THE ASSESSMENT OF EARLY LITERACY DEVELOPMENT

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Summary

The study concerns on the assessment of early literacy development of children aged three to five years.

A review of research into the assessment of early literacy, a consideration of purposes of literacy assessment and a survey of practice in schools revealed the need for new measures of literacy development that are in step with current research into literacy development in the preschool years.

The study addressed six questions:

1. How is early literacy development currently assessed by teachers?
2. What is the focus of teachers' early literacy assessment?
3. What are teachers' purposes for assessing early literacy development?
4. What are teachers' needs in terms of assessment of early literacy development?
5. How can researchers better assess early literacy development?
6. Can early literacy development assessment instruments developed for researchers also be useful to teachers?

Questions 1-4 were investigated through an interview survey of 30 schools. Question 5, the major research question of the thesis, was researched through the development and trialling of a new measure, the Early Literacy Development Profile. Teachers' views gathered during the trial were used to answer question 6.

The major outcome of the study is a new measure, the Early Literacy Development Profile. This is intended for those research studies which require a measure which results in a statistical outcome (specifically, experimental studies involving comparison of groups of children, comparison of methods and comparison between age spans). Other outcomes include: a basis for the development of a new measure; a review of the literature on early literacy assessment and a delineation of the purposes of assessment in this area.

Three lines of future research emerge: further development and evaluation of the Profile; comparisons with other measures; use of the Profile in studies involving comparisons between groups, methods and age spans.
Introduction

This study considers the assessment of early literacy development, focusing particularly on children aged three to five years. This age range has been selected because, as chapter 1 will demonstrate the early years period is where there is significant, recent research in early literacy development with major implications for assessment.

Research into the early literacy development of young children has taught us much about how they learn to be literate, and the stages of progression from early discoveries to later capabilities and understanding about words, print, books and other elements of literacy, (Ferrero and Teberosky 1982, Sulzby 1985a, Goodman 1980). Other researchers (Durkin 1966, Payton 1984, Bissex 1980) have observed children, considered their early writing and made judgements about their ability and their skills in literacy. Observation and inference seem to be the main methods of describing early literacy development and there are some well documented accounts of children taking their early steps along the literacy road, (Butler 1979, Payton 1984, Bissex 1980, Schickedanz 1990).

Observation and description are important for teachers who work with children over a sustained period of time, but are not always feasible for those research purposes which require measurement of early literacy development to be carried out in a short period of time. Descriptions depend on the observational skills of observers, their knowledge of the content of observation, and the criteria they apply. There are times when a different assessment of early literacy development would be useful, for example: to demonstrate the effectiveness of a particular teaching strategy; to challenge unfounded claims about standards; or to ascertain the efficacy of a research intervention study. It is difficult, however, to assess accurately, the emerging concepts and understanding of children's early literacy development. The literature review in chapter 2 makes it clear
that this difficulty exists. It shows an apparent lack of published measurement tools for early literacy development compared to measures of older children's development.

After a discussion of a basis for the development of a new measure, a review of the literature, a consideration of the purposes of literacy assessment and a survey of current literacy assessment practice, the thesis argues that the problem lies with researchers. It appears that research studies have successfully developed and promoted new views of early literacy development which teachers have found attractive. The survey suggests that many teachers have adopted new teaching methods and styles, inspired by research, and have gone on to devise ways of assessing children's early literacy development which match these changes. Research involving the assessment of children does not appear to have kept pace with this change. Instead, old tests are relied upon or researchers develop ad hoc and idiosyncratic tests, (of course, some researchers choose to carry out descriptive and purely qualitative studies in which case briefly-taken measures with numerical outcomes may not be relevant).

The thesis will argue that there is a gap between research in early literacy development and its measurement, and that researchers should attempt to fill this gap. It will attempt to contribute to a possible solution of the problem with the development of a new measure, the Early Literacy Development Profile. This is intended for specific research purposes (such as comparison of groups, of children, comparison of methods, and comparison between age bands). Details of the problem, the development of the assessment tool, trials and refinements are reported. The thesis will conclude with an appraisal of successful features of the Profile, and opportunities for further research.
Chapter 1

New views of early literacy development and the need for measurement

Until the 1970's children's early literacy development had been generally overlooked. Nursery education in the UK had on the whole, denied the existence of literacy abilities in children under five years old and concentrated instead on social and emotional development and promoting spoken language (Tough, 1976; Taylor et al., 1972; Hannon and James, 1990). This chapter will explore the nature of literacy, provide a view of early literacy, and look at the recent history of research and practice in early literacy development. Through this exploration, the need for research into the measurement of early literacy will be identified.

