the utility of the lesson on story grammar.

### *Procedures*

- (i) The brief interview with two pupils took place after they had completed questionnaire 3.3. I asked two of the pupils about features of their plans which had made me wonder whether they had been using a kind of checklist. I wrote down the responses of the two pupils immediately after they had made them.
- (ii) The main interviews took place near the end of Phase 3. The interviews lasted between ten and fifteen minutes, were audio-recorded and transcribed. Pupils were given the questions to read through shortly before the interviews, but they did not discuss them with other pupils. The interviews were conducted in my office, at the same time of the week as I had taken the pupils for lessons. Pupils' stories were laid out on a table in front of them during the interview, so that pupils could refer to their work. They had also been able to look through their stories before the interview.

## *Analysis*

Interviews were analysed by the method of Atkins (1984) which I used for the analysis of questionnaire data. Atkins himself employed his method for the analysis of data from both questionnaires and semi-structured interviews. From my analysis of pupils' responses (to the twelve main questions) three principal propositions emerged. I then grouped under each proposition the data which supported it.

## Results

### Introduction

I give the results below, reserving a discussion of them (including relating my findings to the literature) to a separate 'Discussion' section. I present them under headings of Part 1 and Part 2.

### Part 1

#### 1 A comparison of pupils' results from the two story-writing tasks

##### (i) Pupils' stories

Each pupil could score a maximum of 35 marks for the story on the basis of the scheme for the writing test (QCA, 1999). This comprised maximum marks of 21 for 'purpose and organisation', 7 for 'style' and 7 for 'punctuation'. A mark for each pupil was obtained by adding together the scores of the two markers and dividing by 2.

Means were then calculated for Group A and Group B pupils:

*Figure 3.1: Mean scores for the two stories 'Lost' and 'Abandoned'*

<b>Story</b>	<b>Group A (16 pupils)</b>	<b>Group B (16 pupils)</b>	<b>All pupils (32 pupils)</b>
'Lost'	24.94	24.72	24.83
'Abandoned'	28.09	26.66	27.38



A comparison between the pupils' scores for the two stories was made:

*Figure 3.2: Mean gains in writing scores (from 'Lost' to 'Abandoned')*

<b>Group A (16 pupils)</b>	<b>Group B (16 pupils)</b>	<b>All pupils (32 pupils)</b>
3.16	1.94	2.55

This comparison shows that the group of pupils which made the greater gains had received instruction on story grammar and checklists, but the group of pupils who received only the story grammar instruction also made gains (nearly 2 points on average).

The results of the pupils in Group A who made a checklist were compared with the results of those in Group A who did not:

*Figure 3.3: Mean scores for Group A (according to use of checklist)*

<b>Story</b>	<b>Group A pupils who made a checklist (8 pupils)</b>	<b>Group A pupils who did not make a checklist (8 pupils)</b>
'Lost'	24.62	25.25
'Abandoned'	28.37	27.81
Mean gain	3.75	2.56

These results (Figure 3.3) show that pupils who chose to make a checklist made greater gains on average than those pupils who had received instruction on checklists but who had chosen not to make one.

(ii) Features of pupils' plans

The plans of the thirty two pupils (written by them in their ten-minute planning time before writing their stories) for 'Lost' and 'Abandoned' were examined for evidence of the effect of the lessons about story grammar and checklists. The features of pupils' plans fell into the categories listed below. Against the categories are recorded the numbers of pupils who included the features.

Figure 3.4: Features of pupils' plans ('Lost' and 'Abandoned')

Features	'Lost': number of pupils including each feature	'Abandoned': number of pupils including each feature
Outline of plot	32	31
List of characters	26	26
Description of characters	5	8
List of scenes	1	0
Setting	6	9

Six of the pupils used the headings 'beginning, middle and end' to help them outline their plot for 'Lost' and seven for 'Abandoned'. Eight pupils used the word 'problem' (six of whom also used 'solution' or 'resolution' in their outline of the plot for 'Abandoned'). No pupils had used these terms in their plan for 'Lost'. Which class pupils came from in Year 7 made little difference to how they planned for 'Lost' or 'Abandoned' (Appendix 3.8). Pupils in class 7E were more likely to describe their characters and pupils in class 7Y to describe the setting.

An examination was next undertaken of the differences between the plans (for 'Abandoned') of pupils in Group A and Group B to see whether the lesson on checklists (which only Group A pupils received) had had an effect on pupils' planning:

Figure 3.5: Features of pupils' plans (for 'Lost' and 'Abandoned') by Group

Features	Group A		Group B	
	'Lost'	'Abandoned'	'Lost'	'Abandoned'
Outline of plot	16	15	16	16
List of characters	13	12	13	14
Description of characters	2	7	3	1
List of scenes	0	0	1	0
Setting	2	4	4	5

The main difference seems to be that Group A pupils were more likely to describe their characters in their plans after the intervention and a little more likely to describe the setting. It is striking that nearly half of the Group A pupils (seven) gave some description of their characters in their plans for

'Abandoned' whereas only one of the sixteen pupils in Group B did so. Only two of the seven who described characters in their plans for 'Abandoned' had described characters in their plans for 'Lost'.

I next examined whether there were differences in the plans of pupils who made or did not make checklists for 'Lost' and 'Abandoned':

*Figure 3.6: Features of plans of pupils in Group A*

Category	Group A pupils who made checklists: 8 pupils		Group A pupils who did not make checklists: 8 pupils	
	'Lost'	'Abandoned'	'Lost'	'Abandoned'
Outline of plot	8	7	8	8
List of characters	7	4	6	8
Description of characters	0	4	2	3
List of scenes	0	0	0	0
Setting	2	3	0	1

Pupils who made checklists were more likely to describe their characters in their plans than pupils who did not make checklists. Within the 'made checklists' subgroup of Group A the four pupils who described characters in their plan made nearly double the improvement in their writing (4.9 points against 2.6). This did not hold for pupils who had not made checklists, although one of the three pupils in this subgroup who did describe his characters in his plan made a large gain (7 points).

Only one pupil in the 'made checklist' subgroup used the word 'problem' in his plan, but three included it in their checklist (including the pupil who used it in his plan). Two pupils in the 'did not make checklist' subgroup of Group A used the word in their plan, as did five of Group B.

### (iii) Checklists

Within the 'made checklist' subgroup the pupils who showed the most improvement were more likely to include 'problem' and 'resolution' in their checklist than the pupils who showed the least improvement: the three pupils who showed the least improvement (fewer than 3 points) did not

include either word, whereas three out of the five making the most improvement (4 or more points) included both.

The pupil in the 'made checklist' subgroup who made the greatest improvement (7 points) wrote the most detailed checklist: Introduction, Problem, Resolution, Good ending, Punctuation, Similes/Metaphors, Alliteration, Good names of characters (personality). Both he and the pupil who made the second greatest improvement in the subgroup (6 points) included one or more items which none of the other pupils thought to include (in the first boy's case: Good ending, Similes/Metaphors, Alliteration, Good names of characters (personality); in the second boy's case: Atmosphere).

An analysis of items in the checklists showed the following:

*Figure 3.7: Items included in the checklist for 'Lost' (Group A: eight pupils)*

<b>Item</b>	<b>Number of pupils including it</b>
Beginning, middle, end	1
Introduction	1
Introduce characters	4
Characters	1
Describe characters	5
Good names of characters (personality)	1
Setting	5
Time	3
Atmosphere	1
Description	1
Problem	3
Resolution	3
Journey	1
Good ending	1
Punctuation	4
Paragraphs	2
Spelling	1
Similes/Metaphors	1
Alliteration	1

The lessons on story grammar and checklists had included some reference to nearly all of the items. I had used pupils' suggestions when modelling the creating of checklists on the board (as I had also done when discussing the

common elements of a story). Items which did not figure in the planning parts of the lessons were 'alliteration' and 'atmosphere', but pupils may have used these words when working with partners in the lessons.

Of the eight pupils in Group A who made checklists three had written in questionnaire 3.1 that they had made one before. This was exactly the same proportion of all Group A pupils (six out of sixteen) who had made a checklist previously. I could detect no relationship between the degree of improvement in the story-writing of pupils in the 'made checklists' subgroup of Group A and their familiarity with checklists prior to the lesson on checklists.

Examination of the checklists of the eight pupils who made them shows that they used them for different purposes: to list/check off items in the plan, the story or both plan and story:

*Figure 3.8: Apparent purpose of checklist for 'Abandoned' (Group A: eight pupils)*

<b>Apparent purpose of checklist</b>	<b>Number of pupils</b>
For the plan	1
For the story	2
For both plan and story	2
Not clear	3

There was no relationship between how the pupils used the checklist (ie their apparent purpose) and the extent of their improvement as story writers.

Most of the pupils had filled in the boxes on the checklist they had made, but two who had boxes for both 'plan' and 'story' had ticked the 'plan' boxes but left the 'story' boxes blank.

## 2 Group A pupils' previous use of checklists

The following results were obtained from questionnaire 3.1 given to the sixteen pupils in Group A:

Figure 3.9: Pupils' previous use of checklists (Group A: sixteen pupils)

	Yes	No
1 Have you seen a checklist like the story checklist (provided) before today?	6	10
2 Have you used a checklist like the story checklist (provided) before today?	4	12
3 If you answered 'yes' to question 2, how did you use it?		
(i) I read it before starting to write my story, but I did not fill it in	2	2
(ii) I filled it in as I wrote	1	3
(iii) I filled it in after I had written my story	2	2
(iv) I read it as I wrote but did not fill it in	1	3
(v) I read it after I wrote but did not fill it in	0	4
4 Have you ever made your own checklist for a story?	6	10

Four of the six pupils who answered 'yes' to question 4 gave their reasons, three saying that it was to make sure that they used everything and one that it was to know what the story was going to be about. Three of the six pupils explained how they used it, one giving 3(i) as the reason, another 3(ii) and the third 3(iii).

The sources of knowledge about checklists were mainly parental: one of the six said "My mum told me", a second "Mum's shopping list", a third "I saw my mum doing it and her story was good" and one pupil wrote "school".

Three pupils said that they had made a checklist for a story more than once: two said "sometimes" and one "about half the time".

The results were examined for differences among the three classes in terms of their familiarity with checklists. Differences were slight: for example, of the ten children who had not made a checklist before, three came from one class, three from another and four from the third.

In Year 6 most pupils would have seen a checklist similar to the one I had provided (on the questionnaire), as one was given in the SAT writing paper. Pupils had also undertaken a practice SAT from the previous year's paper which contained a checklist. Half of the pupils had taken the story option in

the SAT and so would have seen the checklist, but those who chose to do the other options (a letter or brochure) may have only glanced at it.

Pupils who had made a checklist before were no more likely to have made one for 'Abandoned'. Of the six pupils who had made a checklist before, two made one for 'Abandoned'. Of the ten who had not made one before, five made one for 'Abandoned'.

### 3 Responses to questionnaires

#### (i) Responses to the 'Abandoned' questionnaire of the eight pupils in Group A who made a checklist

Appendix 3.2 contains the full results.

Pupils saw the checklist helping them in a variety of ways. Five viewed it as helpful during the planning time because it helped them check that they had remembered important things; four of the five also thought it was helpful to write down items in the checklist which they might otherwise have forgotten.

Four pupils (including only one who had seen the checklist helpful at the planning stage) viewed the checklist as assisting during the writing time because the act of creating it helped them remember important things. Few pupils (2) saw the checklist as useful for ticking items off when they had been included, but three quarters (6) said it was helpful for checking on the inclusion of important things when reading through the story after it had been finished.

Pupils considered that their story 'Abandoned' was better than 'Lost' (which it was in all cases, as judged by the markers) for a number of reasons: all but one pupil chose three of the four suggested reasons (no pupil offering any other reasons). All eight pupils, however, gave the use of a checklist as one of their reasons; and seven of the eight selected a reason which related to story grammar: five saying that they had thought more about the important features of a story and five more about 'problem and

resolution' rather than 'beginning, middle and end'. Half of the pupils considered that one of the reasons for improvement was that they had developed their characters more.

Pupils who identified 'a better plan' as a reason for producing a better story gave a variety of explanations for why their plan was better. I intended the question to probe what it was about their plans that pupils thought made them better, but three of the pupils took the question to be looking for what had helped them produce a better plan. I realised that I should have written 'how' rather than 'why'. Two of these pupils gave one reason for the improvement in their plan as the checklist; for example, one wrote: "It was better because I had the checklist to remind me of what I was doing, and we went over problem and resolution plus the characters." The third pupil simply noted that her plan was "easier to write and ideas were easier." The pupil who interpreted the question as I intended wrote that her plan was better because she "described the characters more and the time and place."

I examined whether the responses of the pupils (making a checklist) who had shown the greatest improvement were different from those who had made the least. I could find no differences.

(ii) Responses to the 'Thinking about 'Abandoned'' questionnaire of the eight pupils in Group A who did not make a checklist

Appendix 3.3 contains the full results.

Pupils picked a wide variety of reasons for choosing not to make a checklist. Three said that they kept a kind of mental checklist in their heads to which they referred during their planning and writing. Three saw their plans as acting as a kind of checklist. Two ticked 'Having made my plan I did not need anything else to help me write my story'.

Three of the four pupils who had shown the greatest improvement in their story writing (5.5, 4.5 and 2) chose 'I kept a kind of mental checklist in my



head to which I referred in my planning and writing'. None of the pupils who made the least improvement (0.5, 0.5, 0.0) chose this.

Pupils were asked whether and/or how much the lesson on story grammar and the lesson on checklists had helped them write their story 'Abandoned'. Seven pupils saw the lesson on story grammar as of some help and one as a lot of help. Seven of the pupils viewed the lesson on checklists as giving a little help.

The reasons that pupils gave for finding the story grammar lesson helpful mainly concerned learning about story elements; for example, one pupil wrote that the lesson had taught her "the basic elements of what should be in a story." She added: "I then tried to include them in my plan." Another wrote: "It helped me to plan my story out and to remember things." Two pupils referred specifically to learning about problem and resolution.

The reasons pupils gave for finding the lesson on checklists a little helpful showed that several had some uncertainty about their use; for example, one pupil wrote, "It taught me a different way of making a plan but I still don't know how to use them properly."

Apart from this pupil's reference to her plan pupils did not make clear how the lesson on checklists had specifically helped them to write their story. Pupils seemed to be answering a different question from the one on the questionnaire: they seemed to be indicating reasons for finding the lesson on checklists helpful generally rather than reasons for the lesson helping them to write their story 'Abandoned'; for example, one pupil wrote: "It helped me a little because you wouldn't forget the things you needed to include in your story."

#### 4 Interview with two pupils in Group A to clarify whether certain features of their plans were a kind of checklist

One of the pupils who had placed a tick by the first item in her story outline said that she had intended to tick off items in her plan as she did them but

that she did not think that she had been using a checklist. The other pupil, who had placed crosses by all the items in her story outline and list of characters, said that she had written the crosses by what she had completed so that she knew where she was. This pupil wrote in the questionnaire ‘Thinking about ‘Abandoned’’: “I don’t think I would use a proper checklist. I would like to use boxes with words in and tick them when I had included them in my story.”

I decided that neither pupil had *made* a checklist (so I placed both pupils in the ‘did not make checklist’ sub-group), although the second pupil seems to be moving towards the kind of combination plan and checklist that Martin and Manno (1995) used. She was, however, placing the crosses as a way of seeing where she was in her plan rather than to help her check whether she had forgotten important items. She had used the same method in her plan for ‘Lost’, although she had put crosses against only a few items in her story outline.

## Part 2

### 1 A comparison of Group B pupils’ results from the three story-writing tasks

#### (i) Pupils’ stories

A mean score was calculated for pupils’ ‘Trapped’ stories using the same method as for the two earlier stories.

*Figure 3.10: Mean scores for the three stories*

<b>Story</b>	<b>Group B (16 pupils)</b>
‘Lost’	24.81
‘Abandoned’	26.75
‘Trapped’	27.81

Mean gains were calculated:

*Figure 3.11: Mean gains in writing scores*

	<b>Group B (16 pupils)</b>
From ‘Lost’ to ‘Abandoned’	1.94
From ‘Abandoned’ to ‘Trapped’	1.06
From ‘Lost’ to ‘Trapped’	3

Next a comparison was made between the mean scores and gains of pupils who made checklists and those who did not:

*Figure 3.12: Mean scores for Group A (according to use of checklist)*

<b>Story</b>	<b>Group B pupils who made checklists (5 pupils)</b>	<b>Group B pupils who did not make checklists (11 pupils)</b>
'Lost'	25.2	24.64
'Abandoned'	27.2	26.55
'Trapped'	28.7	27.41
Gain: 'Abandoned'-'Trapped'	1.5	0.86
Gain: 'Lost'-'Trapped'	3.5	2.77
Gain: 'Lost'-'Abandoned'	2	1.91

These results (Figure 3.12) show that pupils who chose to make a checklist made greater gains than those pupils who had received instruction on checklists but who had chosen not to make one. The two sub-groups of pupils had not differed much in terms of gains made after the story grammar lesson (in their 'Abandoned' stories): 2.0 for those who went on to make a checklist for 'Trapped' and 1.91 for those who did not.

(ii) Features of pupils' plans

I examined Group B pupils' plans to see whether the plans had different features from their plans for 'Abandoned':

*Figure 3.13: Features of Group B pupils' plans (all three stories)*

<b>Features</b>	<b>'Lost'</b>	<b>'Abandoned'</b>	<b>'Trapped'</b>
Outline of plot	16	16	15
List of characters	13	14	10
Description of characters	3	1	4
List of scenes	1	0	0
Setting	5	5	3

When outlining their story, two of the pupils referred to 'problem' and 'solution', one to 'problem' and a fourth to 'resolution'.

The main differences between the plans for 'Trapped' and 'Abandoned' were that four fewer pupils had listed their characters for 'Trapped' but three more had described their characters.

Next I examined whether the plans of those pupils who had chosen to make a checklist were different in terms of features from those who had not:

*Figure 3.14: Features of plans of pupils who made and did not make checklists (Group B: sixteen pupils)*

<b>Features</b>	<b>Group B pupils who made checklists (5 pupils)</b>	<b>Group B pupils who did not make checklists (11 pupils)</b>
Outline of plot	4	11
List of characters	3	7
Description of characters	2	2
List of scenes	0	0
Setting	2	1

The most striking difference would seem to be that 40% of the pupils who made checklists described their characters in their plans, whereas only 18% of those who did not make checklists described theirs.

Within the 'made checklists' subgroup, one of the two pupils who described their characters made a gain (3.5) while the other made a loss (-1.5). The average gain for the subgroups was 1.5. Within the 'did not make checklists' subgroup the two pupils who described characters made gains of 3.5 and 2.5. The average gain for the subgroup was 0.86.

Pupils (in the 'made checklists' subgroup) who referred to problem and (re)solution gained 3.5 and 2.5 points (average of 3, against a subgroup average of 1.5). Pupils in the 'did not make checklist' who referred to 'problem' or 'resolution' gained 2.5 and 1 (average of 1.75 against a subgroup average of 0.86).

Pupils in the subgroup 'made checklist' who included 'setting' in their plans made the same gains as the subgroup average. The one pupil in the

subgroup 'did not make checklists' who included 'setting' in her plans made a slight loss (-0.5).

The average gain of Group B pupils after the checklist lesson was 1.06. The difference in gain between Group A pupils after the checklist lesson and Group B pupils was 1.19. This seems to indicate that the effect of the checklist lesson was similar for Groups A and B.

In Groups A and B together thirteen pupils chose to make checklists while nineteen did not. Group A and Group B pupils who made checklists made average gains of 3.66 from their scores for 'Lost'. Group A and B pupils who did not make checklists made average gains of 2.66 from their scores for 'Lost'.

Pupils in Group B who had made checklists had achieved average gains of 2 after instruction in story grammar. If their gains after the lesson on checklists (ie the gain from 'Abandoned' to 'Trapped') are added to the gains of Group A pupils who made checklists (from 'Lost' to 'Abandoned'), the overall average gain after the checklist lesson is 2.88.

Pupils in Group B who had not made checklists had achieved average gains of 1.91 after instruction in story grammar. If one adds their gains after the lesson on checklists to the gains of Group A pupils who chose not to make checklists, the overall average gain is 1.55. So pupils in Groups A and B who made checklists achieved greater gains in the story written after the checklist lesson than those who did not make checklists.