The nature of literacy

All sorts of people talk about literacy and make assumptions about it, both within education and beyond it. The business manager bemoans the lack of literacy skills in the work force. The politician wants to eradicate the scourge of illiteracy. The radical educator attempts to empower and liberate people. The literacy critic sorts the good writers from the bad writers. The teacher diagnoses reading difficulties and prescribes a programme to solve them. The preschool teacher watches literacy emerge. These people all have powerful definitions of what literacy is. They have different ideas of 'the problem', and what should be done about it.

(Barton 1994 p. 2)

One could define literacy as the ability to engage with written language. But short definitions of literacy are misleading because they gloss over its complexities and, as David Barton illustrates above, literacy processes and outcomes cannot be divorced from the social contexts in which they occur.

As Hall (1987) observed, literacy is for many an essential element of everyday life:
Literacy in the Western world is a fact of everyday existence. To awake and find all print removed from the environment would be an unnerving experience. Literacy appears for many to be addictive. People take print everywhere. We take books on holidays to distant places and may even, like Somerset Maugham, carry a bag of books with us. On holiday we feel deprived if we cannot get our daily newspaper, and many people cannot sit in a room without their eyes gravitating towards print in any form. Most of us even carry around significant amounts of print in our pockets and on our clothes.

(Hall 1987, p.16)

Literacy is a social construct which enables human beings to communicate. There are certain skills which accomplished users of literacy have and which new users of literacy develop in the process of literacy engagement. Formal learning settings can help people to acquire and refine such skills, as can the learning which takes place in home and community settings. Literacy as a curriculum area - like other curriculum areas - exists because literacy exists in society. The school curriculum can help children further to develop their literacy or can create blocks in children's literacy learning, disempowering children who find that their home and school literacies are different.

Millard (1997), for example, highlights issues of gender in literacy practices and illustrates that literacy (specifically reading) is constructed within home and school settings as an interest more appropriate for adolescent girls than it is for boys. She argues that curriculum should take account of this but that more information is needed about literacy in everyday life before curriculum change can confidently be made:

Until we have acquired more detailed evidence of how differential access by class and race, as well as gender, to both old and new forms of literacy, continues to shape attitudes and relationships to reading and writing in school, it is difficult to set priorities for the encouragement of good classroom practice...more careful analysis of greater understanding of contemporary literacy practices might encourage teachers to be more critical of school's dependence on book-based learning in general, and fiction in particular, and make a greater variety of literate practices available to all pupils.

(Millard 1997a p. 46)

As Millard's work illustrates, literacy is more than reading or writing, it is embedded in the contexts in which it occurs and the meanings that they hold for individuals.
Chapter 1  New views of early literacy development and the need for measurement

Meaning connects literacy with life, and in life what literacy *accomplishes* can be more important than correct observance of its conventions.

When people read and write they do so for different reasons, their literacy is always functional - it takes place for a reason, it fulfils a need. It is difficult, perhaps impossible, to find examples of literacy in everyday life which are devoid of meaning. People write to convey a message, be it to themselves (such as a shopping list or diary entry) or to others (such as a letter or formal contract). Depending on the context the same words can mean different things 'Do not open' on a brightly wrapped parcel can convey the meaning of a surprise which must be received at a given time. The same message on a laboratory door can convey danger or an unwelcoming reception inside. The changing of meanings according to context is an issue for reading as well as for writing.

Different texts are read in different ways. The same text, such as a verse from a religious text, can also be read in very different ways. It can be taken factually, as an instruction, as something to provoke meditation and thought. Often texts are reread to take further meanings. There is the possibility of oppositional readings.