### (iii) Checklists

An examination of items included in the checklists (for 'Trapped') showed the following (The list of items was based on the items found in the checklists of Group A pupils, except the last six items which figured in the 'Trapped' checklists only):

Figure 3.15: Items included in the checklist for 'Trapped' (Group B: five pupils)

Item	Number of pupils including it
Beginning, middle, end	1
Introduction	0
Introduce characters	0
Characters	4
Describe characters	0
Good names of characters (personality)	0
Setting	3
Time	0
Atmosphere	0
Description	1
Problem	2
Resolution/solution	2
Journey	0
Good ending	0
Punctuation	0
Paragraphs	0
Spelling	0
Similes/Metaphors	1
Alliteration	0
Detail	2
Vocabulary	1
Checking through	1
Scene	1
Plot	1
Action	1

Two pupils made lengthy checklists (eight and six items), while the others had only a few items (three, three and one). The pupil making the largest gain (3.5 points) included six items, but the pupil who included the most items (eight) made a gain of only one point (She had, however, made a very large gain after the story grammar lesson of 6.5 points). Both of the pupils included 'problem' and '(re)solution', the only two of the five pupils to do so. The pupil including only one item made a gain of 2.5 points.

A comparison with the items found in Group A's checklists shows several similarities, particularly in terms of the number of items related to characters, structure and setting. No pupils in Group B ('Trapped') included punctuation, which was a difference from Group A, but one Group B pupil had 'checking through' as an item. It is striking that nearly half of the item

categories (twelve out of twenty five) did not occur in more than one pupil's checklist, which suggests that pupils were using many of their own ideas rather than restricting themselves to items in the checklist that I modelled in the checklist lesson.

I examined the checklists ('Trapped') to try to determine whether they had been devised to support plan, story or both:

*Figure 3.16: Apparent purpose of checklist for 'Trapped' (Group B: five pupils)*

<b>Apparent purpose of checklist</b>	<b>Number of pupils</b>
For the plan	1
For the story	0
For both plan and story	1
Not clear	3

This data added little to what I had found from Group A's checklists. There was no relationship between how the pupils used the checklist and the extent of their improvement as story writers.

I noticed that two of the pupils only ticked the boxes in their checklist after they had seemed to finish their stories and were waiting to hand their papers in.

## 2 Group B pupils' previous use of checklists

The following results were obtained from questionnaire 3.1 given to the sixteen pupils in Group B:

Figure 3.17: Pupils' previous use of checklists (Group B: sixteen pupils)

	Yes	No
1 Have you seen a checklist like the story checklist (provided) before today?	12	4
2 Have you used a checklist like the story checklist (provided) before today?	6	10
3 If you answered 'yes' to question 2, how did you use it?		
(i) I read it before starting to write my story, but I did not fill it in	1	4
(ii) I filled it in as I wrote	2	4
(iii) I filled it in after I had written my story	2	4
(iv) I read it as I wrote but did not fill it in	2	4
(v) I read it after I wrote but did not fill it in	1	5
4 Have you ever made your own checklist for a story?	3	13

Pupils who used a checklist before were more likely to have made one for their story 'Trapped' (three out of five) than pupils who did not make one (three out of eleven). Two of the five pupils who made a checklist had not made one before, whereas only one of the eleven who did not make one had made one previously. There did not seem to be a match between pupils' stated familiarity with checklists and their gains.

### 3 Responses to questionnaires

#### (i) Responses to the questionnaire 'Comparing 'Lost' and 'Abandoned''

##### 1a. Differences in the plan

Pupils varied greatly in what they chose as differences, but several responses fell into groups: five pupils commented on the differences in detail (three judging their plan for 'Abandoned' to have more detail and two less, both of whom thought that they had included too much detail in their plan for 'Lost'); five pupils noted differences in layout, three pointing to the use of headings for setting, characters and other features; three pupils commented on their use of 'problem' and/or '(re)solution'. Pupils who made checklists did not identify differences that were different from those identified by pupils who chose not to make checklists.



#### 1b. Differences in the stories

Pupils showed an even greater variety from that for their comments on the differences between their plans for their two stories. Every pupil identified a different difference except two who wrote that their second story was more interesting. Differences included characterisation, structure, vocabulary and punctuation.

2. Pupils' judgement of which story was better did not match markers' combined judgement very well: markers agreed with nine out of the sixteen judgements of pupils. All five pupils who made checklists thought their second story was better (Markers agreed with three out of the five). Eight of the pupils who did not make checklists thought that their second story was better and three thought the first story better; markers agreed with six out of the eleven, judging each of the three pupils who thought 'Lost' better to have written a better story for 'Abandoned' (by 4, 3.5 and 2 points).

3. In answering the question about what made their 'better' story better, pupils tended to repeat points made in their answers for 2) or to elaborate on them. A major difference, however, was that five pupils seemed to put themselves into the role of a reader of their 'better' story (eg "I think it also contains a bit more description, and humour, so I would much more enjoy reading it" and "It's an overall better read. A small few jokes make you want to read on."). The average gain for the five pupils was 2.2 (compared with 1.82 for the eleven pupils who did not put themselves into the role of a reader).

4. In answering 'What do you need to do to make your next story even better?' pupils again gave a wide variety of responses, but three groups of responses emerged: five pupils mentioned more detail or description, four more interesting words and three pupils referred to making the story more unusual, interesting or adventurous.

The five pupils who mentioned more detail or description made average gains of 1.9 ('Abandoned' to 'Trapped', compared with average gains of

0.68 for the eleven pupils who did not). Three of the four pupils who named more interesting words made gains (3.5, 2.5 and 1.5), but the average for the four was pulled down by a pupil who made a loss of 3. The three pupils who referred to making their stories more unusual, interesting or adventurous made relatively large gains (averaging 2.83), while another pupil who intended to plan the structure of her story more effectively gained 3.5 points. These four pupils made the highest gains of the sixteen pupils in Group B.

(ii) Responses to the questionnaire 'Trapped', completed by five pupils  
Appendix 3.5 contains the full results.

Over half (four) of the seven pupils who had made a checklist thought that the checklist had helped them during planning to write down things that they might have forgotten. Two of the four also thought that it had helped them during planning time because they had ticked items off when they had included them as they planned.

Three pupils saw the checklist as helpful at the time of writing because they kept important things in their minds as the result of making the checklist. Two of the three pupils and one other used the checklist to tick items off when they had included them in the writing time.

Two pupils thought that the checklist had helped them when they had finished their writing because they used it to check that they had remembered important things.

All pupils thought that their story 'Trapped' was better than 'Lost' and 'Abandoned'. Their reasons were diverse. Three pupils ascribed the improvement to the use of a checklist. One of these pupils and two others indicated that one of the reasons was that they had thought more about 'problem and resolution' rather than 'beginning, middle and end'.

Only one pupil attributed improvement to making a better plan (giving the reason for her plan being better as that it included “more detail” so that she knew “exactly how to write” her story).

Two pupils decided that one of the reasons for the improvement in ‘Trapped’ was that they had thought more about the important features of a story. Two pupils gave the greater development of characters as their reason.

(iii) Responses to the questionnaire ‘Thinking about ‘Trapped’  
(completed by the eleven pupils who did not choose to make a  
checklist)

Appendix 3.6 contains the full answers.

Five pupils chose “I kept a kind of mental checklist in my head to which I referred during my planning and writing”. Five (including three who ticked “I kept a kind of mental checklist in my head to which I referred during my planning and writing”) chose “My plan acted as a kind of checklist because I wrote down important elements in it and I referred to them when writing my story”.

Four pupils decided that having written their plans they needed nothing else to help them write their story and three that they did not think a checklist was necessary as they knew the important element in a story. One pupil forgot about checklists.

Pupils who chose “I kept a kind of mental checklist in my head” made relatively large gains (‘Abandoned’ to ‘Trapped’) of an average of 1.9 (compared to an average gain of 0 for the six pupils who did not choose this response). The five pupils who ticked “My plan acted as a kind of checklist” gained 1.4 (compared to an average gain of 0.42 for the six pupils who did not choose to tick it).

The four pupils who chose “Having made my plan I did not need anything else...” made an average gain of 0.4. The three pupils who chose “I did not think it [the checklist] was necessary as I knew the important elements in a story” made average gains of 0.83, but two of the three also ticked “My plan acted as a checklist...”.

Six of the pupils ticked only one item, the remaining five selecting two or three items.

Four of the pupils saw the lesson on story grammar as of “a lot” of help, six “some” help and one “a little”. These responses did not correlate with improvements in pupils’ scores after the lesson.

Eight of the pupils saw the lesson on checklists as of “a little help”, two “some” help and one “a lot”. There was no correlation with pupils’ scores (‘Abandoned’ to ‘Trapped’).

Pupils gave a variety of reasons for how the lesson on story grammar had helped them. Three pupils referred to how it had introduced them to ‘problem’ and ‘(re)solution’ (eg one pupil wrote, “I knew I could do a problem and resolution instead of a beginning, middle and end. This helped me a lot”; and another (referring to ‘problem’ and ‘resolution’) noted, “Now I include them all the time”). These three pupils made an average gain of 3.3 points after the story grammar lesson (compared with an average gain of 1.625 for the eight pupils who did not refer to ‘problem’ and ‘resolution’). Four pupils said that the lesson on story grammar had helped them include important elements: these pupils gained 0.75 points (compared with an average gain of 2.57 for the seven pupils who did not say this). These four pupils did, however, make an average gain of 2 after the lesson on checklists.

Pupils’ responses to the question about how the lesson on checklists had helped them showed that several (three) held a checklist in their head (eg “I had a checklist in my head, so it helped a bit”, “Because I don’t use the

checklist, but now I know in my head what to write and mentally ‘check off’”). These three pupils made average gains of 1.83 (compared with average gains of 0.5 for the eight who did not give this reason). One pupil commented on how the lesson on checklists had helped her check: “Because I learned a different way of checking if my story is complete”). She also referred to how the checklist was an aid to memory: “it helped me remember what I need to put in my story to make it good”. Another pupil made a similar point: “Because of the different things that are involved in a story. So it reminded me.” She added that the checklist lesson helped her with “other ways to plan a story”. Two pupils’ comments indicated that they did not see checklists as useful (“I preferred to just read through instead of making a checklist”; “I don’t think checklists are a vital thing for writing a story. When I write stories, I think of better things as I go along”). These pupils made an average loss of 1.25 (their loss/gain being -3 and +0.5). The remaining nine pupils saw checklists as useful: these pupils made an average gain of 1.33.

#### 4. Interviews with sixteen pupils (eight of whom had made checklists and eight of whom had not)

Appendix 3.7 contains the full results.

It was clear from pupils’ responses that those who made checklists believed that the making had helped them write better stories.

When I asked pupils about the differences between the plans of their first and second story (in the case of Group A) and first and second on one hand and third on the other (in the case of Group B), pupils who had made a checklist tended to refer to the checklist (eg “On the first story I made my plan in paragraphs which got a bit muddly because you can’t always see it properly and you can’t go through it, all of the things like characters, but on my second story I made a checklist and then, once I’d done everything, I could go back and check that I’d done it properly”, Appendix 3.9).

Some pupils make a causal link between a checklist, plan and story (eg in answer to my question, ‘What one or two factors account for the improvement between one of your stories and another?’ one pupil said: “I think the checklist, which made me have a better plan so I had a better picture in my head, so I could write it up on paper much better, so ‘Abandoned’ was better”).

I asked some pupils about certain words in their checklist. One pupil had written “description”. I asked him whether he thought putting description in his checklist had helped him to put more description into his story. He replied that it had but said that what had helped him put more description into his story was that, as the result of writing ‘description’ in his checklist, he had “put a little bit of description” in his plan so that he knew what he “was going to say about the characters and the setting”.

Pupils varied as to how they used their checklist. Some said that they used it to check that their plans had been adequate; others said they used it during the writing of the story to check that they were including the items in their checklist. A few indicated that used it for both purposes (eg “When I was writing the checklist down, it helped me put in my head the things I had to do. It was good it was there on the paper as well. I looked at it.”).

Some pupils saw their checklist as helping them to remember what to put in their plan or story: one pupil said that without a checklist she “wouldn’t have thought about a problem and solution and details”. Some pupils who did not make a checklist said that they had nevertheless found the idea of checklists useful (One pupil, for example, noted: “I do my story and then I say, like, ‘punctuation’ and then I go through the punctuation.” Another pupil said: “I was trying to think about other ideas I could put in while I was writing ... using a mental checklist”).

Pupils were clear that they found it useful to see a story in terms of a problem and solution. One pupil noted that his plan for ‘Lost’ was different from his plans for ‘Abandoned’ and ‘Trapped’ because in the former he was

thinking about “beginning, middle and end” whereas “in the second one and probably more in the third one I was thinking of problem and resolution”. This pupil attributed the improvement in his story writing to having a problem and resolution. He said that the lesson on checklists had been “not as helpful as the problem and resolution but it was helpful”. Perhaps the lesson on checklists had helped him be more conscious of narrative structure, as he said that he was thinking of problem and resolution “probably more in the third one”.

Other interview responses showed that pupils did not generally see themselves as story writers (I had included a question on this to examine whether my work with them had made them more conscious of being writers) and that most of them had not thought about audience when writing their stories. They tended to see the business of story writing more in terms of realising their written plans rather than creating an artefact that contained the features of a ‘good story’. I wondered whether these responses indicated that pupils’ growth in metacognition had been related to the particular (checklist and story grammar) rather than the general (awareness of themselves as writers meeting the narrative expectations of an audience).

To help verify pupils’ responses in the interviews I decided to examine their stories (The question of whether they had been giving me the answers they thought I wanted occurred to me, as it had done in Phase 2, although the best way to have pleased me might have been for all of them to have made checklists!). In particular, I sought to find links between improved planning (which some pupils thought creating checklists had helped them to make) and improved stories.

It was not difficult to find such links. One pupil, for example, had said that in his plan for ‘Abandoned’ he had given greater attention to his characters: “I ... outlined it a bit more and who the characters were and what they were about.” In his plan for ‘Lost’ he had not described his characters but he did so in his plan for ‘Abandoned’. His characterisation in ‘Abandoned’ is much stronger than in ‘Lost’; for example, he reveals his characters’

personalities and attitudes in dialogue at the beginning of 'Abandoned':

"'Woman, just let them go. What can go wrong?'" ordered their dad.'

The pupil had referred to differences in how he had treated dialogue when I had asked him whether something different had happened when he had written his second story in comparison to his first: "I thought like when using speech I sometimes put the same thing all the time. On that one [He had his stories laid out in front of him during the interview] I put it different, but in 'Lost' it was "OK" and "Yeah" all the time."

The boy attributed the differences in his treatment of characterisation to the lesson on story grammar. This was surprising to me as we had discussed characterisation much more in the lesson on checklists when 'description of characters' had been part of the checklist that I had modelled on the board. The pupil had not made a checklist.

Pupils' stories showed that developments in narrative structure, particularly in terms of coherence and relevance, and in characterisation accounted for most of the improved scores for 'Purpose and Organisation'. The group of pupils whose stories demonstrated the greatest development in structure and characterisation comprised those who had included in their checklists items about structure and the description of characters.

Finally, to return to the interview data, in examining it I was struck by the readiness with which pupils talked about their planning and writing, revealing both metacognitive knowledge and the exercise of metacognitive control. As the pupils were no less able and articulate than the pupils in Phase 2, I see the difference being accounted for by the fact that pupils were able to see quite readily how their work had developed (They were comparing two or three stories, whereas Phase 3 pupils, in interviews at the end of the Phase, were considering their work across a wider range of genre), but I also think that part of the difference could be ascribed to a greater precision in my questioning.



## Results of analysis of data in terms of pupils' previous attainment, pupils' gender and components of the assessment scheme

I also analysed the data to answer three questions which became important to me during Phase 3.

### 1. Which pupils benefited most from the intervention?

I examined whether the most able pupils in Group A and B benefited more than the less able. I looked at the gains of the pupils who had achieved SAT scores in Year 6 (on the Writing paper) that placed them in the highest-scoring third of the 32 pupils in the study. These pupils (eleven of them), who had scored a mark of 29 or more, made an average gain of 2.64 points (The overall average gain was 3.06 for all 32 pupils). Within the eleven, three pupils had made checklists; the average gain of these three pupils was 5 (scores of 3.5, 4, 7.5).

I also looked at the scores of the pupils who were in the highest-scoring third for 'Lost' (This time ten pupils, scoring 26.5 and over). Their average gain was 2.05.

Pupils within the ten who made checklists (four pupils) made an average gain of 2.12 (scores of 4, 3.5, 0.5 and 0.5).

Pupils who had gained Level 5 for Reading in the SAT but below Level 5 for Writing (twenty pupils) made an average gain of 3.25. Ten of these pupils had made checklists. Their average gain of 3.25 was exactly the same as the average gain for the twenty pupils. So *making* checklists does not seem to help this group of pupils more than not making them but having instruction in them and story grammar.

Gains for the twelve pupils who had achieved Level 5 for Writing in the SAT were an average of 2.75 (Two of these pupils had scored Level 4 for Reading; the other ten had gained Level 5 for Reading).

But the average gain for the three pupils (out of the twelve) who made checklists was 5 points (against an average gain for the 12 of 2.75). Thus it seems that checklists may particularly help pupils already doing well in both writing and reading. One of the pupils, however, (who improved by 7.5 points overall) had already gained 6.5 points after the story grammar lesson. She gained only 1 point more after the checklist lesson. Of course, I cannot tell from Group A's results how much of the improvement could be due to the lesson in story grammar.

Of the pupils who had achieved Level 5 for Reading and Writing in their SATs the average gain was 2.21 if they had not chosen to make a checklist (seven pupils) and 5 (thirteen pupils) if they had made a checklist. Two pupils had achieved Level 5 for Writing but 4 for Reading. One of these gained 2.5, the other 0.

2. Were there differences in the performance of boys and girls?

Overall boys made greater gains (3.3) than girls (2.85).

Boys making checklists made average gains of 3.81 and girls doing so gained 3.4. Eight boys had made checklists (53.3% of the fifteen boys) and five girls (25.4% of the seventeen girls). Boys not making checklists made average gains of 2.1, and girls not making them gained 2.62 on average.

Over the course of the intervention the gap between the mean score of girls and boys narrowed from 0.58 to 0.13 (Group A and Group B scores added together):

*Figure 3.18: Gains in scores of boys and girls*

	<b>Boys</b>	<b>Girls</b>
Before story grammar and checklist lessons	24.6	25.18
After story grammar and checklist lessons	27.9	28.03
Gains	3.3	2.85

The group of boys who made the greatest gains was the seven checklist-making ones who scored Level 5 for their Reading SAT but not for their Writing: their average gain was 3.79. The five boys not making checklists who achieved Level 5 for Reading but not Writing gained an average of 2.7. The reverse happened with girls who had gained Level 5 for Reading but not for Writing: the three making checklists gained an average of 2.33; the five not making checklists gained 3.8 on average.

### 3. Were pupil gains spread evenly across the three components?

Examination of results for components ('Purpose and Organisation', 'Style' and 'Punctuation') showed that whether pupils made or did not make checklists seemed to account for only minute differences in pupils' gains for Style and Punctuation. For Group A pupils the average gain for Style was 0.69, but the difference between the subgroups of those who made and did not make checklists was 0.01. For Group A pupils the gain for Punctuation was 0.35 and the difference between the sub-groups was 0.06. For Group B pupils (taking the gains from 'Lost' to 'Trapped') the average gain for Style was 0.47 and the difference between the sub-groups was 0.05. For Punctuation the average gain was 0.15 and the difference between the sub-groups 0.23.

This means that almost all the differences between the scores of the pupils who made checklists and those who did not lie in the component Purpose and Organisation, eg in Group A checklist makers made gains of 2.63, non-checklist makers 1.5.

## Discussion

### Introduction

I began Phase 3 with the intention of investigating whether encouraging pupils to use a particular scaffold (a checklist) could help them develop their story writing. As is characteristic of action research, theory emerged from data and influenced the research design (Measor and Woods, 1991): when the writing improved of not only the pupils who had made a checklist but also those who had received the checklist lesson and not made a checklist

*and* those who had been taught only about story grammar, I needed to look more broadly at the kind of scaffolding that took place in the lessons on story grammar and checklists and at the metacognition that might have been developed or called into use.

As I realised in Phase 2, it was necessary to look at not just the operation of a scaffold but at the process of scaffolding (Stone, 1998b) in which the scaffold was provided. Examining (by re-reading my journal accounts of how I had planned and conducted the lessons) how I had introduced the concept of story grammar and idea of checklists showed me that I had implemented many of the features of the model of strategy instruction described by Harris and Graham (1996): for example, the use of scaffolding and the development of goal-setting and self-monitoring.

Although I had studied cognitive strategy instruction (Ashman and Conway, 1993), the idea of the good strategy user (Pressley, Harris and Marks, 1992), the role of metacognition in strategy instruction (Borkowski and Muthukrishna, 1992), as well as the application to writing of the model of Self-Regulated Strategy Development (Harris and Graham, 1992; Graham, Harris and Troia, 1998), I had not *consciously* planned the lessons to include particular elements from any of these approaches. I could see, however, that my long-standing interest in the role of reflection in the development of pupils' writing had been sharpened by examining the literature on metacognition.