(Barton 1994 p.65)

Though discussion here focuses on literacy, the implicit connection of literacy and oracy needs to be acknowledged. Reading and writing, speaking and listening are functions of language - the elements of literacy being linked to those that comprise oracy. The important feature of language - written and spoken - is that it fulfils the need human beings have to communicate. Literacy and oracy are interlinked. People make choices in their daily interactions with others about which functions of language they will use. Such choices can depend upon the purpose of the interaction and factors of meaning and function can influence decisions about whether to speak or whether to write (or whether to do both). Hall's view of the inter relationship between literacy and oracy emphasised meaning and function:
Chapter 1  
New views of early literacy development and the need for measurement

Literacy, like oral language, exists so that meanings can be created and so that communication can take place between human beings. Literacy events are, like oral language events, experienced as meaningful and are usually experienced as means to various ends. Most importantly, literacy, like oral language, is experienced as having many uses and functions because it enables the achievement of that variety of ends.

(Hall, 1987, p16)

A holistic overview of teaching literacy and to research in literacy is useful, but this is not to say that there cannot be times when particular parts of the whole come more sharply into view. This thesis focuses specifically on literacy, and on the literacy of children before the age of five.

The nature of early literacy

Over the past two decades, there has been a change in the way that early literacy development has been seen. It is now widely recognised that literacy begins and can be promoted in the preschool years (in the UK that is between 0 and 5). Children born into a world full of print try to make sense of it while they are very young, in the context of their day-to-day lives at home and in the community.

The teaching of literacy was once widely assumed to be the domain of the school, with the dominant idea that children had to be taught specifically defined 'pre-reading skills' in a distinct manner. Walker (1975) for example, argued that:

> success in the skills of reading depends on successful acquisition of the related subskills of pre-reading

(Walker 1975 p.7)

He continued his argument by emphasising the importance of first developing mainly perceptual skills such as: shape and letter discrimination, hand-eye co-ordination, left-right eye movements, visual memory, listening and auditory skills, phonemic discrimination, auditory memory, letter recognition and knowledge of letter names and sounds. Referring to this list of skills he wrote:
in order to overcome the unique difficulties inherent in beginning reading it is necessary for the child to have first developed a minimum set of skills and capacities.

(Walker 1975 p.7)

The perspective of literacy which some have termed *emergent literacy* (Teale and Sulzby 1986, Hall 1987) has helped us to a different view early literacy development.

Yetta Goodman (1980) wrote about the *roots* of literacy developing in the pre-school period as including:

- print awareness in situational contexts
- awareness of connected discourse in written language
- meta cognitive and meta linguistic awareness about written language
- using oral language about written language
- functions and forms of writing

For healthy growth she suggests these *roots* need the fertile soil of a literate environment:

- symbol systems - as in art, music and dance
- variety of functions of written language
- adult language about written language
- oral language development
- background - something upon which to build
- experience which aids development

The *emergent literacy* perspective on early literacy shows how much very young children know about reading and writing. For example:

- recognising, making sense of and using their knowledge and understanding of print in the environment
- sharing books with adults
- being *apprentices* to adult literacy experiences in the home
  - sitting on a parent's knee as he or she reads the paper
  - writing shopping lists
  - sending and receiving cards and letters
- early scribble and drawing, and early attempts at writing, gradually developing into conventional writing
- using knowledge about literacy in socio-dramatic play

Literacy skills such as book handling, writing conventions, and letter knowledge can be taught and reinforced as part of meaningful literacy experiences.
Kenneth Goodman (1986) has argued that *function* matters more than *form*. That is to say - it is important first for children to be able to make their literacy do what they want it to do. Through engagement with the *functions* of literacy Goodman argues that children are motivated to get control of the *form* of language, how it works, its constituent parts and rules.

...language is easy to learn if it meets a functional need the child feels.

Goodman 1986, p.18

As well as function before form, the idea of literacy learning as *whole to part* is also important from the emergent literacy perspective. Goodman argues that language is learned *as a whole* and it is only later that we see and develop and understand the parts. He wrote:

The whole is always more than the sum of the parts and the value of any part can only be learned within the whole utterance in a real speech event.