In terms of my own learning, the idea of reflection had been enriched by the concept of metacognition which in turn had been illuminated by theories of self-regulation. Although not clear initially about the relationship between metacognition and self-regulation, I had come to see that self-regulation was essentially the same as metacognitive control, an identification made by Miller (1991) and Hofer, Yu and Pintrich (1998). I could see also how my delivery of the lessons on story grammar and checklists had been influenced by the deepening of my understanding of scaffolding (for example, that effective scaffolding is interactive (Mercer, 1995): I provided opportunities

in the story grammar lesson for pupils to interrogate narratives and justify their identification of story grammar elements in collaboration with a partner and in whole-class discussion) and what I had learned about able pupils (for example, that they like the challenge of extending strategies and generating their own (Baird, Fensham, Gunstone and White, 1993): I emphasised the flexibility of checklist design).

The teaching I gave about story grammar could be regarded as a key element of the scaffold: as I indicated in my introduction to Phase 3, pupils need to know about story grammar to be able to construct their own checklists. Moreover, the lesson on story grammar which involved pupils in examining several stories, including ones which they told each other, could be seen as having developed their metacognitive knowledge (through the interaction of the variables of person, task and materials: Flavell, 1979; Brown, Campione and Day, 1981).

Scaffolding was provided and metacognition developed, therefore, not just in the teaching, and use by pupils, of the checklists but more widely in the lessons on story grammar and checklists. This means that my research in Phase 3 had broadened out from its initial narrow focus on the effect of a checklist on story writing. It had also widened in terms of looking not just at the effect of the intervention on pupils' stories but at how their planning had changed too. I wanted, in addition, to try to study the checklists created and see what it was about them that might have helped pupils: this involved examining the elements (in the checklists) which I was able to link to the lesson on story grammar (and which I was also able to link to both pupils' plans and the quality of their stories).

I discuss below some particular aspects of my findings, concluding with the role of metacognition.

(i) Influence of interventions on pupils' planning

The lesson on story grammar seems to have influenced the planning of some of the pupils in both Groups A and B. Nearly a third of the pupils in the

latter group named a 'problem' and '(re)solution' in their planning for 'Abandoned'. Only three (out of sixteen) in Group A did so, but a further two (not counting one who used the terms in both planning and checklist) used it in their checklist.

The mean gain for the five pupils in Group B who used 'problem' and '(re)solution' in their plan for 'Abandoned'(2.6 points) exceeded the mean gain for Group B as a whole (1.94), one of the pupils making the largest gain (6.5 points) of the pupils in Group B. The main improvement in this pupil's story mark was in the Purpose and Organisation category, which suggests that thinking about problem and resolution improved the structure and coherence of her story.

Pupils in Group A who used 'problem' and/or '(re)solution' in their plans or checklists for their second story ('Abandoned') made greater gains (mean of 4.5 points) than Group B pupils who used one or both terms in their plans for 'Abandoned' (and greater gains than the mean for Group A). Four out of the five pupils made high gains (between 4 and 7 points), those who included it in their checklist scoring higher gains (5.2) than those who included it in their plans but not their checklist (2.75). It must be remembered that this is a very small number of pupils on which to make a comparison, but the pattern seen in the possible effect of using 'problem/resolution' in planning and checklist on improving the quality of stories seems to be repeated in the use and possible effect of 'description of characters', as shown in the next paragraph.

Although description of characters had been discussed in the story grammar lessons as an important aspect of successful narrative, it did not feature in the plans for 'Abandoned' of any of the Group B pupils except one. Group A pupils, however, were far more likely to include it in their plans. Pupils who included it in their checklists made greater gains than those who did not. It seems, then, that the lesson on checklists was needed to encourage pupils to include description of character in their planning. In terms of metacognition, we could see the checklist lesson as providing a strategy

which activated discourse knowledge by means of self-regulation (Ferrari, Bouffard and Rainville, 1998). Zimmerman and Bandura (1994) believe that an important “instructional implication of a self-regulatory approach to writing is the value of using self-monitoring to create a personal feedback loop” (p.96); the checklists that the pupils made seems to have facilitated the development of such a loop: that they used their checklists in a variety of self-regulatory ways underlines its personal nature.

Pupils’ plans for ‘Lost’ were remarkably similar to those for ‘Abandoned’ when considered overall in terms of features (Figure 3.4), the only overall difference being the increase in the number of pupils describing characters (from five to eight). All but one of the eight pupils were in Group A. The tendency for more pupils to describe characters in their plans after the checklist lesson was also shown in the plans made by Group B pupils for ‘Trapped’. It seems, therefore, that the checklist lesson encouraged pupils to describe characters in their plans.

The plans of pupils in the two sub-groups of Group A were very similar overall in terms of the number of pupils using particular features (Figure 3.6), the only substantial differences being (i) that pupils making a checklist were more likely to include ‘setting’ in their plans (three against one) and (ii) that pupils making a checklist were less likely to make a list of characters. But all except one of the pupils who did not list characters described the characters in their plans (and in doing so listed them). Similar results were obtained by Group B pupils in their plans for ‘Trapped’ in terms of pupils making checklists being more likely to include setting and description of characters (rather than merely listing characters).

(ii) Influence of checklists on story quality

Group B’s results for ‘Trapped’ supported the conclusion drawn from Group A’s: that pupils who chose to make a checklist made greater improvements on average than those who did not but that the lesson on checklists still helped the pupils who did not choose to make a checklist.

How did the making of checklists help? Some pupils (who used checklists to help them develop and assess their plans) saw the making of the checklists as leading to the improved plans which in turn assisted them to produce better stories. Other pupils saw the checklists as helping them during the writing of the story or when checking through at the end of the writing.

The impact of checklists seemed to be much stronger in the 'Purpose and Organisation' component (rather than 'Style' or 'Punctuation'). This component includes the two areas that pupils were most likely to include in their checklists, namely narrative structure and characterisation. Pupils who included these items in their checklists tended to improve (in their stories) on the aspects which these items concerned.

As I have said, pupils who chose not to make checklists but who had received the checklist lesson made less improvement than those who made the checklists. Data from questionnaires and interviews suggests that the pupils found the lesson helpful even though they did not make checklists; some pupils referred to keeping a checklist in their heads. It seems possible that the checklist lesson reminded the pupils of story grammar elements which they could then make use of metacognitively during the planning and writing of their stories.

(iii) A consideration of a 'practice effect'

One would expect that pupils' ability to tell an effective story would improve over time because of their growing maturity, experience of stories and general development of language skills. I have considered whether the gains of pupils in Group A ('Lost' to 'Abandoned') and B ('Lost' to 'Trapped') exceeded what one would expect.

In the National Curriculum it is expected that most pupils will advance two Levels over a period of four years: so that, for example, the majority of pupils will attain Level 2 in Year 2 (end of Key Stage 1) and Level 4 in Year 6 (end of Key Stage 2). Key Stage 3 lasts for three years rather than



four, so most pupils are expected to reach levels 5 or 6. Pupils who are more able are expected to reach Level 3 at the end of Key Stage 1, Level 5 at the end of Key Stage 2 (less than 1% attained Level 6 in 1999 (QCA, 2000a)) and Level 7 at the end of Key Stage 3.

In the marking schedule for the Key Stage 2 SAT for the writing paper (QCA, 1999), 5 marks separate each level (ie 3 for Purpose and organisation, 1 for Style and 1 for Punctuation); pupils cannot attain Level 6 without taking a separate paper (5 marks above the Level 5 mark give a score called "high Level 5"). It might be deduced, therefore, that in general terms, pupils are expected to progress after Year 6 at the rate of one Level in 1½ years. As 5 points separate Level 4 from Level 5, it could be expected that an average-attaining pupil would reach level 5 half-way through Year 8. This means that we could expect a story written by such a pupil at this time to score 5 points more than 1½ years earlier, at the end of Year 6 (that is, a gain of 1 point for every three-four months on average). We might expect more able pupils to progress at a faster rate than 1 Level in 1½ years, but data from Key Stage 3 tests (QCA, 2000b) does not show more pupils gaining Level 7 at the end of Key Stage 3 than gaining Level 5 at the end of Key Stage 2.

In my study, pupils in Group A gained an average of 3.1 points over a period of a little less than 2½ months and pupils in Group B an average of 3 points over a period of a little less than 5½ months. Both groups therefore showed greater than expected progress. It could be argued that the very act of writing the first story helped Group A pupils write a better second story and that pupils may have been 'rusty', not having written a narrative since Year 6. It is certainly the case that some pupils had a lower score for 'Lost' than for their SAT, but just as many had a higher score. A comparison of the scores for Purpose and Organisation (of pupils who wrote a story in the SAT) shows that seven pupils gained a lower score for 'Lost', seven a higher score and four the same score; average losses equalled average gains, so overall pupils had not gained in their attainment for Purpose and Organisation between taking the SAT in their last term in Year 6 and

writing 'Lost' in the first month of Year 7 (a period of 4½ months, a third of which was holiday).

While a small practice effect may have occurred, it is unlikely to have produced the level of gains recorded for either Group. That Group B's overall average gain from 'Lost' to 'Trapped' did not exceed the overall average gain for Group A pupils who wrote a second story (but not the third that Group B pupils wrote) shows that simply writing a third story did not produce greater gains. The notion of a 'practice effect' does not explain why in both Group A and B pupils who chose to make a checklist made greater gains than those who did not.

The value of the lesson on story grammar to Group B pupils is shown in both their increased attainment (average gain of 1.94 from 'Lost' to 'Abandoned') and in the pupils' opinions collected from questionnaires. Data from interviews also shows that a number of pupils in Group B found the lesson on story grammar useful and believed that it had helped them write better stories.

(iv) The role of metacognition in the use of story grammar and checklists

Research on the role of metacognition in developing reading (Brown and Palincsar, 1989) had led me to examine whether the teaching of story grammar had been investigated. I found that Short, Yeates and Feagans (1992) had concluded that training in story grammar improved pupils' comprehension by giving them metacognitive skills. I also re-examined some of the literature on questioning as a checklist can be viewed as a set of questions (each element implying, in the case of a story checklist, 'Does my story contain ...?'). The connection between questioning and metacognition is perhaps not difficult to see, as we question to assess and metacognition involves assessing our cognitive activity and products. The role of self-questioning in developing performance is well established (King, 1991); and Englert, Raphael, Anderson, Anthony, Stevens and Fear (1991) show how they developed pupils' writing through the use of 'think sheets' which involved engaging pupils in metacognition by getting them to ask

themselves questions. But could questioning be developed by pupils when they are writing as well as by pupils when they are reading? Could the “provision of a metacognitive, story grammar strategy” (Short, Yeates and Feagans, 1992, p.117) help writers as well as readers?

Graves and Montague (1991) described using what they called ‘story grammar cueing’ to develop the writing of pupils with learning disabilities. They called their ‘monitoring checklist’ a “scaffold” and “metacognitive prompt” (p.246) and saw it as an example of procedural facilitation (Bereiter and Scardamalia, 1987), because it was an “external aid to promote self-regulation”. Graves, Montague and Wong (1990) found that the story grammar checklist improved the writing of learning disabled students.

Montague, Graves and Leavell (1991) claimed that procedural facilitation in the form of story grammar cue cards (which listed story grammar elements) helped learning disabled students produce better stories but led to normally achieving students writing stories inferior to their earlier ones. As I noted in the Literature Review, the normally achieving pupils may have become bored: they did not actively use a checklist but simply read the cards.

Certainly, able students appreciate being allowed to extend strategies (Baird, Fensham, Gunstone and White, 1993); they would seem to need an active role to engage their metacognitive skills well, and the act of *creating* their own checklists appears to provide it. In my study pupils who made checklists seemed to take ownership of them: they freely included items of their own choosing (ones which had not been in the checklist that I had modelled).

Short and Ryan (1984) found that skilled readers do not necessarily have well-developed metacognitive knowledge; and Short, Yeates and Feagans (1992) suggest that such knowledge in young children may be latent rather than non-existent: “Young readers may require explicit instruction on metacognitive strategies to employ them effectively” (p.118). I had found in Phase 1 that it was wrong to assume that able pupils had well-developed

metacognition; and in Phase 2 I had concluded that able pupils could benefit from the teaching of metacognitive strategies.

So could checklists be a strategy for developing metacognition in the service of improving children's writing? My findings suggest that while story grammar instruction led to improvement for a number of pupils in my study, the extra dimension of checklist instruction brought about greater gains – and the greatest gains were made by the pupils who constructed their own checklist.

Checklists seem to be a scaffold which pupils could use in the metacognitive activities of planning and checking and which also contribute to metacognition during the process of writing. That some pupils chose not to make a checklist (but still found the lesson about them useful, some claiming that they had kept a mental checklist in their heads) might indicate that they had begun to 'fade' (Farnham-Diggory, 1990) the scaffold because they had internalised it.

### Evaluation

In reviewing the methodology of Phase 3 I see the assessment of pupils' stories by two markers independently and according to a set of nationally known criteria as a strength. A weakness may be that pupils' responses in questionnaires and interviews could have been influenced by a wish to give the answers they thought I wanted, but, as I have already pointed out, had pupils wished to please me, they might all have chosen to make checklists. The detail of pupils' answers in interviews, as illustrated by the example in Appendix 3.9, particularly in terms of the reasons and examples provided, seems to speak of truth.

If I had restricted my data to the pupils' stories, I would have lost the insights into their planning processes which analysis of their plans allowed and which helped me to explore links between checklists, plans and the narratives themselves. It was also useful to study the elements that pupils put into their checklists and to relate them to the intervention.

I am conscious that a number of weeks elapsed between the writing of the stories and the interviews (Greene and Higgins, 1994, recommend the smallest possible gap in time when collecting retrospective data in composition research), but pupils were able to look through their plans and stories before the interviews and refer to them during interviews.

I recognise that those of my questionnaire questions that asked pupils to select an answer rather than formulate one might have constrained pupils' responses, but, on the basis of my findings in Phases 1 and 2, I did not expect my Phase 3 pupils to be experienced in the metacognitive examination of their responses to tasks. Brown and Pressley (1994, p.170) point out: "A persistent concern in interpreting metacognitive interview data is that such data reflect more whether students can talk about cognitive processes rather than whether they can and do use them."

It might have been valuable to have conducted a later post-test to assess whether pupils retained the improvement in their story writing, as did Gordon and Braun (1985); but it would have been difficult to have filtered out the effect of the teaching of narrative which it is likely the pupils' regular English teachers would have done by then.

A useful follow-up to Phase 3 will be to ask the pupils' teachers at the end of the year whether they have seen the use of checklists and noticed development in planning and the quality of writing. It will also be worth my looking at the work of some of the pupils (such as the one who volunteered that he had employed a checklist to help him plan a subsequent story, Appendix 3.9) over the next year and discussing with them their use of such strategies as checklists.

In such discussions, with teachers and pupils, it will be important to avoid focusing too narrowly on checklists but to use the opportunity to ground talk about particular devices in a wider context of learning about how to write. Quicke and Winter (1994) point out that "neither pupils nor teachers find it easy to use check-lists in a way that does not eventually become a boring

and repetitive exercise, the purpose of which is lost sight of as pupils go through the motions, ticking boxes but achieving no real insight into their learning” (p.433). Quicke and Winter recommend that the use of such strategies as checklists be embedded in a classroom discourse which becomes richer as the teacher responds to pupils’ growing metacognitive knowledge. The fact that my pupils *devised their own checklists* should reduce the risk of their becoming an empty device, but Quicke and Winter’s recommendation is still worth following if pupils are to make metacognition work for them when they are using strategies.

## Conclusion

My study has led me to believe that the *development* of students' metacognition, by means of carefully planned scaffolding provided by the teacher, can help more able writers improve their writing skills. The idea which I held initially that I could improve the writing of more able pupils by *drawing on* their ability to reflect now seems simplistic.

I had concluded in Phase 1 that my pupils did not seem to have the extensive ability to reflect that I had assumed on the basis of my early reading of the literature. But the more I read, as my study progressed, the less sure I became that the *evidence* for such an assumption was as strong as many writers on high ability students claimed. Some much named studies were based on what seemed to me to be very specific aspects of metacognition (such as meta-memory in the case of Borkowski and Peck, 1986); I noted the view of Alexander, Carr and Schwanenflugel (1995) that the relationship between metacognition and high ability depends on the *kind of metacognition examined (and that the relationship may be domain-specific)*. The 'fuzziness' of the concept of metacognition (Butterfield and Ferretti, 1987) and the breadth of definitions of high ability (Borkowski and Day, 1987) contributed to my uncertainty.

I also became uneasy because of a possible circularity in the link between high ability and metacognition: if high ability were defined in terms of the meta-components of Sternberg's model of intelligence (1986), students would need to show that they were highly metacognitive to qualify as 'highly able'. I was concerned, too, about the apparent silence in the literature about the genesis of metacognition in high ability pupils. I could find very few studies which paid any attention to the origins of metacognition in such children (a gap in the research literature which Cheng, 1993, has identified). I began to wonder whether writers who explored the link between metacognition and high ability had made the tacit assumption that both were 'fixed', almost as if they were innate. I also began to consider whether the metacognition of my more able pupils was latent and I had not found the key that unlocked metacognitive potential.

As I developed a more precise working definition of metacognition (expressed in the model I provide in the Introduction to my study), I realised, during Phase 2, that I could have found more evidence of metacognition in my Phase 1 pupils if I had looked for it more specifically in terms of the variables that interact to form metacognitive knowledge and in the components of metacognitive control (although it would still have been less than I had assumed initially). In Phase 2 I was able to identify both metacognitive knowledge and metacognitive control in my pupils. I focused my research increasingly on the latter. Both my research and reading had contributed to my realisation of the importance of metacognitive control. My research had shown me that to reflect pupils needed to reflect *on* something (more specifically, if they were reflecting on a final draft, they needed to be able to evaluate it in terms of a goal or a plan, as Dougherty (1986) points out). In my reading I had been particularly struck by the conclusion of Flower and Hayes (1981a, 1981b, 1984) that *planning* played a key role in the development of writing.

So I came to see that pupils need more than the *ability* to reflect. Put simply, they need knowledge on which to reflect, including discourse knowledge: Ferrari, Bouffard and Rainville, 1998, argue that “good writers base their self-regulation on a deeper knowledge of the task (eg knowledge of different types of discourse structures) that poor writers seem to lack” (p.485). Expressed in terms of metacognition, pupils need knowledge of themselves as writers, knowledge of tasks (which includes discourse knowledge), knowledge of strategies and knowledge of materials so that these kinds of knowledge can interact to develop metacognitive knowledge. I see my work in Phase 2 as having helped pupils develop such knowledge, which can be drawn on when pupils practise self-regulation: Alexander, Carr and Schwanenflugel (1995) say that “regulation and control of cognitive processes refers to the ability to use metacognitive knowledge strategically to achieve cognitive goals” (p.3).



As I had explored the literature on the role of metacognitive control in the development of pupils' writing, I had become keenly interested in the concept of self-regulation (which I came to realise matched what most researchers identified as metacognitive control; for example: Hofer, Yu and Pintrich, 1998). Increasingly, I found evidence in the literature that more able pupils benefit from teaching that helps them develop and use self-regulation (Scruggs, Mastropieri, Jorgensen and Monson, 1986; Ashman, Wright and Conway, 1994).

At the same time, my reading of the literature that documents research into the teaching of self-regulation to develop pupils' writing (particularly that of Harris and Graham: Harris and Graham, 1992, 1996) strengthened the interest that was growing from my findings about pupils' use of planning and other aspects of metacognitive control. I realised that pupils' knowledge of strategies was also important in the learning of writing (Graham and Harris, 1996a, 1996b; Graham, Harris and Troia, 1998), as I began to explore pupils' use of checklists at the end of Phase 2. The development of Phase 3 thus sprang from both my reading and research. I believe the findings from my study could be seen as giving some support to the hypotheses of Butterfield and Ferretti (1987) that executive processes draw on base knowledge and metacognitive understanding to select problem-solving strategies and that high attainment derives from greater knowledge, more sophisticated strategies, better metacognitive understanding and greater use of executive procedures.

A question which a teacher engaging in action research needs to ask is 'How has the action research benefited the pupils?' I believe that I helped my pupils in each of the Phases (but more particularly in Phases 2 and 3) to become more "strategic". Boscolo (1995, p.354) defines a strategic writer as "a thinking planner, a coherent organiser, a careful reviser, an audience-sensitive message sender". I do not claim that all the students became all of these! But, to give a couple to examples, the 'Thinking Sheet' of Phase 1 helped pupils become audience-sensitive and the checklists of Phases 2 and 3 assisted pupils in the development of planning. In short, I believe that I

have helped pupils become more metacognitive in their writing, less inclined to 'tell knowledge' and more inclined to 'transform' it (Bereiter and Scardamalia, 1987).