(Goodman 1986 p19)

This perspective on early literacy development places meaning and function before accuracy and convention, and from this theoretical position it could be argued that when children have a sense of meanings and functions in literacy they are spurred on to tackle some parts of the conventions of literacy.

Emergent literacy gives a clear view of several things:
- links between reading and writing
- the importance of the home and parents in early literacy development
- the importance of play
- the importance of context and meaning
- effective ways of teaching specific literacy skills

Emergent or developmental literacy supposes that children, before they go to school, are active in their pursuit of literacy skills, knowledge and understanding, and that, in
so doing, they have generated a positive view of literacy. They often see literacy as exciting, interesting, a 'good thing' to get involved in.

This particular perspective on early literacy development is still evolving and, as with any theoretical position, there is an inevitably provisional nature to it. New perspectives evolve which lead to the reappraisal of existing research and which inform the development of future research. One example of this was the work of Ferrerio and Teberosky (1982) whose research focused on children's writing. This research shed new light on the children's construction of personal spelling rules and in so doing contributed to the development of a theoretical view of children as competent learners of writing systems and to an approach to researching the development of writing that might be adopted in the future. Ferrerio and Teberosky proposed a view of the 'evolution of writing' and of children posing their own literacy problems which they are motivated to solve. In terms of reading, Ferrerio and Teberosky concluded that reading is not deciphering and challenged skills based approaches to teaching reading. They argued that children who only learned to decipher print had a limited view of reading and a limited reading ability. Children who, according to Ferrerio and Teberosky "have organised their own learning" are readers in the fullest sense of the term, having mastery of processes and skills of reading as well as a sense of its purposes and pleasures. Such a stance on early literacy learning requires reconsideration of previous studies and the of the way early literacy, is viewed.

Examples of the importance of meaning, of home literacy, of play, and of context can be found in children's play which involves literacy. Nigel Hall (1991), suggested that:

Play offers an opportunity to help children preserve the wider understanding of literacy by allowing them the chance to explore literacy in contextualised situations.

(Hall, 1991, p.11)
Simply giving children literacy related materials and the opportunity to play is of limited use unless they also have some sense of how to use them, derived from experiences of the reality of literacy in different situations. Wray, et al (1989) suggest children need to see literacy happening.

A literate environment is a fairly meaningless concept without people who are using that environment, people who, through a variety of ways in which they use print, demonstrate when it is used, how it is used, where it is used and what it is.

(Wray et al 1989 p 66)

For preschool children, written language can be a significant part of their worlds and some will notice that it is a significant part of the world of their parents or other family members. It is as natural for them to be curious about it, to ask questions, and to want to talk about it from time to time, as other matters that interest and confront them. Children's vocabularies grow rapidly in the preschool years, it follows that, during the processes of playing with and talking about literacy with peers and with adults, children will acquire new words about written language. This kind of literacy vocabulary can be used to discuss their literacy, the content of stories and the attributes of authors and illustrators, (Nutbrown, Hannon and Collier, 1996).

Strands of research in early literacy

Hannon (1995) has suggested that early literacy development can be thought of as having three main strands: reading, writing, and oral language. Hannon devotes little discussion to the emergence of these strands, seeing them largely as a matter of convenience. He writes:

It is....helpful, for practical reasons, to distinguish the three strands of literacy development.....: children's experiences of reading (environmental print as well as books and other texts), or writing, and or oral language (to include storytelling, phonological awareness and decontextualised talk).

(Hannon 1995 p.52)
What Hannon identified as strands of early literacy development can perhaps be seen more usefully as strands of early literacy research. It is worth reflecting on how strands of early literacy research have developed, and how understanding of early literacy development has changed as a result of such research.

Research into early literacy development seems to have developed rather unevenly. Use of *books* was an early focus, then followed interest in the development of *writing*. Later research focused on children's perceptions and abilities to recognise and learn to read some *environmental print*. *Oral language* has been a continuing focus of interest but at different times the emphasis has been on different aspects (such as talk, storytelling, or phonological awareness).

Briefly, the historical origins of the three more specifically literacy strands of research (into book reading, writing and environmental print) can be attributed to three researchers. The work of Durkin (1966) in the USA began discussion on young children's ability to read books and later Clay (1975) in New Zealand stimulated two decades of research which shed new light on the early reading and writing capabilities of young children. It was Goodman (1980) who added the third strand of literacy research with her work on children's recognition and understanding of print found in the context of their environment. So far as research into elements of oral language that contribute to literacy development, the work of Bradley and Bryant (1983, 1985) and of Goswami and Bryant (1990) shed light on children's phonological awareness and Wells (1987) illuminated interest in children's storytelling and the importance of listening to stories as well as having stories read.

At the start of the 1970's new perspectives on early literacy development emerged. These were important firstly because they acknowledged the view that young children
were literate and had literacy capabilities, and secondly because they influenced the work of preschool teachers.

Changes in the teaching of early literacy
To understand fully the impact of research in early literacy development (and key aspects of oral language) it is important to take an historical perspective. This highlights the changes that have taken place in the teaching of literacy (sharing and reading books, early writing and environmental print) and enables the identification of the role of research in those changes.

Sharing and reading books
Reading was the first strand of literacy to have a place in children's formal learning. Environmental print was very limited and reading was often confined to religious learning. In 1805 Andrew Bell who became the superintendent of the 'National Society' which promoted church schools for the poor, argued that children should be taught to read the Bible, (Simon 1960). The literary tradition of the nineteenth century suggests that reading, for those who had the opportunity to learn, was often a traumatic and laborious process:

"...I struggled through the alphabet as if it had been a bramble-bush; getting considerably worried and scratched by every letter. After that I fell among those thieves, the nine figures, who seemed every evening to disguise themselves and baffle recognition. But, at last I began, in a purblind groping way, to read, write and cipher, on the very smallest scale.

(Pip in Great Expectations, Chapter 7, Dickens 1860)"

The means by which pupils in the nineteenth century were taught to read seems to have left a legacy for teachers and children in the present day which led Waterland to consider the introduction of the reading scheme:

"The idea that some special sort of book was necessary really began with the introduction of elementary schooling for all in the late 1800s..."
schemes were brought in to enable the untrained monitor to teach reading. These youngsters, themselves often only a very little older and wiser than those they taught, needed something which would deskill the reading process and break it down into easily passed chunks.

(Waterland 1992 p. 162)

The research of the late sixties and early seventies inevitably seemed to have an effect on the teaching of reading at about that time. In the UK, the 1970's saw a development in the teaching of reading when children were gradually offered more interesting reading materials as publishers of reading schemes began to update their material (Root, 1986). There was still, however, a divide between books for learning to read 'reading scheme books' and other children's books. Similarly, in the USA, there was a clear division between 'trade books' and the 'basal readers' used in school.

Though there were many reading tests in use during the 1970s and 1980s, assessment of reading for the purposes of teaching and learning in the early years of school, was apparently under developed. Assessment was largely based on the stages children reached on the reading scheme, their reading ability being classified according to the number of the book they were reading. This was not dissimilar to the practice established some 100 years earlier, by the introduction of the Revised Code of 1862 which set out 'standards' based on the reading of 'reading-books used in the school', (Birchenough 1914).

The 1980's saw a further development in the teaching of reading with the use of 'real books' rather than those produced for reading schemes (Waterland, 1985). Using children's literature, rather than a structured reading scheme to teach reading, demanded more of the teacher. It required teachers to know more about how young children learn to read; which books best supported children's learning; what strategies were effective, and it also necessitated a different way of identifying and recording reading achievement.
Waterland (1985) advocated an 'apprenticeship' approach to reading in which children learned to read by sharing books with an adult who demonstrated his or her own love of reading, and ways of using books. Teachers shared stories with children on an individual and group basis and extended children's interest by talking about the books they read together. This approach to learning to read was a concept borrowed from the model of apprenticeship in industry where a young person would learn to be a carpenter (or some other trade) by becoming an apprentice to and working alongside a skilled craftsman in the workshop.

Writing

Writing was not part of the curriculum for the poor in the early Sunday Schools of the 1800s. In 1805 Andrew Bell made his position on the role of church schools in relation to literacy clear when he wrote:

It is not proposed that the children of the poor be educated in an expensive manner, or even taught to write and cypher.  