Pupils also seemed to develop confidence. I did not set out to measure this, but I noted that pupils were keen to talk about how their writing had improved and confident in doing so, as the interview transcript of Appendix 3.9 shows. Pupils were able to point to specific instances of their learning in the interviews conducted in the latter part of Phases 2 and 3. At a parents' evening several months after the end of Phase 3 the mother of one of the pupils involved in the Phase told her daughter's regular English teacher that her daughter had gained greatly in confidence as a writer as the result of my work with her. The pupil (who had been in Group B) had written a much better 'Abandoned' story than 'Lost' and had improved further, after the checklist lesson, in 'Trapped' (for which she had made a checklist). Of course, I could not tell how much of her increased confidence had derived from her realisation that she had written better stories and how much from her sense of having the *ability* to do so. But confidence plays an important part in a writer's performance (Zimmerman and Bandura, 1994, found that a sense of self-efficacy correlated more highly with performance than did verbal aptitude).

A teacher action-researcher also needs to ask the question 'How has the action research developed my teaching?' This, of course, is a particularly pertinent question for a teacher exploring the role of scaffolding. Whether I teach more or less able pupils now, I pay more attention to the clarity of learning objectives, as I know that I cannot expect pupils to focus clearly and metacognitively on what they are *learning* if I am not myself clear and have not communicated the objectives to the pupils. I have also become more sure that pupils need to be taught explicitly about discourse knowledge and the strategies which enable them to apply it. I have grown in confidence as a classroom practitioner because my long-held interest and belief in the value of pupils' *reflecting on their work* has been supported by my review of the literature and my own findings. Similarly, my new

understanding of scaffolding (gained from reading and research) has shown me that I have employed it as a feature of my teaching without having realised that it had a name; but, more than this, I have been able to *develop* my use of it, including, for example, the more active involvement of learners in the process. I am pleased that I pulled myself back from the danger of seeing scaffolding too narrowly in terms of scaffolds rather than the process of scaffolding (Stone, 1998b). When I teach checklists again, I intend to involve pupils more in examining for themselves how they might work for them. This should help avoid the risk, identified by Quicke and Winter (1994), that checklists may become rigid and mechanical in their use.

In terms of my methodology I believe that the flexibility and recursive quality of action research have helped me develop practice and theory. My research journal has been essential to the creation of a data record and the development of my thinking. My main concern about my data collecting has centred on whether pupils have given me the answers which they thought I wanted. I cannot be *sure* of the extent to which pupils may have done this, but the readiness with which most of the pupils were able to provide *reasons* for their views (and examples to illustrate their reasons) suggests that pupils did not generally give answers simply to please. I believe that the triangulation of data from different sources, particularly in Phase 3, helped reduce the effect of pupils not giving honest answers.

A number of other uncertainties remain. Exactly how the creating of their own checklists helped my pupils is unclear. Although a line can be traced from checklist to improved plan to improved story (and, more specifically, in some cases, from 'problem and resolution' in the checklist to 'problem and resolution' in the plan to 'problem and resolution' in the better structured narrative), the relationships may not be causal. Perhaps it is that 'improved' thinking (developed through metacognition) which manifests itself in the checklist also manifests itself in the plan and the story; but what particularly helped the development of such 'improved' thinking? Was it the scaffolding that took the form of modelling the writing of a checklist?

The making of a checklist by pupils in the checklist lesson ? Pupils' using of their checklist, in the lesson, to assess their plans and stories?

The nature of the contribution of the lesson on story grammar also raises a number of questions; for example, would checklists appear so useful if they included 'beginning, middle and end' instead of 'problem and resolution'? Pupils who used the latter terms tended to improve more than those who did not, but how much of the improvement came from the writing of the checklist and how much from the reconceptualising of narrative as problem and solution? In the case of both checklist-makers and those who chose not to make checklists those pupils who used the terms in their plans improved more than those who did not, but did the checklist-makers improve more than those who did not make checklists because they had seized the synergy of checklist AND reconceptualising or because they had simply made the checklist?

Revisiting the data may lead me to successive clarifications of these issues (and clearer pointers to further research), particularly if I share it with colleagues as I plan to do (both within the school and L.E.A., at conferences at which I have been invited to describe my work) and encourage them to explore the use of my approaches. I also hope that sharing my work more widely will help to illuminate it and subject it to the kind of critical scrutiny that Winter (1989) sees as helping to establish the validity of action research. An account of Phase 1 (Darch, 2000) has been published in the journal of the National Association for Able Children in Education (NACE) and Professor Diane Montgomery, the journal editor, has asked me to submit accounts of Phases 2 and 3.

As well as helping my own practice and, I hope, that of the teachers in my school, I see my study as contributing to areas of research that are relatively neglected, certainly in Britain. School-based studies of more able pupils in Britain are rare, of their writing rarer, of how their metacognition can be developed to enhance their writing rarer still (and possibly non-existent).

A number of studies in the U.S.A. examine the effect on pupils' writing of devices such as checklists, but, as I have indicated above, they are nearly all confined to what we in Britain call special needs and North Americans call learning-disabled. Several of the American studies identify the importance of metacognition in the use of the devices, but they tend to be more concerned with the effect of them on attainment rather than with *how the devices develop* the kinds of metacognition that enhance attainment (including how the devices are introduced as part of scaffolding episodes).

It is perhaps surprising that so much research has focused on metacognition in reading and so little on metacognition in writing, particularly if one takes the view that writing is essentially a more metacognitive process than reading (Wray, 1994); but not so surprising when one considers that writing is generally well under-researched compared with reading. I would like to develop links between my work and the studies of metacognition in reading, particularly through the notion of writers as "their own best readers" (Beach and Liebmann-Kleine, 1986).

Finally, for me the most compelling evidence in my study has been to find in the pupils' stories the reasons for their higher scores: reasons such as better characterisation, more detail of setting and greater coherence in narrative form. Similarly, in Phase 2, I was pleased to find improvements in structure (for units of text, such as paragraphs, and for the whole text, such as that of an essay) – and improvements which pupils could recognise themselves (That paragraphs have a structure seemed to come as a *revelation to one of the ablest and most metacognitive pupils*). Although I could see such developments for myself, I was, nevertheless, glad that I had asked another teacher (who did not know the pupils) to assess their work in Phase 3; the high level of agreement between us, in spite of the oddities of the SATs mark system, was reassuring. I was also pleased that we had marked according to criteria rather than holistically as this had enabled a sharp focus to be made on the component of Purpose and Organisation; it allowed, too, a fairer comparison with pupils' Year 6 SAT results which had been used to select the participants.

On the basis of my findings (and the studies that I have examined) I do not conclude that more able writers have such well developed metacognition per se that they simply need to apply it. It needs to be nurtured. Nor do I believe that more able writers are more able writers only because they are *metacognitively* more able. But more able writers are likely to become even more able as writers if they are helped to develop their writing through metacognition: for me, as a teacher, this is the heart of the matter. As Span (1995, p.78) points out, “ the more able an individual is the more self-regulation will be needed for high achievement: the less able the individual is the more teacher regulation is needed.” Teacher regulation can, of course, lead to self-regulation, particularly if it is provided through a process of scaffolding; and writers can become increasingly ‘more able’, as they develop their metacognition.

## **Appendix 1.1**

### **A Learning Log**

Your name:

Today's date:

1. What is your aim for today's session? (Please try to be exact.)

2. What tasks need to be done today? (You can add to this list during the session.)

- a)
- b)
- c)
- d)

3. Mid-point review:

- a) How are you doing half-way through the session?
- b) What do you particularly need to do in the second half of the session?

4. End-of-session review:

- a) What has gone well?
- b) What do you need to seek opinions and advice on?
- c) *What do you need to do before the next session?*
- d) If you have worked with someone else, how has this helped you?

## **Appendix 1.2**

### **An information booklet about Shakespeare**

#### **Task Details**

Your task is to create a booklet that presents information about Shakespeare in an interesting and attractive way.

You will need to decide whom you are making the booklet for. We use the word 'audience' to describe this person or people. Examples of audiences are: someone your own age who has not studied Shakespeare but knows a little about him; a younger child who has heard of Shakespeare's name but knows little else about him; an adult who knows some things about Shakespeare but who would like to know more. It might help you to have a particular person or people in mind as your audience.

#### **Subtask 1: audience research**

Find out what your audience might want to know. You could do this by asking one or two examples of your audience what they would like to know. You might find it best to start by asking them what they know already. An alternative would be to come up with a possible list of contents and ask for their reaction. Contents could include: Shakespeare's life (important details and dates), his theatre, Shakespeare's plays and poems, some well-known characters in Shakespeare's plays, phrases of Shakespeare that are now part of the English language, a mini-study of one play, costumes used in productions of Shakespeare's plays.

#### **Subtask 2: deciding what you want to find out**

It is a good idea to make a list of questions to help you clarify what you need to find out; for example, if you were collecting information on Shakespeare's life you might decide to ask: When was he born and where?

What is known about his family?

Where was he educated?

Where did he live at different times during his life?

#### **Subtask 3: locating sources of information**

Likely sources are: (i) printed material, such as books  
(ii) data accessed through computers  
(iii) people

#### **Subtask 4: collect the data to answer your questions**

Please aim to use your own words. Don't copy whole sentences from books!

#### **Subtask 5: planning the layout of your booklet**

(i) You will need to decide how to help your audience find their way around your booklet. How do information books help their readers do this?

(ii) You will need to plan the layout of each page. Remember that you want to make your booklet look interesting and attractive, so consider how you can use headings and pictures. Decide whether information is best presented in sentences or in a table or diagram.



### Subtask 6: initial drafting

You will probably need to interweave this task with planning your layout. It may be best to first draft sections of your booklet on separate paper. Remember to think about your audience as you draft. Check spellings and punctuation.

### Subtask 7: making the final draft

The appearance counts, as well as the content! Use guidelines to help you keep your writing straight.

### Assessment

Your work will be assessed on

- (i) how well your plan your work and reflect on your progress (Evidence will be your thinking sheet and what your teacher observes in class.)
- (ii) how well your booklet is tailored to a particular audience (Evidence: the finished booklet)
- (iii) the care you take to present your work accurately, neatly and attractively.

### National Curriculum Levels

#### Level 3:

- (i) You can show that you have thought about your work as you have done it.
- (ii) Your booklet will be suitable for your audience.
- (iii) Your booklet will deal with at least three aspects of Shakespeare's life, theatre or plays (and cover at least two sides of A4).
- (iv) Your writing will be neat and joined, your presentation will be tidy and your spelling good.

#### Level 4:

- (i) You can show that you have thought carefully about your work as you have done it.
- (ii) You will be able to demonstrate that your booklet is appropriate for your audience.
- (iii) Your booklet will deal with at least 4 aspects of Shakespeare's life, theatre or plays (and cover at least 3 sides of A4).
- (iv) Your writing will be cursive and legible, your presentation very neat and your spelling very good.

#### Level 5:

- (i) You can show that you have reflected intelligently about your work as you have done it.
- (ii) You will be able to demonstrate that your booklet is very appropriate for your audience.
- (iii) Your booklet will deal with at least 5 aspects of Shakespeare's life, theatre or plays (and cover at least four sides of A4).
- (iv) Your writing will be cursive, very legible and your presentation and spelling excellent.

**Appendix 1.3**

Thinking Sheet

Your name: ..... Class: .....

This sheet is designed to help you think about your booklet and to assist you in reflecting about how you are going about the tasks.

Subtask 1

1. Who could be your audience?
2. What do you think they would like to find in the booklets?

\* Do your audience research as suggested on the Task Details sheet \*

3. What did you find out?

<p><i>Reflect box</i> How successful was your audience research? Do you need to do some more? Do you need to ask different questions or try a different method of finding out what your audience wants?</p>	<p><i>Help box</i> I need my teacher to help me to...</p>
---	---

Subtask 2

Record here the aspect of S's life and works that you plan to start with and the questions that your research will enable you to answer:

Aspect 1:

- Question: 1
- 2
- 3
- 4

Aspect 2:

- Question: 1  
2  
3  
4

Please use other paper for further aspects.

<p><i>Reflect box</i> Do my questions cover the aspect well? Will they only give short, 'closed' answers?</p>	<p><i>Help box</i> I need my teacher to help me to...</p>
---	---

Subtask 3

List your proposed sources here and decide when you are going to access them:

<i>Source</i>	<i>Dates/times</i>
(i)	
(ii)	
(iii)	

<p><i>Reflect box</i> Are the sources adequate for answering the questions? Do you need help to use the sources? What other sources do you need?</p>	<p><i>Help box</i> I need my teacher to help me to...</p>
--	---

## Appendix 1.4

### Groups of Categories

#### 1. Able pupils

Able pupils in general

Language

Metacognitive

Particular pupils

Underachievement

Writing

#### 2. Methodology

Interaction with colleagues

Narrowing of the focus

- Inter-relationship of metacognition and scaffolding

Questions to myself

Theoretical memos

Weaving in of the literature

- Vygotsky

#### 3. Teaching

Identification

Language

Learning objectives

Prompts

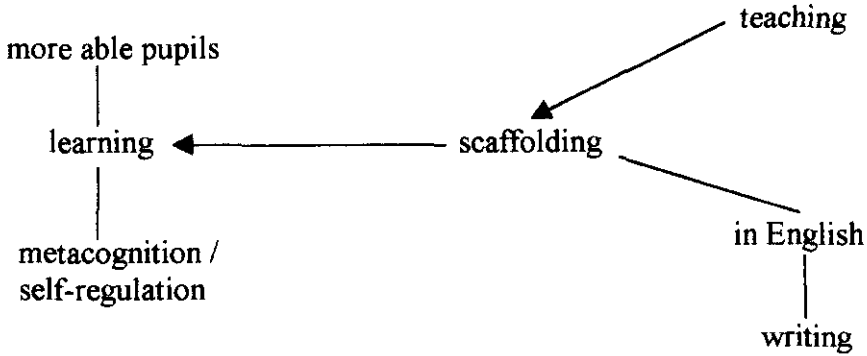
Scaffolding

Targets

**Appendix 1.5**

**Inter-relationship of metacognition and scaffolding (ISM)**

1. 3.1.98



2. 12.1.98

The logs could be a way of linking scaffolding and metacognition.

3. 10.2.98

I need to see metacognition as an important way of enabling me to use scaffolding: not least because scaffolding depends on knowledge of where child 'is' / what problems are.

4. 1.3.98

I also need to think more about the 'inter-relationship of scaffolding and metacognition'. Do I want to make an explicit link, eg 'How scaffolding supports metacognition'? Am I trying to find out whether scaffolding itself is sufficient (or how sufficient it is) without metacognition (and vice versa)?

Some interesting points in Doran and Cameron (1995) 'Learning about Learning: Metacognitive Approaches in the Classroom'.

5. 1.3.98

Some scaffolding which I have provided has not developed metacognition. - ?

Do I need a model of 'developing better writing'? Is it:

scaffolding → metacognition → writing

or scaffolding → metacognition → writing

or scaffolding → metacognition ↓ first draft → scaffolding (by teacher/peer) → metacognition → 2nd draft

6. 5.3.98

Do I need to tighten up on relationship between 'scaffolding' and 'metacognition'? Or is it better to keep things open at this stage? Perhaps by defining each of these terms I could get a better grasp.

7. 12.3.98

I drafted sheets on Shakespeare booklet, trying to provide scaffolding and encouragement to develop metacognition.

8. 22.3.98

How can scaffolding develop metacognition? Does teacher putting two children together (to stimulate reflection of each) constitute 'scaffolding'?

9. 30.3.98

How does zone of proximal development relate to scaffolding? How am I allowing/encouraging children to do something with my help today which they could do on their own tomorrow?

Perhaps idea of 'Thinking Sheets' is an example: pupils can internalise reflection (this was central to Vygotsky's ideas of development of child's thinking – ie that child internalises from social interaction).

[I need to make my theoretical underpinning explicit]

What to I need to explore next in interviews? Remember I am thinking about inter-relationship of pupils' metacognition and teacher's scaffolding in development of (better) writing.

How far do (good) writers have explicit understanding of process of writing and improving their writing? Pupils seem to agree that *drafting is valuable*.

I need to have a clear idea of how concept of scaffolding derives from Vygotsky.

Presumably I think that scaffolding on its own (ie without metacognition) is not enough.

Consider this: what kinds of scaffolding do not involve metacognition? What kinds do?

Is metacognition necessary for good writing to develop? I would argue that it is because the developing writer needs to be able to interact with his/her developing creation (eg in terms of audience. Cf. Thinking Sheet. How important will idea of audience turn out to be?). Writer needs to be able to see his/her creation as an artefact. It is both separate from the writer's mind and part of it.

## **Appendix 1.6**

### **Essay: metalearning review**

1. How did you spend last week's lesson and homework time?
  
2. How did you respond to the points made last week about the format of the essay?
  
3. How do you think you are doing on your essay?
  
4. What do you need to do next?
  
5. What do you need help with?
  
6. If you could use a response partner, how would such a partner help?
  
7. What are you learning by doing the essay?
  
8. How has completing this sheet helped you in
  - (i) the task of writing your essay?
  
  
  - (ii) your learning?

## Appendix 1.7

### Thought Commentary

#### Pupil's Thought Commentary

*(This had been written in  
a wide margin to the left  
of the pupil's poem)*

"The cat has a sleek coat  
and bright eyes."

#### NOTE:

Start off the queen and  
cat separate. Then mould  
them as one as if you're  
talking about two  
different people/animals  
at the same time.

#### NOTE:

Should you use "They"  
instead of "It" to mould  
the two together?

#### My analysis

Here the pupil is recording a sentence that seems important to her. I had asked the class to jot down some key details of an animal, using adjectives. The pupil's sentence seems to be extracted from what she jotted down.

The pupil is giving herself directions based on the method used by Ted Hughes in his poem 'The Thought Fox'. I had examined the poem with the class earlier in the lesson.

Here the pupil is asking herself a question about her use of pronouns. The pupil had crossed out 'It' in the phrase 'They walk sleekly', replacing it with 'They'. Later in the sentence she used 'it' and was clearly uncertain.

In her commentary the pupil is practising self-regulation.

When I asked pupils at the end of the lesson to answer the question 'What helped me learn today?', the pupil had written "The thought commentary helped me learn most because I was asking myself questions."



## **Appendix 1.8**

### **Extract from Interview 30.3.98: BD with pupils D, S & L**

- 1 BD D, first of all, can I have a look at your Thinking Sheet?
- 2 D Yes.
- 3 BD Do you think this sheet is helping you do the task?
- 4 D Yes.
- 5 BD Can you give me an example of that?
- 6 D Like the 'aspect', the questions we had to do. If I hadn't done them I wouldn't have known what I was looking for.
- 7 BD So has it helped you focus on particular things?
- 8 D Yes.
- 9 BD OK. Let's have a look at the 'Reflect Box'. You've put 'My questions did cover the aspect well. None of them gave short, closed answers.' Do you think that Reflect box was useful?
- 10 D Yes.
- 11 BD How was it useful?
- 12 D Well, it helped me think about whether my questions were OK or not.
- 13 BD Can I turn to you, S? Do you find the Thinking Sheet useful?
- 14 S Yes.
- 15 BD Can you tell me how?
- 16 S When we were doing the audience research I found it useful because I actually wrote down ... about ....
- 17 BD So you're talking about filling in this bit here. Did it make a kind of record for you?
- 18 S Yes.
- 19 BD What can you tell me about the Reflect Box and how you used that?
- 20 S I think it's quite good because if we didn't have a Reflect Box we wouldn't have been able to look over and decide if it was OK.

## Appendix 1.9

### Extracts from Interview 23.3.98: BD with pupils C, L, S, M & D

- 1 BD Did you fill in the Reflect Box?  
2 C Yes.  
3 BD Did the Reflect Box help you to think about what you were doing?  
4 C It did a little. I could see which questions I asked and how I could improve them.
- \*\*\*\*\*
- 5 BD Do you think the Reflect Box and Help Box are a good idea?  
6 L Yes. It's better than seeing you the next day.  
7 BD Do you think sometimes writing down a problem helps you to solve it yourself?  
8 L Yes. You can look over a lot more times instead of thinking about it in your head.  
9 BD Does it help you think?  
10 L Yes.  
11 BD Why? Is it because it's on paper?  
12 L Probably.
- \*\*\*\*\*
- 13 BD Do you have any other ideas for why we have a Reflect Box?  
14 S We can show what we've done instead of just thinking about it in your head. It's proof you've thought about it properly.  
15 BD So far you've seen the Reflect Box and Help Box in terms of your thinking and learning. How can they help the teacher teach better?  
16 M The teacher knows what you think and what they need to teach you about it.  
17 C The teacher can see what you need help on.  
18 BD Do you think teachers give you enough opportunity to think about what you're doing in your work? S?  
19 S Yes. They help you through what you're doing and give you enough time to think.  
20 L Sometimes they let you think and then say 'You haven't done enough work' and say you haven't paid attention.  
21 BD OK. That's thinking about the work you've got to do at the beginning of the work. What about half way through?  
22 L That's OK. It's getting started.  
23 BD What I'm thinking about particularly is after you've done a piece of work or part of an activity, are you encouraged to think about how you've done it? Do teachers allow you to think not about the task but about how you've done it? For example, if I had to write a poem and started by brainstorming, the teacher might ask me to decide what had been useful.  
24 C I think they don't really. Teachers don't ask you when you've finished to think about your work. They say 'Well done' and give you another piece of work.