(Simon 1960 p.133)

The place of writing in the 'Revised Code' of 1862 was limited to copying and dictation, but not creating written text, (Birchenough 1914).

The National Primary Survey (DES 1978) showed that the teaching of writing in the 1970s tended to be 'skills based' and that writing was frequently taught in the absence of context and purpose. Much of the writing children did was set by teachers. This seemed to change rapidly in the next decade and HMI (DES 1990), reflecting on the teaching of literacy in the 1980s, considered it good practice to encourage children aged three and four years old to engage in play situations where they wrote letters and addressed envelopes, for example, as part of play in the classroom post office.

During the seventies and eighties researchers in the UK and USA, working independently, reported studies of their own children, with detailed accounts in which children in the preschool period and beyond demonstrated their developing literacy
skills, knowledge and understanding, and a positive attitude to literacy related activities (Payton, 1984; Baghban, 1984; Bissex, 1980; Butler, 1979). Research and Government reports seemed in agreement at this time. In the UK, HMI, referring to the practice of teachers which they had observed, commented on both form and function of early writing when they reported that:

They (the children) were able to put into practice what they had noticed about letter formation, how English writing moves from left to right, and the structures and shapes of writing. They were able to experience the satisfaction of using writing to draw a response from others.  

(DES 1990 para 29)

This apparent shift in philosophy was also reflected in the work of teachers through the development of the National Writing Project (1985 - 1989), which was originally intended to focus on writing in the statutory years of schooling (5-16 years), but rapidly moved to include writing in the preschool period. One nursery teacher wrote:

Writing in the nursery? My first reaction was, 'Oh no!' I felt that pressures came to the children soon enough in school and should not be introduced into the nursery. Now I have discovered that play activities can be broadened and extended by providing the opportunity for some form of writing.  

(Hodgson 1987 p 11)

In 1988 the DES further recognised that young children were capable of early writing and that this began before some children attended school:

Just as many young children come to school believing that they can read, so they will come willingly to try to write. The very youngest children, given the opportunity to use what they know, are able to demonstrate considerable knowledge of the forms and purposes of writing. This may at first be simple 'draw writing' but as they develop and learn more about how written language works, their writing comes increasingly close to standard adult systems.  

(DES 1988 para 10.12)

At the start of the nineties, current research, government policy and practice in schools seemed in some agreement. There was evidence in policy documents of recognition of strands of early literacy research which were exemplified by observations of classroom practice. We now need to look at developments with regard to the third strand of early literacy development, that is children's awareness and developing knowledge of literacy
through interacting with print in the environment, such as advertisements, signs and notices.

**Environmental print**

Relatively unheard of until Goodman's work (1980), and made popular with teachers through the work of the National Writing Project (1989), was the realisation that children learned something about print by living in a literate and print rich environment. There are several accounts of teachers using logos and familiar words from the environment to help children to learn more about literacy (Hall, 1989; Hall and Abbott, 1991).

In a study of children's ability to read ten items of functional environmental print McGee, Lomax and Head (1984) found that:

> Children attend to all sorts of print that surrounds them in a highly meaningful way. Not only do they know the type of print-conveyed meaning associated with different print items performing different literacy functions, but they also are sensitive to the language cues, including graphic detail, in written language.

(McGee, Lomax and Head 1984 p.15)

HMI (DES 1989) acknowledged the importance of environmental print in the development of young children's literacy:

> Children are well used to seeing print in the home, in the streets, in the supermarket and in a variety of other places they visit with their parents. Many of them already have an interest in reading, some are readers already, and teachers of young children seek to sustain and develop this skill at a pace appropriate to each child.

(DES 1989 para 32)

This is an approach to teaching literacy far removed from the education of Dickens' day and the Revised Code of 1862 and one which current research has both prompted and supported.
Key aspects of oral language

There has always been an emphasis on the development of oral language in early childhood education, but perhaps it has not always been clear which aspects of oral language contribute to literacy development. Written language is a way of representing the sounds of the words used in speech. Using written language presupposes some knowledge of the sound structure of oral language. The specific focus of knowledge of oral language is crucial, as sub skills, such as knowing the sounds that the 26 letters of the English alphabet supposedly 'make', are of minimal use here. Neither does it help children to read to know that letter 'N' can represent 'nuh' if that sound cannot be 'heard' in a word such as 'string'. Another approach is to consider 'sound awareness' as a factor that could help literacy development. Linguists break oral language down into units called 'phonemes' (there are supposedly 44 in the English language) and phonemic awareness is considered helpful in reading and spelling. However, phonemes are often difficult to spot, and phonemic awareness may be acquired as a result of becoming literate, rather than something which helps children to become literate.