## Appendix 1.10

### Extract from Interview 27.4.98: BD with pupil C

- 1 BD Has the Thinking Sheet helped you?
- 2 C Yes, because it keeps me on target.
- 3 BD It's called a 'Thinking Sheet'. How has it helped your thinking?
- 4 C It's kept me on target. It helps me look at my work and see how I'm doing.
- 5 BD What have you learned?
- 6 C To plan things better. I don't tend to plan things out very well.
- 7 BD Do you think the next time you have a booklet to write like this, what you've done this time will help you?
- 8 C Yes, because I'd know how to break things down. I wouldn't have thought about the audience if it hadn't been on the sheet.
- 9 BD Were the reflect boxes useful?
- 10 C Reflect boxes.....so I can think about what I am doing. The Reflect Box helps you make sure you've done it properly. It's another check.
- 11 BD What have you learned from the booklet activity?
- 12 C The most useful thing is how to do a booklet rather than about Shakespeare. I've done at as well.
- 13 BD Do you think that you've done more thinking about your learning?
- 14 C Yes. I'll probably go beyond the task to think more about audience and different aspects.

## Appendix 1.11

### Extracts from Journal (with coding) 8.1.98 - 25.1.98

- 8.1.98 **S** I need to think about the role of language in my study, particularly in the teacher-pupil interaction (& possibly pupil-pupil). I need to consider how the teacher uses language to provide scaffolding. Of course, this does not have to take a spoken form: it can be written (cf. 'Writing Frames'). Several articles in Section 4 of 'Thinking Voices – The Work of the National Oracy Project' book useful.
- 9.1.98 **Ap** 7A: 'Star Wars'. I asked pupils (in groups of about four) to imagine that they were the writers of 'Star Wars'. They had to discuss choosing of characters, plot, special effects etc. Several pupils shone, including M. who took a leading role in group. A group of girls, including C., was particularly impressive, C. seeming to generate several ideas (eg thinking of pets for main characters, rejecting this and then thinking of robots). I provided scaffolding in form of suggestions, eg 'Where do you think idea of ... came from?', 'Why is Chewy in the story?'.  
**S**
- 12.1.98 **Ap** Discussed 'Goodnight, Mr Tom' with J. I suggested ideas for writing as I want to give able pupils opportunities to write at length, in response to particular interests. I taped discussion (and copied work J. did afterwards).  
**W**  
**Ap** With M. (and S.) I launched idea of their own space story (discussion taped). I asked them to start a log to record how they work. I could ask J. to do similar.  
**M**  
**ISM** The logs could be a way of linking scaffolding and metacognition. What other ways could there be?  
I probably need to highlight usefulness of logs (with all class?).
- 15.1.98 **S** For essay on "'Star Wars': is it a fairy story set in space" I provided scaffolding in form of an A4 sheet giving structure and advice. It will be interesting to see how able pupils respond.
- 19.1.98 **Ap** Talked to J. about her 'Goodnight, Mr Tom' work. She seemed keen to continue. I repeated idea of log/journal which she agreed to do.  
**Ap** Also talked to M. and S.: they asked if they could continue their story while rest of class do other story. I agreed. I asked them to discuss how they had worked (eg how working together helped/which bits had been better done individually) *before* writing their logs. I am trying to encourage metacognition.  
**W**  
**M**
- 25.1.98 **Ap** Looking at J.'s drafting book, I noticed how often my comments are statements (rather than questions). Targets take the form of statements.  
**M,Q** To encourage metacognition I need to use more questions to open up children's thinking. Perhaps I should aim to do much more to create a dialogue, encouraging pupils to respond with answers/own questions.

**Key:** **Ap:** *A particular more able pupil.* **M:** *Methodology.* **Q:** *Question.*  
**S:** *Scaffolding.* **W:** *Writing.*

## Appendix 1.12

### Extract from Journal 30.3.98

30.3.98 Interviewed D, S and L about Thinking Sheets and 'Treasure Island' work. They said they found Thinking Sheets useful.

[How am I going to measure (gains in) writing development?]

In interview also discussed drafting, especially how 'thinking' came into drafting process. Pupils saw thinking in drafting coming during second draft in particular.

[I was encouraging metacognition here. How does my asking of questions actually develop facility to engage in metacognition?]

Was I 'scaffolding' in this interview?

How does zone of proximal development relate to my idea of scaffolding? How am I allowing/encouraging children to do something with my help today which they could do on their own tomorrow? Perhaps idea of 'Thinking Sheets' is an example: pupils can internalise reflection (This was central to Vygotsky's ideas of development of child's thinking – ie that child internalises from social interaction. [I need to make my theoretical underpinning explicit]).

What do I need to go on to explore next in interviews?  
Remember I am thinking about inter-relationship between pupils' metacognition and teacher's scaffolding in development of (better) writing.

How far do (good) writers have explicit understanding of process of writing and improving their writing? Pupils seem to agree that drafting is valuable.

I need to have a clear idea of how concept of scaffolding derives from Vygotsky.

Presumably I think that scaffolding on its own (ie without metacognition) is not enough. Consider this: what kinds of scaffolding do not involve metacognition?

What kinds do?

Is metacognition necessary for good writing to develop? I would argue that it is, because the developing writer needs to be able to interact with his/her developing creation (eg in

terms of audience. Cf. Thinking Sheet. How important will idea of audience turn out to be?). Writer needs to be able to see his/her creation as an artefact. It is both separate from the writer's mind and part of it.

Cf. process/product distinction I made in PRO4.

I think I should do some more to encourage journal writing. How can I do this?

I need to have a better (ie 'more defined'?) idea of what kinds of writing I am thinking about for my project. Am I just thinking of imaginative? Presumably not, as Shakespeare Booklet is not of this kind.

One of my ideas is that able pupils benefit from structure/support ('scaffolding') as much as less able. Cf. writing frames. How can I develop these for more able? Try to come up with one or two examples as prototypes.

Is there any way I can have a control group for any of my work?

Metacognition: how is it different from such concepts as 'self-assessment', 'reflection', 'evaluation'? Would I be better off with 'meta-learning'?

Children often (usually?) think of their work in school in terms of tasks rather than learning.

When I plan a lesson, do I think of it in terms of work/tasks or learning?

How explicit am I in my own thinking (and how explicit to the children)?

I could have started at start of information on Shakespeare Booklet something like this:

In doing this work you will learn:

- (i) how to write for an audience
- (ii) how to devise questions for research
- (iii) how to access data
- (iv) how to plan a booklet

I definitely need a much clearer idea of what I mean by 'metacognition'. Perhaps I need to define what I want to be examining/studying (in terms of learners' thinking/reflecting) and then see what word I can find to describe it.

Here goes:

"I am interested in how a learner can reflect on his/her work as it develops and use the thinking process to..."

This is not as clear as I want [Note how I am using this journal literally as a 'think book'. I'm getting more fluent at this!]. I want to get down to the issue of where the 'meta' comes in (the difference between 'thinking' and 'meta-thinking').

Is (all) thinking about a piece of written work 'meta' because the work is the product of thought?

"I am interested in how a writer is conscious of both the task and how he/she is doing the task."

Perhaps I can develop/clarify my thinking by making my beliefs explicit:

I believe that good writing develops when writers reflect on their own creation and how they can develop it.

I believe that able children can use their abilities to reflect on themselves as learners to improve their work.

I believe that able children need to see themselves as developing writers.

I believe that reflection on the process of writing helps writers develop.

How (far) does writing involve thinking? When I interviewed pupils today (30.3.98) they thought that they did most of their thinking when redrafting. Does this surprise me? Probably, because some pupils do not seem to think at all when redrafting! Do able pupils change/develop drafts more? Are first drafts all action and little conscious thought? I need to examine the transcript carefully. I asked 'What sort of thinking do you think you do after you've finished the first draft before you start the second draft or while you're doing the second draft?' L said, 'You keep reading through your first draft and try to get some ideas.' I asked whether more thinking happened after first draft or during second. Pupils thought during second. Later I asked D whether he thought he did most thinking in first draft or revising or redrafting. He thought redrafting. Pupils thought hearing other children's ideas was important to process of redrafting – to get ideas.

## Appendix 2.1

Pupils' answers are in *italics*. Nine pupils completed the questionnaire.

### Writing in a role from literature

1. What kinds of writing in role from literature have you done before?

*Diary 9*

*Newspaper 8*

*Letter 7*

*Poetry 1*

2. What are your first thoughts when you are asked to write in role?

*I don't like it 3*

*Depends on whether I liked the book 1*

*I like action and humour and enjoy writing it 1*

*Depends on the book 1*

*It explores different perspectives 1*

*Some uncertainty 2*

3. How far do your reactions depend on the following?

(i) your understanding of the character's feelings and thoughts

*Sometimes I find it difficult to get into a character's head 1*

*I have to understand their feelings 2*

*It helps to understand their feelings 3*

*I try to become the character 1*

*I try to change my opinion of a character 1*

*Does make a difference but I find it interesting to see what develops 1*

(ii) your sympathy with the character

*It helps if you like the character 4*

*I don't feel sympathy with the character 1*

*This doesn't matter 1*

*Usually this makes it more interesting but it can cause problems for me 1*

(iii) your sympathy with the other characters

*I don't have sympathy for the other characters 2*

*I don't think about the others 2*

*I have sympathy with the others if the main character is bad 1*



- (iv) unsureness about the genre in which you have been asked to write

*Prefer certain genres 4 (story 4; letter 1; newspaper 1)*  
*Not unsure 3*  
*Sometimes unsure 1*  
*I use the text as a guide 1*

- (v) uncertainty about how much you can use your imagination

*Not uncertain 7*  
*I like to use my imagination 7*  
*I rely on the material as I don't have a good imagination 1*

- (vi) other factors:

*I like to set writing in the future 1*  
*I like to modernise things 2*  
*The form the literature takes 1*  
*To do my best work I've got to enjoy it so I like including  
humour, mystery or adventure 1*  
*How I start and finish is effective on the character's thoughts  
and feelings 1*

4. What has helped you in the past to write effectively in role?

*Knowing the character well 3*  
*Using my imagination 2*  
*Reading the whole story 1*  
*The text 1*  
*Enjoying the story 1*  
*Research on the character and how the writer portrays the  
character 1*

5. How could your teacher help you to write in role?

*Give me ideas 3*  
*Give me ideas about my character 1*  
*Provide detailed study of the role 1*  
*Have more interesting stories 1*  
*Explain what to do 1*  
*Give us small examples of how to do it 1*  
*Give us clear understanding of book and character 1*

## Appendix 2.2

Pupils' answers are in *italics*. Only three pupils completed the questionnaire as most were out of school on a visit.

### Thinking about a draft during its production

1. What pleases you about what you have written so far?

*Amount done 1*

*What I have written about the character's feelings 1*

*Very few mistakes 1*

*The detail: names and habits 1*

2. What are you keen to improve or develop?

*Punctuation and spelling 2*

*Improve how I write what the character goes through 1*

*Perhaps use new words 1*

3. What has been the easiest part of the writing so far?

*Using my imagination 1*

*Describing John Reed as the book describes him clearly 1*

*All of it 1*

4. What has been the hardest part?

*Using Jane Eyre's type of language 1*

*Using the book to find out dates and what happens 1*

*None of it 1*

5. What are you expecting that your teacher will say about your draft (as far as it has gone)?

*I don't know 1*

*I don't know, probably a few ideas to help me 1*

*Watch spellings and punctuation 1*

6. Have your teacher's comments helped you?

Please give reasons

*He has given me more things to think about as I write 1*

*He agrees with everything I put 1*

*Because now I am thinking about my audience 1*

7. What are your aims for today's lesson?

*Start building up to more exciting stuff 1*

*To write more feelings and reactions 1*

### Appendix 2.3

Pupils' answers are in *italics*. Ten pupils completed the questionnaire

#### Structure

1. When you are doing a piece of writing, do you think about the structure or shape of it, or do you tend to keep writing until you have developed your ideas to the full?

*Just keep writing 4*

*Think about structure during writing 3*

*Sometimes think about structure during writing 3*

*Refer to plan 1*

2. When you have a piece of writing to do, do you make a plan without being told to do so?

Please tick the most appropriate answer:

Never	Occasionally	Half the time	Usually	Always
<i>1</i>	<i>4</i>	<i>4</i>	<i>1</i>	<i>0</i>

3. How often do teachers of writing tell you to make a plan first?

Please tick the most appropriate answer:

Never	Occasionally	Half the time	Usually	Always
<i>0</i>	<i>1</i>	<i>1</i>	<i>6</i>	<i>2</i>

4. When you come to make a second or subsequent draft, how much change do you make to the structure or shape of the piece of your own accord (ie without a teacher telling you to do so)?

Please tick the appropriate answer:

Never	Occasionally	Half the time	Usually	Always
<i>1</i>	<i>3</i>	<i>3</i>	<i>2</i>	<i>1</i>

5. Think of a piece of writing which you have done that has structure or shape that pleases you.  
What helped you to create the structure or shape?

Please tick one of the following:

- |       |  |          |
|-------|--|----------|
| (i)   | Clear description of the required structure by the teacher | <i>8</i> |
| (ii)  | Class or group discussion of the required structure        | <i>0</i> |
| (iii) | Reading a piece of writing that had the required structure | <i>3</i> |
| (iv)  | Making a plan of the structure first                       | <i>8</i> |
| (v)   | Feedback from peer(s) on first draft                       | <i>1</i> |
| (vi)  | Feedback from teacher on first draft                       | <i>3</i> |
| (vii) | Please specify any others:                                 |          |

*Create structure from memory (personal account) 1*

## **Appendix 2.4**

### **'Moonfleet'**

What do you expect to find in a story about smuggling written about a hundred years ago and set in the 18<sup>th</sup> Century?

1. **Characters:**

2. **Setting:**

3. **Plot/action:**

Beginning-

Middle-

Ending-

4. **Language:**

## Appendix 2.5

Pupils' answers are in *italics*. Eleven pupils completed the questionnaire.

### Review of my writing: 'The perspective of another character'

Name: .....

1. How pleased are you with what you have written today in your first draft? (Please circle your answer.)

very pleased	3	pleased	6
partly pleased/partly displeased	1	displeased	1

2. Please give reasons for your answer to Question 1:

<i>I am doing well / have done a lot</i>	8
<i>(four pupils referred to what they had done)</i>	
<i>I made good use of my thinking space</i>	1
<i>I didn't do much</i>	1
<i>I am not 100% sure that what I was doing was right</i>	1

3. How do you think you could improve your first draft?

<i>Put in more of thoughts of character</i>	3
<i>Making it sound more like the book</i>	2
<i>Writing it in story form</i>	1
<i>By keeping both aspects of the task in mind</i>	1
<i>Put in more detail</i>	1
<i>Put in what I've missed out</i>	1
<i>Show bigger friendship between Ratsey and Elzevir</i>	1
<i>Punctuation and spelling</i>	1
<i>Improve vocabulary</i>	1

4. Please tick which of these statements apply:

- |  |   |
|--|---|
| (i) Today I looked at the picture I drew of John Trenchard with the different ways an author uses to reveal his character listed around him. | 8 |
| (ii) I did not look at the picture but I remembered it and it helped me with my writing.   | 0 |
| (iii) When I was writing, I stopped now and again to refer to the text.  | 9 |
| (iv) I made notes today <i>before</i> I started writing my first draft.  | 6 |
| (v) I made some notes/jotted down ideas <i>as I drafted</i> .  | 4 |
| (vi) Once I had started the first draft, I did not think of the wording of the task until I finished the first draft.                        | 3 |

- (vii) As I wrote my first draft I thought about telling the story through the ideas of a character (other than John) but I did not think about revealing details of my character in a variety of ways. 5
- (viii) I managed to keep *both* aspects of the task in mind (ie telling the story from another character's perspective *and* using a variety of methods to reveal details of the character). 5
- (ix) If you thought about *both* aspects of the task, how did you manage to keep both in mind at the same time?

Please write your answer here:

*Having title in two questions helped me as I could see it* 1  
*I kept referring to the task in my head* 1  
*I kept referring to the task written down, so that I didn't go off task* 1  
*I used my thinking space* 1

- (x) I think that I should have spent more time planning my answer *before* I started the first draft. 2
- (xi) I think that I should have made more of an attempt to look back at my plans *as I wrote* my first draft. 1
- (xii) I think that my plans were too vague. 1

5. What do you think your teacher meant when he asked you to write down your “thoughts on planning”?

*What I was going to do and how I was going to do it* 2  
*What we were going to do* 2  
*Our first thoughts on starting the writing* 1  
*How I was going to keep the question in mind* 1  
*Brief summary of structure, content and method* 1  
*How we think planning helps* 1  
*My teacher made me create a structure in my head and sum up what I was going to do* 1  
*To start with I thought he meant what character and part of the story I had chosen* 1

6. Do you think “planning” is about how you organise going about the task (eg making notes, first draft, second draft) or about the structure of the piece of writing (eg introduction, main part of answer, conclusion)?

*Both* 8  
*Planning is making notes, first draft and second draft* 1  
*Planning is thinking about the structure of the writing* 1  
*No* 1

## Appendix 2.6

Pupils' answers are in *italics*. Eleven pupils completed the questionnaire.

### How does the author of 'Moonfleet' put the reader on the side of the smugglers?

1. How are you going to keep the question in mind as you work on the answer?

<i>Put question on a separate piece of paper to remind myself</i>	5
<i>Produce a plan with the question in mind</i>	1
<i>Make a plan and check it fits</i>	1
<i>Have a thinking space</i>	1
<i>Just remember it in my head</i>	1
<i>Look at the title</i>	1
<i>A look at the title before writing</i>	1
<i>Start essay with question (or part of it)</i>	1
  
2. What structure will you use for your answer?

<i>Introduction, main points and evidence, conclusion</i>	8
<i>Paragraphs</i>	3
  
3. What sources can you use to collect information to answer the question?

<i>Text</i>	8
<i>My notes</i>	6
<i>Computer on stereotype smuggler</i>	1
<i>Film</i>	1
  
4. Apart from the structure, what features/qualities should an essay (such as this) have?

<i>Main points and evidence</i>	4
<i>Evidence</i>	1
<i>Quotes</i>	3
<i>Conclusion</i>	3
<i>Factual content</i>	1
<i>Formal language</i>	1
<i>Should be on target and never wander from title</i>	1
  
5. What characteristics should the language of your essay have?

<i>Formal language</i>	5	<i>No abbreviations</i>	4
<i>Correct punctuation</i>	1		
  
6. Try to rough out a plan below (and overleaf if necessary) for going about the task of answering the question. You will need to put the sub-tasks in an order, but you may want to write down the sub-tasks first before sorting them into an order.  
*(Five pupils provided details of how they were going to organise themselves (eg make notes) and gave a plan of the structure of the essay. Six pupils gave a plan of the structure only.)*

## Appendix 2.7

### Checklist for assessing the first draft of an essay

#### 1. Structure

##### (a) Introduction

- (i) Does the introduction show what I have taken the word of the question to mean?
  
- (ii) Have I outlined my approach to the question?

##### (b) Main section

- (i) Does the main section make clear points which are *relevant* to the question?
  
- (ii) Are the points supported by evidence (close reference and/or quotation)?
  
- (iii) Are the points grouped together in the most logical way?

##### (c) Conclusion

- (i) Does the conclusion sum up my main points?
  
- (ii) Does my summing up of the main points show that I still have my full attention on the actual words of the question (and that I have answered it)?

#### 2. Language

##### (a) Paragraphing

- (i) Have I used paragraphing to help make clear points?
  
- (ii) Do my paragraphs have a clear structure (main point, followed by elaboration and evidence)?

##### (b) Formal language

- (i) Have I avoided using slang?
  
- (ii) Have I used full forms of words (eg “cannot”) instead of shortened forms (eg “can’t”)?



## Appendix 2.8

Pupils' answers are in *italics*. Eight pupils completed the questionnaire.

### Review of working on first draft of essay

1. a) How did I keep the question in mind?  
*I kept looking at the title 4*  
*I wrote it down and kept it fresh in my head 1*  
*I planned what I was writing and checked it fitted the question 1*  
*I included it in most paragraphs 1*
- b) Was this different from my intention? If so, how?  
*Yes 2: I was planning to write the question on a different piece of paper.*  
*[Both pupils wrote, in answer to question 1 a), that they kept looking at title instead]*
- No 6*
2. a) What structure did I use for my essay?  
*Introduction, main points and evidence, conclusion 7*  
*Paragraphs 1*
- b) Was this different from my intention? If so, how?  
*No 8*
3. a) What sources did I use?  
*Text only 3*  
*Text and own notes 4*  
*Text, matrix and 'John Trenchard Sheet' 1*
- b) Were these different from my intention? If so, how?  
*No 5*  
*Used text less than intended 2*  
*Intended to add some of own ideas 1*
4. a) What features/qualities of an essay did I include?  
*Main points and evidence 3*  
*Keeping to the point 2*  
*Quotations 2*  
*Paragraphs 2*  
*Conclusion 1*
- b) Were these different from my intention?  
*No 7*  
*Yes 1 (I wanted to avoid slang completely)*

5. a) What characteristics of language does my essay have?  
*Formal language 5*  
*No abbreviations 1*  
*Full stops and paragraphs 1*  
*A little slang and I didn't avoid shortened forms 1*
- b) Did I intend these characteristics to be present?  
*Yes 7*      *No 1*
6. a) If I made a plan for the structure of the essay, did I keep to it?  
*Yes 7*
- b) If I made a plan for going about the task of writing the essay (such as "First I will read my notes..."), did I keep to it?  
*Yes 5*
7. Which points that I added to my answer sheet after the class discussion have I taken note of/found helpful?  
*Using formal language 1*  
*Using quotes 1*  
*Structure of paragraph 1*  
*Class discussion reminded me of the course 1*  
*Thinking space very helpful 1*  
*Using summary notes to save time on trawling for quotes 1*
8. Did answering the six questions [ie questions 1-6 above] help me in the task of writing my first draft? (Try to be specific in your answer)  
*Yes 7*  
*Helped me think about what an essay should have 2*  
*Reminded me of the structure 2*  
*Helped me get structure 1*  
*Reminded me about answering the original question 1*  
*Useful prompts 1*  
*Reminded me about language of an essay 1*

## Appendix 2.9

Pupils' answers are in *italics*. Twelve pupils completed the questionnaire.

### Looking Back and Forward

1. What role has your checklist played in helping you develop your writing?  
*Helped me to identify important features/things to remember at planning stage* 5  
*Helped to remind me during writing* 4  
*Helped me to evaluate at end* 2  
*Enabled me to record useful things that occurred to me when writing* 1
  
2. What have you learned about writing essays? Was your 'Moonfleet' essay better than your 'Macbeth' essay? If so, why was it better and what helped you to write a better essay?  
*Yes* 9 (*Reasons for 'Yes' answer: Improved essay technique* 2; *Keeping to question* 2; *Used more planning* 1; *Providing evidence to back up points* 1; *Used thinking space* 1; *Comments from the teacher* 1; *Learned from past mistakes* 1)  
  
*No* 1      *Same* 2
  
3. Is your current piece of work better than previous pieces in the same genre (or different genres)? If so, why have you been able to produce better work?  
*Yes* 8 (*Reasons for 'Yes' answer: Improved essay technique* 1; *Improved story technique* 1; *Comments from teacher* 1; *Have been more subtle and descriptive* 1; *Improved paragraphing and punctuation* 1; *Learned from past mistakes* 1; *Better knowledge of current genre than previous one* 1)  
  
*No* 2      *Same* 1      *Unsure* 1
  
4. What have you learned overall about the process of writing this year in Express lessons?  
*Thinking space* 3      *Plan* 3      *Structure of essay* 3  
*Checklist* 2      *Keeping to the question* 1      *Paragraphing* 1  
*Punctuation* 1      *Characterisation* 1      *Formal language* 1  
*Making points clearly* 1
  
5. Imagine that you are given a writing task (such as to write a short story or report) during your first week at High School. What will you do to help yourself write well?  
*Checklist* 8      *Plan* 6      *Thinking space* 3  
*Brainstorm* 1      *Review previous work* 1

## Appendix 2.10

### Planning for 'The perspective of another character': part of my matrix

Pupil	First Thoughts on Planning 2.2.99	Second Thoughts on Planning 2.2.99	Second Thoughts on Planning: added 9.2.99	Thinking Space	My observations in lessons 9.2.99
B	<p>'Structure –</p> <ul style="list-style-type: none"> <li>• Introduction – Brief summary of views and character</li> <li>• The story – Include sources. Embellish facts, as appropriate.'</li> </ul>		'I will use my thinking space to detail my sources and to note any embellishments made.'	<ol style="list-style-type: none"> <li>1. Names chosen character.</li> <li>2. Writes reasons for including certain sections in first draft, eg "This aims to explore David's death..."</li> <li>3. Gives himself directions, eg "Add extra paragraph."</li> </ol>	Worked confidently.
C	'Ratsey – I may do the part where he is in the vault and speaks up for John. Ratsey as sexton, had been a mason...'	'I could make a list of different events, then check them off or make some sort of list.'	'My essay should include firstly a paragraph introducing what I am looking at and doing.'	<ol style="list-style-type: none"> <li>1. Gives himself directions: 'Look at picture of John.'</li> <li>2. Records plans: 'I am going to write down things about Ratsey.'</li> <li>3. Lists relevant events in story.</li> <li>4. Jots down points from class discussion.</li> <li>5. Comments on how well he thinks he is doing.</li> </ol>	
S	'I am going to look at the story through the eyes of Elzevir. Page 19-21. Ratsey takes John to the 'Why not?'. It is not the first time Elzevir meets John in the story.'	'I am going to make a list in the thinking space of what I need to put in and tick it off when I've put it in.'	'I am going to make notes about Elzevir in the thinking space.'	Asks questions: 'How does he act towards John? What does he say? How does John react?' Then answers questions, including by quotation.	Seemed less on task than most. Was she thinking?
H	'I am going to choose Elzevir Block – son has died.'		Says what he is going to describe next.	Not used.	Said he was now thinking about second aspect of task (variety of ways) when I asked him what he had concentrated on (two-thirds through lesson).
X	'Choose character. Find part of story to do.'	'Make sure to remember to reveal details about character.'	All of her writing took form of notes of main events to include.	Recorded a page number.	

## **Appendix 2.11**

### **Analysis of variables (of metacognitive knowledge) in questionnaire answers**

The numbers are those of the questionnaire questions.

<b>Variable Questionnaire</b>	<b>Person</b>	<b>Task</b>	<b>Strategy</b>	<b>Materials (references to texts used)</b>
<b>(i)</b>	1 2 3 4	1 2 5	4 5	3 4 5
<b>(ii)</b>	1 2 3 4 6	1 2 3 4 5 6 7		2 4
<b>(iii)</b>	1 2 4 5	1 2 3 4 5	1 2 3 4 5	
<b>(iv)</b>	4			1 2 3 4
<b>(v)</b>	1 2 3 4 5 6	1 2 3 4 5 6	3 4 5 6	3 4 5
<b>(vi)</b>	1 2 3 6	1 2 3 4 5 6	1 2 3 6	3 6
<b>(vii)</b>	1 2	1 2	1	1
<b>(viii)</b>	1 2 3 4 5 6 7 8	1 2 3 4 5 6 7 8	1 2 3 6 7 8	3 7
<b>(ix)</b>	1 2 3 4 5	1 2 3 4 5	1 2 4 5	1 2 3 4 5 6 7

## Appendix 2.12

### Interview planning and questions

#### Planning for Interview 2 with B and N (25.2.99)

1. Look at their recent work. Discuss pupils' matrices and pupils' writing ('The perspective of another character').
2. Read transcript of last interview and pick out areas to explore more.
3. Think specifically about planning (different strategies for different tasks?).
4. Consider encouraging them to use journals more? Other means of reflecting?

#### Questions for interview with B and N (25.2.99)

1. Do you think that different kinds of writing have different structures? Examples?
2. If you were writing a story today, would it have a different structure from the kind of story you wrote in Year 5?
3. What has helped you develop the structure of a story? (Eg, have you been encouraged to identify features of structures – or has it been a less conscious process?)
4. N, you said in the questionnaire on 'Structure' that you change the structure or shape of a piece of writing about half the time. Can you give me an example?
5. [Look at the pupil's work and 'Review of my writing: The perspective....' sheet and matrix sheet.] How useful was the matrix?
6. When you write, do you have to put yourself into a different role (from yourself)? (Not necessarily as a character in a story. I am thinking of, say, adopting the role of a 19<sup>th</sup> century author rather than a 20<sup>th</sup> century one – or in a piece of report-writing.)  
How easy/difficult?  
What helps?

## Appendix 2.13

### Topics in interviews

Date	Interviewee	Topic
13.1.99	B, N	<ul style="list-style-type: none"> <li>• What helps to create a good final draft</li> <li>• How pupil knows he is on the right track when writing a first draft</li> <li>• What helps a pupil reflect on written work when making a plan</li> <li>• How models of text help a writer when planning and composing</li> <li>• The use of criteria/review sheet to evaluate</li> <li>• Purpose and audience</li> <li>• Role of reflection</li> </ul>
25.2.99	B, N	<ul style="list-style-type: none"> <li>• Structure of texts; what helps pupils to develop the structure</li> <li>• Matrix pupils made for assessing whether they had used variety of ways to reveal character</li> <li>• Persona of author</li> <li>• Use of thinking space</li> </ul>
14.5.99	B	<ul style="list-style-type: none"> <li>• Pupil's responses to:               <ol style="list-style-type: none"> <li>a) Questionnaire (viii) ('Review of working on first draft of essay'): planning, structure</li> <li>b) Questionnaire (vii) ('Checklist for assessing the first draft of an essay'): use of checklist</li> </ol> </li> <li>• Pupil's essay ('Moonfleet')</li> <li>• Methods teacher used to encourage reflection</li> <li>• Genre</li> <li>• Teacher's providing of a model of a text</li> </ul>
15.6.99	C	<ul style="list-style-type: none"> <li>• What helped pupil focus on essay question</li> </ul>
22.6.99	E	<ul style="list-style-type: none"> <li>• Pupil's story</li> <li>• Use of checklist and thinking space</li> </ul>
25.6.99	B	<ul style="list-style-type: none"> <li>• Pupil's story</li> <li>• Use of notes and checklist</li> <li>• Awareness of thought processes</li> </ul>
29.6.99	M	<ul style="list-style-type: none"> <li>• Pupil's story</li> <li>• Use of checklist</li> </ul>
30.6.99	N	<ul style="list-style-type: none"> <li>• Pupil's story</li> <li>• Use of checklist</li> <li>• Audience</li> </ul>
6.7.99	D	<ul style="list-style-type: none"> <li>• Pupil's method of writing a story</li> <li>• Use of checklist</li> <li>• Planning</li> </ul>
6.7.99	H	<ul style="list-style-type: none"> <li>• Use of checklist and margin</li> </ul>
6.7.99	T	<ul style="list-style-type: none"> <li>• Pupil's current writing</li> <li>• Use of checklist and margin</li> </ul>
6.7.99	W	<ul style="list-style-type: none"> <li>• Pupil's story</li> <li>• Use of checklist</li> </ul>
6.7.99	X	<ul style="list-style-type: none"> <li>• Pupil's story</li> <li>• Use of checklist and thinking space</li> </ul>
7.7.99	C	<ul style="list-style-type: none"> <li>• Use of checklist</li> <li>• Pupil's current writing and 'Moonfleet' essay</li> </ul>
8.7.99	Q	<ul style="list-style-type: none"> <li>• Pupil's current writing</li> <li>• Use of checklist and thinking space</li> </ul>
13.7.99	I	<ul style="list-style-type: none"> <li>• Pupil's current writing</li> <li>• Use of checklist</li> </ul>

## Appendix 2.14

### Interview with pupils B and N: 13.1.99

- BD If you think about your English lessons in the last three or four years, what has helped you create a really good final draft of written work?
- B I think having lots of background material about what we've got to write about and also being interested in the subject that you are writing about and having people to proof-read it for you and being able to make lots of drafts before your final draft.
- N Just checking it with all your friends and enjoying the subject that you're writing about tends to make the written work better than if you don't enjoy it or you're writing it on your own.
- BD When you're doing a first draft, how do you know that you're on the right track as you are writing it?
- B I just sort of let my ideas flow out onto the paper and then, after I've got enough down for me to be able to remember what I was writing about, I look back at it and then I can make any significant changes before the next draft.
- N I just write down anything that comes into my mind and then pick out the best ideas from what I've written down. [At time of verification pupil added: *and if I've had a sudden idea while drafting, I write that down as well.*]
- BD If you think you have done a piece of written work in English really well and the teacher doesn't agree with you, what might the reasons be for the disparity?  
Or has it never happened?
- B It's never happened, but I'll speculate. I think it might be because your piece of writing might not be on the right lines, what you're supposed to be writing about, or... it's not the right style of writing.
- N It's never happened to me but if it did I'd be very upset, because I'd spent all this time on a piece of writing and the teacher didn't like it. But it could be that you've gone off the track what you're supposed to be doing or...
- BD What helps you reflect on your written work in English as you are making a plan? When you are doing a planning stage, what helps make you thoughtful and reflective about a task?
- N If I'm writing on my own in silence... I can concentrate better. I seem to concentrate better if I'm at home than in the classroom.
- B I think having just looked at related texts and having a very vivid idea of what I want to achieve with the piece of text.
- BD OK. When you say 'related texts' is it the idea that you're given a text that provides a kind of model or guide?
- B Yes.
- BD You find that useful?
- B Yes.
- BD OK. Do you find that you keep that in your head when you're writing? If you've read, say, a poem and you're asked to write a poem, you keep the framework or structure or shape of that poem or significant features of it in your head?... Is that what happens?
- B Yes. I can keep the structure of the poem to a certain extent and then I can sort of fill it in with my own ideas.
- BD Do you agree?
- N Yes. I do.
- BD So do you like being given models of writing?
- B Yes. I think it helps.
- BD So that's about the planning stage... When you're doing the first draft, is it the same then? Do you still keep that model in your head as you go through the first draft?
- B I don't think so much in the first draft because having got your ideas down on a piece of paper you can then work more on that, but I still sort of keep the general theme in my head.
- BD Do you ever hear a little voice that sort of... is a kind of reminder that says 'Remember about that' or 'Remember what the teacher said about that'? Do you ever have that sensation?
- N Yes, definitely.
- BD Do you both have that?
- B Yes, sometimes.
- BD Does it tend to be the teacher's voice you hear or is it more your thoughts of what you've made of the teacher's voice? How does it work?
- B Mainly my own thoughts about it, but sometimes when I'm just writing my first draft I have to try and keep myself on track so I don't veer off what I'm supposed to be aiming for.



- N I hear a little voice: 'Don't forget to do this. Don't forget to do that.'
- BD Does that tend to be the teacher who's working with you at the moment or is it sort of a general mixture of teachers over the years?
- N It depends on what subject you're doing. You seem to get different teachers of different subjects appearing saying: 'Don't forget to do this.'
- BD So that's the first draft. When you get to the final draft stage, what helps you to be really thoughtful and reflective at that stage? You've done the first draft. You're now on your final draft. What helps you to be thoughtful at that stage?
- B I think at that point having a set of criteria or review sheet that you can look at for the task and then can look back at what you've planned to do and see if it fits all those criteria.
- BD So you like having the criteria for...
- B Yes.
- BD What, getting a particular level? Do some teachers do that? I'm not talking about English...
- N Yes. Some teachers do.
- BD Do you like that?
- B Yes.
- BD So then you know, if you're aiming for level 7, you know what you've got to do for a level 7. What subjects do you find that in most often?
- B Geography, Design Technology and Science if you're doing enquiries.
- BD Is that something you'd like in all subjects as well?
- B, N Yes.
- BD There are a lot of abilities that help anyone produce good work in English. One is the ability to spell; another is the ability to punctuate. Another is the imagination. If you think about all the abilities you need to produce good work, how important is the ability to reflect or think carefully about what you're doing, how you're doing it? How would you rank that compared to those other abilities?
- N Very important, because you need to really understand what you're writing and if you reflect on it, then it's helpful, it's more helpful.
- B I think that having a good grasp of English and the way to write and the way English grammar works is very important, but alongside that you have to be able to look at what you're doing because you might be writing a brilliant piece of work but it's nothing to do with what you're supposed to be writing about.
- BD So you're saying you need to think about the purpose.
- B Yes.
- BD OK. So is that something you...you talked about criteria...that's really what the teacher is saying about how to get good marks...but the purpose might be connected with that. So do you try to keep in your head the purpose of that particular piece of writing...
- B, N Yes.
- BD ...when you're doing it? Do you keep anything else in your head? Like...some pieces of writing have what we call an audience. Some pieces of writing have a *real* audience: for instance, if you were writing a letter and it was a letter that was actually going to be sent, then your audience is the person who is going to receive the letter, but, if you're writing a story in school, then the audience is basically the teacher or yourself or you can go home and show it to your parents.
- N Last year in Year 7 I wrote a story which was similar to a childhood memory that I had and I sort of based it on the childhood memory that I had so I do have other things in my mind or to do with the story.
- BD So perhaps your audience in a way was something you're trying to match up ...was it, you're trying to match up to something...?
- N Yes.
- BD OK. Now recently I gave you a sheet that you filled in about 'Moonfleet' and it was to explore what you thought might be in the story. We talked about the setting and characters and so on. Now, after we read the first chapter, do you...thinking back on it...we didn't talk about it...you might have noticed and thought 'Ah, I was right about that' but there might have been other things that were different, so do you think that sheet helped you think about the story or not?
- B I think that the sheet helped us with...have an idea of what the story would be like and then I could compare the story with that.
- N I thought it would be interesting for a comparison later on after we'd read the first few chapters.

- BD Now I should have here some work you've done before... what you wrote about structure.  
Now let's look at it...
- Do you think when it comes to reflecting about what you're doing and being thoughtful, some people do it because they're naturally more thoughtful and reflective, or is it that they've been trained by teachers... to take that sort of style of going about it?
- B I think some people are naturally thoughtful and like to look back on what they've done or see how they would have made it better or what was good about it.
- BD Do you agree?
- N Basically the same. If you reflect, some have just a natural ability to do that and some people have to really try to reflect on what they've written.
- BD Do you think you are a thoughtful, reflective person?
- N It depends on what I'm writing. If I'm writing something... a story that I'm really enjoying writing or something like that, it's easy to reflect, but, if I'm sort of writing something and it's sort of dragging along and I'm not really enjoying it, I find it hard to reflect on what I've written.
- BD What do you think?
- B I do like looking back on things that I've done and examining them and seeing if I've done them well or could have done them better and in the stories I like to look back on that sort of thing as well, but sometimes, if you've done it and you don't see that you can really change it and you've just... there and you didn't really enjoy what you were writing, you just leave it and don't...
- BD Can you think of any instances in the past where English teachers have tried to encourage you to be more reflective or thoughtful about what you're doing in your written work? Can you think of any example where that sort of thing...
- B In one context... in Year 7... every piece of English... we were set a target for it so in that respect we were given something to look back on that piece of work...
- BD Can you give me an example?
- B Some targets to do with grammar and punctuation. In the first piece of work (it was a newspaper report) it was to use apostrophe for possession and some targets for other things as well.
- BD I have done one or two things this year you might have... we had a little space at the side called a 'Thinking Space' that some people used. Did you find that useful?
- B Yes, to a certain extent.
- N It was useful but it was... because... Sometimes I write really big and sometimes really small and I don't know what I'm going to do next because I'm a weird sort of person, but if I write really big it takes up quite a bit of the side of the paper and I can only fit a certain amount on the paper.
- BD Thank you. I'm going to end the interview there.

## Appendix 2.15

### Interview with pupil B: 14.5.99

- BD You've got in front of you your sheet called 'Review of working on the first draft of the essay'. You say that you try to refer to the focus plan which you had produced to keep the question in mind. How did that particularly help you to think about the words of the question?
- B I had produced the plan bearing in mind the words of the question and how I interpreted it because at that time I didn't need to think much about what I was going to put in...to be content in the evidence and then I tried to follow that plan for structure which adhered to the task and tried to put in the content around that so I didn't stray too far.
- BD You used the three-part structure which we might talk about in a moment. You used your notes predominantly but you also looked at the text. Why do you think your use of the text as evidence was less than you intended?
- B I think that when I came to write in my evidence and try and link that to the points that I wanted to conclude on, I had lots of facts that I needed to do that already in note form so I didn't refer to the text as much.
- BD OK. You made a plan for the structure of the essay and you kept to it and you used summary notes to save time on trawling for quotes. Now, question 8 says 'Did answering the six questions help you with the task of writing the first draft?' and you say 'I feel that some of the questions were unnecessary in reinforcing already cemented ideas while other were useful', is it possible to say which ones you did find useful? We've got the sheet here. So which ones helped?
- B I found question 3 helped in as much that I was able to make notes from the class discussion and that helped me when I was producing my essay as far as I've already got and question 6...I was able to rough out a plan which I needed when I was trying to do the essay, but I think question 2 ('What structure will you use for your answer?') we did quite a lot about essay structure before so I didn't really need that.
- BD OK. Now, I think we've learned that the word 'plan' can have two senses. It can be about the structure, but it can also be the plan that you make to go about your work. Do you find both of those types of plan useful?
- B The only type of plan I use in my work is to plan how I want the work to be when I finish it, so that I can use that when I'm trying to build the text. I don't plan much the way of going to do the task.
- BD OK. Right. Can we go now to look at a sheet that's called 'Checklist for assessing the first draft of the essay'. One question says 'Have I outlined my approach to the question?' and you've said 'To some degree. Will require elaboration.'. Do you think this checklist is going to influence in any way how you do your second draft?
- B Yes. I started my second draft after completing this checklist and I found it quite useful in amending my first draft.
- BD OK. Now, this is the first year that I've used this sort of checklist, so I'm interested in students' response. So you're telling me that it helps you think about what you've done.
- B Yes.
- BD OK...so would it be useful if other teachers sometimes used these without overdoing it?
- B Yes.
- BD Especially with the first draft situation.
- B [Nodded]
- BD OK. Right. Question 1 c) (ii) is another one you're going to elaborate.
- B Yes.
- BD About summing up the main points.
- B Yes.
- BD Right. OK. So we've looked at the two sheets.
- B Yes.
- BD Right. OK. What do you feel about the essay in the state it's in at the moment?
- B The first draft of my essay I put quite a lot of ideas down, but when I came to read it through again when I was redrafting for my second draft I found that some parts of it, particularly to do with the conclusion, didn't really fit points that I could summarise when I was concluding, so I changed that quite a bit in my second draft and I'm happy with that now, but I basically kept my introduction and most of my evidence from my first draft.
- BD I'd like you to think about some more general questions...
- B Right.

- BD ...in relation to the English work we've doing. Can you think of some of the sheets I've given you or tasks I've asked you to do that have encouraged you to reflect on what you're doing... or on the text itself or on your general thinking about the text.
- B The 'Moonfleet' text: there were some lessons where we had to go down about the chapter... I think... there's a piece here about Chapter 13, the interview. I found that quite useful in analysing the way the story had been put together.
- BD Would you say it's true that when you were younger you read a story at what we might call the surface level and accepted it as a fiction, as a work that had been created, but now you're beginning to think more about how it's constructed by the author? Would that be a fair comment?
- B Yes. I think when I was younger I didn't really used to think about the way the effects in the story were achieved. I just listened to it and manipulated what I knew about the story and its plot in my work that I had to do.
- BD Do you think it's possible to still enjoy the story and appreciate it as a story, a fiction, but also at the same time in your head be conscious that an author has written it and written in particular ways? Can you keep the author's side in your mind?
- B I think it's more difficult to try and analyse a story into the way that its effects have been achieved and still enjoy the story as a fiction than it is just to read it and be aware of the plot but not really try and understand the way it's... what was built.
- BD But you think you are beginning to do that?
- B [Nodded]
- BD OK. Do you think you are beginning to do that because of things that you've done last year and this year with your main English teacher, do you think it can include some of the things I've done with you or is it that you're generally getting older and developing a broader understanding of books? And it may be a mixture of those as well. What do you think?
- B I think in English work, particularly this year, lots of the tasks that we've had to do have been essay form where we've had to evaluate a piece of literature so... when you do that you have to try and analyse the story as well.
- BD That... the approach that I've taken to 'Moonfleet' is that similar to what you've done with your main English teacher or do you think I'm doing different things?
- B I think it's different in the Express English lessons to our main English lessons.
- BD Can you tell me why?
- B In our main English lessons we read through the text either by ourselves or together and then we're given tasks to do and we write it out and we try and analyse it as we write it out to fulfil the task and then we look at it later whereas in the Express English lessons we try and analyse the text before and then write out our piece in that knowledge.
- BD Which approach do you find most useful? Or does each have its own uses?
- B I think it's better when you're trying to write out a best piece of essay writing to have analysed the story first so that you know what it is you're trying to summarise in the writing, but it can also be useful to just read through the story and write down any ideas you have about it first, just to try and appreciate the story as it is without breaking it down.
- BD OK. Do you think one of the important things in English is to develop an understanding that there are different kinds of writing... sometimes called genres? Do you think that's a really important thing in English?
- B I think it's important to appreciate the style which is used to... the style that the text is... because that helps you to understand the way that it's been built and structured more.
- BD OK. Do you think... if a teacher asks you to write in a particular genre - it might be a recall, a letter, essay, leaflet - what do you think are the best ways to help you produce a really good piece of writing?
- B I think different people like different types of genre... write best in different types of genre, but I think it's a good idea to break down the features of a genre into separate sub-tasks so that you know the way that the piece works ... built.
- BD Do you think it's useful if teachers do what's called modelling where they construct a text on the board, perhaps on their own or with the class, so if the task was to do a leaflet perhaps the teacher's looked at leaflets with you (perhaps the leaflet's trying to persuade) and then the teacher chooses a subject for the leaflet and actually constructs it on the board or at least part of it with the class. That's usually called modelling. Is that a technique you know?
- B Yes.
- BD Do you find that useful?

- B Yes, I do find that sort of thing useful, because if you don't have a complete grasp of the genre, it can help to demonstrate the way it can be done..
- BD OK. Do you think it's a good idea to have choice over the genre...? If there's an English lesson and you're told the subject is writing, do you prefer if the teacher says 'Right, you can choose any genre and any subject', or do you like it if the teacher says 'Right, today we're going to do leaflets and in two weeks' time we're going to do poems and after that we're going to do a play'? What's your preference?
- B I think everybody has their favourite genre which they're good at and I certainly prefer to have a choice so I can write in a genre that I quite like, but I think that you should also be given genres to write in so that you can experiment with different styles of writing.
- BD If you look back over your writing - you're in Year 8 in the last term - occasionally you might come across a piece that you did in Year 5 and you might think 'Wow!' or you might think 'Wow. I wrote that in Year 5' or you might think 'Mm. I've improved on that'. What do you think has particularly helped you - is it wide experience of texts, for instance, is it being asked to write particular genres, is it teachers modelling, is it teachers looking at a first draft? What sort of things have really developed your writing?
- B I think...when I was in Year 5 and in Primary School we were...we just read through a piece of text which was usually quite short and then we were told to construct a similar sort of story - because it was mainly stories - which had parallels with it and I think doing that you could get stories that were really nothing like what it was you were trying to model but they had some sort of features the same so you could say they were sort of...deviate a lot, whereas getting...in Years 7 and 8...giving more specific and focused tasks so you have to study the text more and when you write you have to be more careful and write more...and write in a more complex way.
- BD How important do you think it is in English - and particularly writing - to get students to be reflecting on what they've written, say as a first draft or on the first paragraph, how important do you think that is in English?
- B I find it useful to be able to write out a first draft which is first of all my ideas down and then be able to look at it and change it so it becomes more focused to the task, but I think if you reflect too much on a piece, you keep changing things and you never leave it and it never sort of sets down and fits the task completely.
- BD When you're writing something imaginative, not perhaps an essay, do you have an audience in mind...or not?
- B If I'm given a specific audience to target the piece to, then I try to change the way I write it to fit that, but if I'm just told to write a story, I tend to aim it at my own sort of age group.
- BD OK. Thanks.

## Appendix 2.16

### Interview with pupil E: 22.6.99

- BD How's the story going?  
E Alright.  
BD What's been easiest?  
E Getting the idea.  
BD The hardest?  
E Writing it out.  
BD Can you say a bit more about 'writing it out'?  
E Putting it into a full story.  
BD The detail?  
E Yes.  
BD Did you start with the action... the plot or with one or two characters?  
E The action... I tend to think about the characters once I've got a story planned.  
BD You devised a checklist. Good idea?  
E I wouldn't have done but it is helping me to think about my writing...include certain things...characters...whether or not I've put enough about each one.  
BD Are you going to add to your checklist?  
E I can't tell.  
BD What do you do when you, say, have an idea for the end of a story at the beginning.  
E I think first how I could fit it in...then I try to...  
BD How do you hang onto an idea?  
E Write it down...my own notepad...I keep looking at my notepad...my ideas.  
BD Compared with two years ago do you make more use of notes?  
E I use them more.  
BD Why?  
E Because I've realised it makes writing my story easier. [At time of verification pupil added: *because I don't have to hold the idea in my head.*]  
BD When did you realise it?  
E I've gradually realised it.  
BD Do you understand what 'genre' means?  
E Yes, what type of writing.  
BD Do you have a particular genre in mind?  
E Just a normal story.  
BD Can you think of how your writing is better now than, say, a year ago?  
E The words I use...more descriptive.  
BD Why are you using them?  
E To give more detail.  
BD Where have these come from? Heard or from stories?  
E Both.  
BD Have you used your Journal... Thinking Space...?  
E On occasions...I haven't used them much.  
BD Is it because you don't need them...you have your notebook...or you tend to forget they're available?  
E I don't think of using them.  
BD Which might you use?  
E The Thinking Space I've used the most.  
BD Might you use it in the future?  
E I think I probably will.

## Appendix 2.17

### Interview with pupil B: 25.6.99

- BD How are you doing with your story?  
B I've been word-processing. I'm up to the chapter where the story is tied together and resolved.
- BD What has helped you write it?  
B I made some notes to begin with and worked from the notes. When I come to the end, my checklist will help me evaluate what I've done so I can take out anything inappropriate that won't fit.
- BD Would the checklist help you see whether anything was missing?  
B It might help me add to parts of the story that might be weak. With the Thinking Space when I'm writing I have a few notes and get into a flow. I found the checklist useful in that I could use it at the end of a chapter and I could evaluate what I've written.
- BD You've been able to use your Journal, Thinking Spaces, planning tools and so on. Are you saying the checklist was the most useful of these?  
B Having some basic notes and the checklist was the most useful.
- BD Has anything from Express been used with your other English work?  
B We use plans in main English and homework but not Thinking Spaces or checklists.
- BD Do you think the checklist would be something you'd use again?  
B Yes.
- BD Is it more appropriate for other kinds of writing also? (i.e. not just story)  
B You could use it for a report of other form of writing but you'd have to modify it.
- BD Do you think that you are more aware of your thought processes as a writer now than, say, in September?  
B I think that I'm more aware of the fact that when you write you get into a flow of writing and when you get to the end it's a good idea to check over the content.
- BD Do you think about audience when writing?  
B I wouldn't really think about an audience when writing a story unless I'd been set a particular audience.
- BD When you read what you've written or check it over, do you think your self as a reader is different from your self as a writer?  
B I think if I was writing a piece and I came to a point where I thought what I was writing might not join up very well with what might happen later, I'd bypass that awareness and keep straight on and try to join them up later on. And then in that way I'd be quite involved in what I was writing and when I came to read it I'd be quite critical and want to change it. I think I'm more critical of my own writing than someone else's, because I compare my own writing to an idea I have of the way it should be written.
- BD Genre?  
B Partly genre and partly elements of a story and from what I've read. With other people's writing I'd appreciate more they have their own style.

## Appendix 2.18

### Interview with pupil C: 7.7.99

- BD You're doing a report. Have you found making a checklist useful?  
C It's made me think about what I should put in my report.  
BD Was that just when you wrote the checklist or subsequently?  
C It's helped me while I've been writing my report.  
BD Is that because you've added items to your checklist?  
C I've only added one. It's mainly helped me with the style...remembering short paragraphs.  
BD So you would make a checklist again?  
C Probably. I haven't finished my first draft, but I can use it to check off what I've done.  
BD Have you used anything like a checklist before?  
C I can't really remember. I suppose I have in some stories...what it's going to be about.  
BD Like a plan?  
C Yes.  
BD What has helped capture the newspaper style?  
C Probably just reading reports about football games.  
BD During the year we've used certain devices to help you as a writer reflect on your writing and hang on to ideas, such as the Journal, Thinking Space, plans and checklist. Which of these do you think have been useful to you?  
C The checklist and checklists for essays.  
BD Do you think it's useful to be given models or examples of particular kinds of writing?  
C It puts you on the right track for what you're doing.  
BD Which piece of written work are you most pleased with?  
C The 'Moonfleet' essay.  
BD Why?  
C I followed the task and got lots of details.  
BD Did you realise you'd done a very good piece of work before it was marked?  
C No, not really. But I knew I'd followed what you said.  
BD Do you like being given a choice of content and genre?  
C Yes.  
BD Do you think you should have been given more choice?  
C I haven't had much choice before.



## Appendix 2.19

### Scaffolding episode a): 'The perspective of another character'

I asked pupils to use the thinking space for their assignment 'The Perspective of Another Character'. I related the thinking space to the idea that students had two tasks in writing the assignment: a) to be the storyteller (I had asked them to tell a part of the story through the eyes of a character other than the narrator, John Trenchard; b) to reveal details of the character in a variety of ways. I suggested that the main text could be seen as (a) and the thinking space as (b). I noted in my journal that I hoped this approach would encourage metacognition.

Pupils used their thinking spaces in a variety of ways, to:

- ask questions to which they wanted to discover the answers
- make notes (eg "I am going to make a list in the thinking space of what I need to put in and tick it off when I put it in")
- give themselves directions (eg "look at a picture of John" ; "add extra paragraph ... and detail Elzevir's dominance")
- record intentions (eg "I am going to write down things to do with Ratsey")
- record items learned (eg difference between first and third person narrative).

Some of the pupils' written work took the form of plans. I had been struck by the research finding that pupils spent little time on planning (Emig, 1971; Stallard, 1974). I had found this to be true when I interviewed two of the ablest pupils in the group. I decided to explore planning with the pupils.

I asked pupils to put a heading "First thoughts on planning" having given them the title 'The Perspective of Another Character', the two-part task and an explanation. After ten minutes pupils shared what they had written in a class discussion.

Some pupils had written an outline, some had written reminders (eg “Include sources”) whereas others wrote down the choice of characters and section of the story which their character was going to tell.

I had done some work previously with the class on how a writer employs different methods to reveal a character. Pupils had drawn a quick match-stick style sketch of the central character and had attached to him a number of methods (eg ‘deduction from his thoughts’, ‘contrast with other characters’) in the style of a topic web.

I had recorded in my journal (26.1.1990 “I want this to be a bridge to pupils’ writing: my theory is that by working out how a writer reveals character, pupils will be able to use the same methods in their description of character”.

So I saw pupils’ attention to the author’s methods leading to the development of a metacognitive approach to their own use of similar methods.

I was keen to promote a problem-solving approach to writing, drawing on Hillocks’ (1995) meta-analysis of research evidence which suggests that discussion between teachers and pupils, in a problem-solving approach to specific writing tasks, is particularly effective in developing writing skills.

My method was similar to the ‘guided writing’ approach now enshrined in the National Literacy Strategy (Beard, 1998).

A number of writers point out the value of exploiting reciprocal links between reading and writing. Martin (1989) describes how she makes a “structured intervention” to reveal features of stories before getting children to write their own.

After the class discussion on ‘First thoughts on planning’, pupils wrote their ‘Second thoughts on planning’. In these second thoughts some pupils

seemed to be becoming more metacognitive (eg “I could make a list of different events, then check them off or make some sort of list”, “My essay should include firstly a paragraph introducing what I am looking at and doing”, “I will use my thinking space to detail my sources and to note any embellishments made”).

In a subsequent lesson, after pupils had completed first drafts, I asked them to examine how far they had used a variety of methods to reveal their chosen characters. Each pupil made a matrix listing the methods which we had identified as a class (and which pupils had placed around their sketch of John Trenchard) and against each method they named the evidence that they had used it. This allowed pupils to identify blank spaces in the matrix which they filled with plans (eg “I plan to make Elzevir shout at Ratsey for not helping John when he is discovered”).

Underneath the matrix pupils wrote what they had learned from completing it (eg “That there are a lot more ways of expressing my character than I first thought in my ‘Second thoughts’ on planning”).

The matrix was not only a means of enabling pupils to identify gaps in their work and fill them to write better assignments. I saw it as scaffolding to help develop their metacognition. It served as a kind of checklist (with evidence).

## Appendix 2.20

### Scaffolding episode b): Developing awareness of how a plot is advanced

I hoped that development of pupils' metacognitive reading skills would assist the growth of metacognitive writing skills (Tierney, Soter, O'Flahavan and McGinley, 1989, show how reading and writing can interact to develop students' thinking). Selfe (1986, p.62) points out that "teaching students to become better writers may necessitate teaching them to become better readers".

I wanted pupils to discover how an author can deliberately anticipate events. I asked them to answer individually the question 'Why does the author include this chapter?' (Pupils had answered the same question about an earlier chapter and I thought that they had *begun* to make a more metacognitive reading: I felt I had moved them towards asking themselves questions about the author's intentions rather than seeing each chapter as merely the next bit of the narrative).

After pupils wrote down their responses, I held a class discussion which involved sharing the responses and discussing them. Then I asked the pupils to answer the question again (in writing). Results were as follows:

Purposes of chapter	Number of pupils choosing the purpose	
	Before discussion	After discussion
Give information about character(s)	10	3
Bring character(s) more into the plot	2	5
Advance the plot	1	8

In answering the question after the discussion pupils were able to refer to particular threads in the plot.

I concluded in my journal (13.4.99): "They seem to be beginning to understand that an author deliberately 'plants' details which have

significance later”. Comments in my journal made immediately after my conclusion show how I was trying to connect examination of text with the pupils’ writing: “What is the relationship between analysis of an author and students’ own writing? Atwell and Calkins [Atwell, 1998; Calkins, 1986] would seem to have moved towards making more use of modelling own writing and examination of how writers write – rather than just letting children write. How could I test this relationship?”

The answer I gave myself was that I needed to be able to assess the quality of pupils’ written work in some kind of semi-experimental condition. Here were some of the seeds that grew into Phase 3, although it was the effect of checklists rather than the analysis of text that I investigated. In the same entry in my journal I wrote: “Able children do not seem to ‘automatically’ understand how an author goes about writing a story.”

## **Appendix 2.21**

### **Scaffolding episode c): Teaching checklists**

I began by referring to questionnaire (vi) ('How does the author of 'Moonfleet' put the reader on the side of the smugglers?') which had some of the features of a checklist.

I then modelled a checklist for a short story on the board (referring to how I wrote short stories myself). We discussed the short story genre and pupils made suggestions for other items in the checklist. I brought into consideration the work we had done on how an author reveals a character, reminding pupils of the sketch of John Trenchard (described in Appendix 2.19). We also discussed whether the first paragraph of a story should be vague or explicit and how an author lays clues for the reader (instances of which we had found in 'Moonfleet').

Pupils then wrote a checklist for the genre they had picked for their creative writing assignment. Pupils who had selected narrative tended to incorporate several of the elements from my checklist, but other pupils (eg one writing a report of a sporting event) had to rely on their own knowledge of their chosen genre (Examples of pupils' checklists are provided in Appendix 2.22).

When the pupils then began working on their assignments, I wrote down the details of the lesson which I have just provided.

## Appendix 2.22

### Examples of pupils' checklists

#### Example 1: narrative (pupil N)

- Are the characters well defined?
- Is the plot well thought out?
- Is there a good, original beginning?
- Is there an exciting, catching middle?
- What about a solid ending?
- Is my spelling accurate?
- Is my story well-balanced (dialogue, action)?

#### Example 2: narrative (pupil B)

- Are characters:  
well defined  
feasible
- Is setting:  
well described  
atmospheric
- Does plot:  
unravel well  
balance (ie equal beginning, middle and end)
- Is action and suspense well maintained

#### Example 3: report of a football match for a newspaper (pupil C)

- A catchy headline
- Descriptions to build up the atmosphere
- Words that set the scene for the rest of the match – keep the reader interested
- Short paragraphs
- Descriptions of people (players, managers and officials)
- Emotions

## Appendix 3.1

### Checklists

This is a checklist I made before I went on holiday:

- camera
- sun-screen
- swimming gear

As I packed the items, I ticked them off on the list.

This is a checklist someone used for writing a story:

- Remember**
- (1) How the story **begins** and **ends**.
  - (2) **Setting** (Where and when does it happen?)
  - (3) **Characters** (eg Who are they? What are they like?)
  - (4) What **happens**.

Circle Yes or No in answer to each of the questions below.

1. Have you seen a checklist like the story checklist before today? Yes/No

2. Have you used a checklist like the story checklist before today? Yes/No

3. If you answered 'yes' to question 2, how did you use it?

- |       |  |        |
|-------|--|--------|
| (i)   | I read it before starting to write my story, but I did not fill it in. | Yes/No |
| (ii)  | I filled it in as I wrote.   | Yes/No |
| (iii) | I filled it in after I had written my story.                           | Yes/No |
| (iv)  | I read it as I wrote but did not fill it in.                           | Yes/No |
| (v)   | I read it after I wrote but did not fill it in.                        | Yes/No |

4. Have you ever made your own checklist for a story? Yes/No

5. If you answered 'yes' to question 4,

(i) why did you make the checklist?

(ii) how did you use it? (Choose (i) – (v) from question 3)

(iii) where did you get the idea of a checklist from?

6. If you have made a checklist for a story more than once, how often have you done this?

Please circle one of the following:

sometimes      about half the time      most times      every time



## Appendix 3.2

Pupils' answers are in *italics*. Eight pupils completed the questionnaire.

### 'Abandoned'

- 1) Think about the checklist you made for the story 'Abandoned'. In which of these ways did the checklist help you? (Please tick one or more.)
  - a) During the planning time it helped me write down things that I might have forgotten. Writing them down helped me to remember them. 4
  - b) During the planning time it helped me check that I had remembered important things because I could tick them off on the checklist when I had included them. 5
  - c) During the writing time it helped me remember important things because I had them in my mind as the result of making the checklist. 4
  - d) During the writing time it helped me check that I had remembered important things because I could tick them off on the checklist when I had included them. 2
  - e) When I had finished writing it helped me check that I had remembered important things because I went through my story ticking off items in my checklist. 6
  
- 2) For this question, please tick one or more. Was your story 'Abandoned' better than your story 'Lost' because
  - a) You thought more about the important features of a story. 5
  - b) You thought more about 'problem and resolution' rather than 'beginning, middle and end'. 5
  - c) You used a checklist. 8
  - d) You made a better plan. 4
  - e) You developed your characters more. 4
  - f) There were other reasons (please write down what they were): 0
  
- 3) If you ticked 2d (You made a better plan), please say why you thought your plan was better:

*Two pupils attributed their better plan to having made a checklist. One of these pupils also gave the story grammar lesson as a reason, referring to "problem and resolution plus the characters".*

Pupils' actual responses:

- *It was better because I had the checklist to remind me of what I was doing, and we went over problem and resolution plus the characters.*
- *I think that my plan was better because I used a checklist. And I thought about the plan more.*
- *I thought it was better because I described the characters more and the time and place.*
- *It was easier to write and ideas were easier.*

### Appendix 3.3

Pupils' answers are in *italics*. Eight pupils completed the questionnaire.

#### Thinking about 'Abandoned'

- 1) Why did you choose not to make a checklist for your story 'Abandoned'? Please tick one or more of these possible reasons and/or add other reasons:
- a) I did not think it was necessary as I knew the important elements in a story and what I needed to concentrate on. 0
  - b) I kept a kind of mental checklist in my head to which I referred during my planning and writing. 3
  - c) I forgot about checklists. 1
  - d) My plan acted as a kind of checklist because I wrote down important elements in it and I referred to them when writing my story. 3
  - e) Having made my plan I did not need anything else to help me write my story. 1
  - f) 0
  - g) 0
- 2) Please indicate whether/how much the following helped you write your story 'Abandoned' by circling one of the choices:
- a) the lesson on the elements of a story  
no help 0    a little 0    some 6    a lot 1
  - b) the lesson on checklists  
no help 1    a little 6    some 0    a lot 0

Please try to give reasons for your choices:

- For a)
- Lesson taught me about the elements of a story* 3  
*(One pupil referred to learning about problem and resolution)*
  - Lesson reminded me of story elements* 2  
*(One pupil referred to being reminded about problem and resolution)*
  - Lesson helped me plan* 2
  - Lesson helped me with structure of story* 1

- For b)
- I learned about checklists* 4
  - I don't know how to use checklists properly* 1
  - I keep the story elements in my head* 1
  - A checklist would remind you about story elements* 1
  - No help because I didn't use it for my story* 1
  - I don't think I would use a proper checklist ("I would like to use boxes with words in it and tick them when I had included them in my story")* 1

## Appendix 3.4

Pupils' answers are in *italics*. Sixteen pupils completed the questionnaire.

### Comparing 'Lost' and 'Abandoned'

1) What differences do you notice between your story 'Lost' and your story 'Abandoned'?

(a) In your plan

<i>Had more detailed plan for 'Abandoned'</i>	4
<i>I found another way of writing plot down</i>	2
<i>Used 'problem and solution' in 'Abandoned'</i>	1
<i>Plan was more brief for 'Abandoned' ("I put too much detail in 'Lost' plan")</i>	1
<i>I put more detail in 'Lost' but found it easier to work from 'Abandoned'</i>	1
<i>'Lost' plan contained a lot of shorthand notes, whereas 'Abandoned' had headings such as Setting, Characters, Problem, Resolution</i>	1
<i>'Lost' had outline of scenes, but 'Abandoned' had Characters, Problem, Setting, Conclusion ("I prefer the first method")</i>	1
<i>'Abandoned' has list of characters and places but 'Lost' was just a summary of the story</i>	1

(b) In your story

<i>'Abandoned'</i>	
• <i>is more interesting</i>	3
• <i>has wider vocabulary</i>	1
• <i>is more descriptive</i>	1
• <i>has more ideas and fits together better</i>	1
• <i>had equal amounts of dialogue and narrative (whereas 'Lost' was mainly dialogue)</i>	1
• <i>was hard to make it short ('Lost': hard to make it long)</i>	1
• <i>had too much speaking</i>	1
• <i>started with speech ('Lost' started with characters and what they were doing)</i>	1
• <i>has fewer characters but more speaking</i>	1
<i>'Lost'</i>	
• <i>is more dramatic</i>	1
• <i>was more detailed</i>	1
• <i>had better punctuation</i>	1
• <i>was rushed</i>	1

2) Which story is better?

*'Abandoned'* 13

*'Lost'* 3

3) What makes this story better than your other story?

*'Abandoned'*

- *is more interesting/unusual* 6
- *is more detailed/descriptive* 5
- *is more exciting* 3
- *has better spelling* 1
- *has more realistic features* 1
- *has more speech which makes it more interesting* 1

*'Lost'*

- *is more detailed* 2
- *is more exciting/dramatic* 2
- *has more characters* 1
- *started better* 1

4) What do you need to do to make your next story even better?

- Provide more detail/description* 5
- Use more interesting words* 4
- Make story more interesting/unusual* 3
- Write faster* 2
- Describe characters more* 2
- Check* 2
- Plan better* 1
- Spend less time on beginning* 1
- Have a checklist* 1
- Have a more exciting plot* 1
- Think more* 1
- Do a plan* 1
- Describe setting more* 1
- Make enough time to finish* 1
- Avoid rushing* 1
- Have a picture* 1
- Use paragraphs more* 1
- Have a different time-frame and place* 1

### Appendix 3.5

Pupils' answers are in *italics*. Five pupils completed the questionnaire.

#### 'Trapped'

- 1) Think about the checklist you made for the story 'Trapped'. In which of these ways did the checklist help you? (Please tick one or more.)
  - a) During the planning time it helped me write down things that I might have forgotten. Writing them down helped me to remember them. 4
  - b) During the planning time it helped me check that I had remembered important things because I could tick them off on the checklist when I had included them. 2
  - c) During the writing time it helped me remember important things because I had them in my mind as the result of making the checklist. 3
  - d) During the writing time it helped me check that I had remembered important things because I could tick them off on the checklist when I had included them. 3
  - e) When I had finished writing it helped me check that I had remembered important things because I went through my story ticking off items in my checklist. 2
  
- 2) For this question, please tick one or more. If you think that your story 'Trapped' was better than your stories 'Lost' and 'Abandoned', was it because
  - a) You thought more about the important features of a story. 2
  - b) You thought more about 'problem and resolution' rather than 'beginning, middle and end'. 3
  - c) You used a checklist. 3
  - d) You made a better plan. 1
  - e) You developed your characters more. 2
  - f) There were other reasons (please write down what they were):
  
- 3) If you ticked 2d (You made a better plan), please say why you thought your plan was better:
  - *I included more detail and developed it more, so I knew exactly how to write my story.*
  - *It helped me understand what I was going to do more [The pupil had not ticked 2d]*
  
- 4) If you think that your story 'Trapped' was not so good as your stories 'Lost' and 'Abandoned', please say
  - a) what features make it less good:

*No pupils thought 'Trapped' was poorer.*
  - b) why these features occur

## Appendix 3.6

Pupils' answers are in *italics*. Eleven pupils completed the questionnaire.

### Thinking about 'Trapped'

- 1) Why did you choose not to make a checklist for your story 'Trapped'? Please tick one or more of these possible reasons and/or add other reasons:
- a) I did not think it was necessary as I knew the important elements in a story and what I needed to concentrate on. 3
  - b) I kept a kind of mental checklist in my head to which I referred during my planning and writing. 5
  - c) I forgot about checklists. 1
  - d) My plan acted as a kind of checklist because I wrote down important elements in it and I referred to them when writing my story. 5
  - e) Having made my plan I did not need anything else to help me write my story. 4
  - f)
  - g)
- 2) Please indicate whether/how much the following helped you write your story 'Trapped' by circling one of the choices:
- a) the lesson on the elements of a story  
no help 0    a little 1    some 6    a lot 4
  - b) the lesson on checklists  
no help 0    a little 8    some 2    a lot 1

Please try to give reasons for your choices:

- For a)
- It taught me about story elements* 4  
(One pupil referred to problem and resolution)
  - It helped remind me of story elements* 3  
(Two pupils referred to problem and resolution)
  - It helped me plan* 1
  - It helped me know more* 1
  - It helped me write a more interesting story* 1
  - I remembered the elements from writing stories before* 1
- For b)
- It helped me because I ticked a checklist in my head* 3
  - It reminded me of other ways to plan a story* 1
  - It reminded me of story elements* 1
  - It told me what to put in my story* 1
  - It helped me understand more* 1
  - I learned a different way of checking if my story is complete* 1
  - I preferred to read through instead of making a checklist* 1
  - When I write a story, I think of better things as I go along* 1

## Appendix 3.7

Answers are in *italics*. Sixteen pupils were interviewed.

### Interview Questions: Year 7

Compare your stories.

1. Did something different happen when you

(i) made your plan

*I had a checklist* 8

*I had a problem and resolution* 5

*I had a better plan* 4

*3 pupils attributed their better plans to making a checklist*

*1 pupil attributed better plan to knowing about story grammar*

(ii) wrote your stories?

*I used a checklist* 4

*I had a better plan* 3

*I kept more to my plan* 2

*My plan helped* 2

*6 pupils referred to differences in their stories (eg "The third one was more about a person", "I put loads of speech in the second one").*

2. Did you think about yourself or see yourself as a story writer when you wrote your first or later stories?

*No* 11                      *Yes* 2                      *Varies* 1

3. Did you think about the reader when you wrote your first or later stories?

*Yes* 11                      *No* 3                      *Sometimes* 1

*Some pupils answering 'Yes' distinguished between their stories:*

*Yes for 'Abandoned' but not for 'Lost'* 3

*Yes, more for second story* 3

*Yes, more for 'Trapped'* 2

4. When you wrote your stories, were you thinking more about the story as a "made thing" (something that you were creating that needed to have certain features) or were you putting your efforts almost entirely into getting your story down on paper and turning your plan into reality?

*Turning plan into reality* 9

*As a "made thing" with certain features* 6

5. When we write we try to do several things at once (such as get ideas down on paper, choose the best words, think about the audience, remember punctuation).

What different things did you try to do at the same time when you wrote

- (i) your first story
- (ii) your second story
- (iii) your third story (if you wrote one)?

*Pupils tended to name one thing that they were concentrating on in each story rather than refer to the different things that they were trying to do at the same time. Several pupils could not remember about their individual stories and answered generally. Some pupils could not remember well enough to make a general answer.*

(i) *Aspects thought about in first story*

<i>Punctuation</i>	2
<i>Vocabulary</i>	2
<i>Using plan</i>	1
<i>Fitting everything together</i>	1

(ii) *Aspects thought about in second story*

<i>Vocabulary</i> <i>(One of the pupils had named punctuation for first story; the other had said "I don't know much about how to do it")</i>	2
<i>Audience</i> <i>(Pupil had named punctuation for first story)</i>	1

*One pupil said, "I had a better picture in my head".*

(iii) *Aspects thought about in third story*

*No specific aspects were named. One pupil referred to using a "mental checklist". Another said, "I was getting into writing stories".*

6. How did you manage to keep an eye on these different things?

<i>I used checklist (including one who referred to a checklist in his head)</i>	9
<i>I had them in my plan</i>	2
<i>I thought about story grammar items</i>	1

7. If you had to choose to write a plan or not for a story, would you write one? Why?

Yes 14 No 1



8. When do you need to think most/the hardest about the task (of writing the story)

- when planning 7
- when writing the story 6
- when checking through/revising? 2

Why?

9. When you write a story, does the story create itself once you have an outline of the plot, setting and some characters *or* do you have to consciously think about what you know makes a good story and use that knowledge as you write?

*Story creates itself from outline of plot, setting and some characters*

8

*I have to consciously think about what makes a good story* 0

*Both (of above)* 3

10. What helped you to create your characters?

*Particular sources* 8

*(real people: 6; stories: 3; TV: 2)*

*Checklist* 3

*Plan* 2

11. Was it useful to see a story in terms of a problem and solution?

*Yes* 13

*No* 1

12. What one or two factors account for the improvement between one of your stories and another?

*Better plan* 5

*Lesson on checklists* 3

*Using checklist* 3

*Using problem and resolution* 2

*Lesson on story grammar* 1

*I thought more* 1

*I learned more* 1

*I spent too long on planning in my first story* 1

*Most pupils named one rather than two factors.*

### Appendix 3.8

#### Features of pupils' plans for 'Lost' and 'Abandoned' according to Year 7 class

##### (i) Features of pupils' plans for 'Lost'

<b>Features</b>	<b>Year 7 classes</b>		
	<b>7E</b>	<b>7S</b>	<b>7Y</b>
Outline of plot	8	11	9
List of characters	7	8	11
Description of characters	3	1	1
List of scenes	1	0	1
Setting	1	2	3
<b>Number of pupils</b>	<b>9</b>	<b>11</b>	<b>12</b>

##### (ii) Features of pupils' plans for 'Abandoned'

<b>Features</b>	<b>Year 7 classes</b>		
	<b>7E</b>	<b>7S</b>	<b>7Y</b>
Outline of plot	8	10	7
List of characters	9	7	10
Description of characters	4	2	2
List of scenes	0	0	0
Setting	2	2	5
<b>Number of pupils</b>	<b>9</b>	<b>11</b>	<b>12</b>

## Appendix 3.9

### Interview with pupil TY: 16.3.00

- BD Did something different happen when you made your plan?  
TY Yes. On the first story I made my plan in paragraphs [ie method he used in first story] which got a bit muddly because you can't always see it properly and you can't go through it, all of the things like characters, but on my second story I made a checklist, and then once I'd done everything I could go back and check that I'd done it properly, so that I knew that I'd done it.
- BD So did you fill the checklist in *after* you'd done your planning or *after* you'd written the story?  
TY I did it after I'd done the planning, so that I knew that I'd done it, so I didn't have to go back after the story.
- BD Did you find the checklist helpful?  
TY Yes. I found it helpful because you *can* forget on paragraphs what you're going to include, but with a checklist you can remember and just check it over to make sure that you have remembered what you're going to put in.
- BD Do you think that the difference in the plan accounted for 'Abandoned' being a better story or was it other reasons?  
TY On 'Abandoned' I made it more interesting. I gave it more description in it than 'Lost' and I didn't rush it and make a really long start and have a short ending, so that was good.
- BD In your checklist you've actually got description, haven't you, so do you think putting description in your checklist helped you to put more description in your story?  
TY Yes, 'cause I put a little bit of description in my plan, so that I knew what I was going to do and what I was going to say about the characters and the setting and the time and what happened.
- BD Did something different happen when you wrote your stories?  
TY Yes, on 'Lost' it started off quite good, but it ended because I'd run out of time... I took too long on the beginning, but on 'Abandoned' I didn't take so long on the start and didn't have to rush the ending, so that was good.
- BD Did you think about yourself or see yourself as a story writer when you wrote your first or later stories?  
TY No.
- BD Did you think about the reader when you wrote your first or later stories?  
TY Yes I did, but... on the first story it was just kind of myself because when you're writing a story it feels like you want to make a good impression of yourself and not make a good *impression to the reader, but on the second one I tried to make a better impression to give the reader so that they would read it and read on, so they would find it exciting or adventurous or something like that.*
- BD Why do you think you thought about the reader more as a different person for the second one?  
TY The first one when I'd read it through it didn't seem very good, and to me if I was a reader I wouldn't want to read on, so I thought I'd make the second one more readable and make it a lot better for the readers.
- BD When you say 'When you read it through' was that after you'd finished it or when I gave you some time to read it through at one stage?  
TY That was when you gave us some time to read it through.
- BD You had two lessons from me... one was on story grammar and one on checklists. Did anything in those lessons make it more likely to think about the reader?  
TY When we did the checklists, I thought more because you said about a problem and a resolution and including that.
- BD When you wrote your stories, were you thinking more about the story as a "made thing" (something that you were creating that needed to have certain features) or were you putting your efforts almost entirely into getting your story down on paper and turning your plan into reality?  
TY I wanted my story to be realistic but give that effect of fiction as well and exciting for readers.
- BD When we write we try to do several things at once (such as get ideas down on paper, choose the best words, *think about the audience, remember punctuation*). *What different things did you try to do at the same time when you wrote your first and second stories?*  
TY With my first story I thought about choosing punctuation. With my second one I thought about the audience and good vocabulary so it would be exciting and give good effect of reality.
- BD How did you manage to keep an eye on these different things?

- TY With my first story I kept looking back at my plan to see what I'd put down but that isn't so good, but a checklist is better because I could see when...if I go back that I'd checked it and then I could look up what I'd written.
- BD Do you think making a checklist makes you more conscious of what you're doing when you're writing a story?
- TY Yes, I think I does. It makes you realise what you're going to do and you really know it and you've got a good fix of it in your mind so that you don't lose track of what you've done or what you're going to do.
- BD If you had to choose to write a plan or not for a story, would you write one? Why?
- TY Yes, I would, because when you write a story down you have to think of the ideas in your mind and you take a couple of minutes to do that, but when we do write a plan it's better because we do get fifteen minutes so that we can think of what we're going to write and then think up a good story line.
- BD When do you need to think most/the hardest about the task (of writing the story). Is it when planning, when writing the story or when checking through and revising?
- TY When you're checking through, because you're looking to make sure that you haven't made any mistakes and you can go through about spellings and punctuation, so that you actually know that it's good and you as a writer can then actually look at it and know that you've done it right, and if you haven't you can put it right.
- BD When you write a story, does the story create itself once you have an outline of the plot, setting and some characters *or* do you have to consciously think about what you know makes a good story and use that knowledge as you write?
- TY I like the story to create itself. When I do write, I like to write it down and then read it...read what I've done...read like a sentence or paragraph, to see if it would be realistic and see if it does give that effect of reality and makes it good for the readers.
- BD What helped you to create your characters?
- TY I used the checklist because checklists are good to do that. I put "description of characters" in it so that I knew what I was going to do and then I write down the characters as well and then I give a description of what the characters would be like, so, when the reader reads the plan of what you've done, they get a first look at what the characters would be like and what they do in the story.
- BD Was it useful to see a story in terms of a problem and solution?
- TY Yes. If you don't have a problem or a resolution, you don't really get anywhere because in most stories there is a problem and a resolution, so it was useful...that would happen so it was good.
- BD What one or two factors account for the improvement between one of your stories and another?
- TY I thought that I could make my second story better because my planning wasn't too good and I rushed it a bit. I took too long on my planning, and then, when I got into the actual story, I thought that it wouldn't be proper. The plan was wrong so I had to go back and just do a little bit of re-planning to make it a little bit better for the reader.
- BD Do you think the lessons on story grammar and checklists were also part of the reasons your story was better?
- TY Yes, because when we did do the checklist and the grammar it showed you, like, how you could make your story better, and from my first story because it wasn't so good I could see what to do in my second story and how I could make it a lot better.
- BD Have you thought of using checklists for any other piece of writing?
- TY I have already used a checklist in...
- BD What? Since we did this work.
- TY Yes. I have used it in English when we were planning a story, and I have found it helpful again because it's good to make yourself realise what you've planned, so it's good.

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