Research suggests that key aspects of oral language have an impact on children's literacy learning and development, particularly phonological awareness and storytelling. These can be considered strong elements of the oral language strand of literacy development.

Phonological Awareness

In the 1980s the work of Peter Bryant, Lynette Bradley and Usha Goswami, helped to pinpoint the importance of phonological awareness in children's literacy development. Goswami and Bryant (1990) stressed the importance of children's
awareness of beginning and end sounds - *onset* and *rime* - in spoken words. They argued that preschool children who are aware of onset and rime find learning to read easier, their literacy being enhanced if children can identify, for example, similar *onsets* such as in: 'strong', 'stretch', and 'stripe' and similar *rimes* as in: 'wing', 'thing', 'ring', and beginning'. Goswami and Bryant (1990) demonstrate that preschool tests of this kind of phonological awareness could be used to predict reading attainment later and showed that preschool 'training' to help children identify onset and rime could enhance later reading attainment. Maclean, Bryant and Bradley (1987) found that the number of *nursery rhymes* known by preschool children predicted later reading success in school. Children could become aware that words have different parts through singing and saying rhymes which repeat words with the same onsets or rimes.

**Storytelling**

Gordon Well's longitudinal study (Wells, 1987) revealed four experiences of language in the home which he considered might be important to children's later reading achievement. These were: *listening* to a story; other sharing of picture books; drawing and colouring, and early writing. Of these four, *listening to stories read aloud* stood out above the others as being related to later achievement in school. Wells suggested the reasons for this centred around the various benefits children gain from *listening* to stories:

- experience of a genre later encountered in written form
- extension of experience and vocabulary
- increased conversation with adult
- child's own 'inner storying' validated
- experience of language use to *create worlds*
- insight into *storying* as means of understanding

Others, such as Margaret Meek (1988, 1991) and Jerome Bruner (1990) have emphasised the importance of story in the development of literacy and in thinking.
Chapter 1

New views of early literacy development and the need for measurement

The need for measurement

With new views of early literacy development developing from an increasing body of research in the field (Holdaway 1979, Temple et al. 1982, Ferrerio and Teberosky 1982, Harste et al. 1984) teachers were able to support and extend children's literacy development from a young age (e.g. Manchester Literacy Project 1988, National Writing Project 1989, Sheffield Early Years Literacy Association 1991).

Once such an approach to literacy development was admitted, it gained popularity during the 70's and 80's, and prompted questions of how best to measure this newly acknowledged behaviour. Formats and processes for teacher assessments were developed (e.g. Manchester 1988, Barrs et al. 1989, Waterland 1989, Chittenden and Courtney 1989). Despite a growth of interest in literacy in the UK and innovative international research into reading and writing during the same period (Clay 1975, Goodman 1980, Ferrerio and Teberosky 1982) measures of literacy which reflect these research interests and which could be used for research involving comparisons are still in short supply.

Whilst research focused increasingly on 'emergent literacy' and children's developing knowledge and understanding of environmental print, books and stories, and early writing behaviours, measurement of children's behaviour has been restricted to tests of vocabulary, visual discrimination, and other related but isolated skills. Tests have focused on 'prerequisites' for literacy: capabilities in visual discrimination, one to one correspondence, matching colours, shapes and pictures. Such skills were all considered predictors of later literacy ability, and the teaching of 'prereading' skills was once seen as an essential role of teachers in nursery and early infant classes:

Prereading comprises all the many activities and skills that the child will need before the reading process can begin.

(Walker 1975 p 5)
Walker advocated as essential the need to begin the teaching of reading with isolated skills, for example:

I am convinced that letters need to be taught very thoroughly before children meet them in words, i.e. before they read.

(Walker 1975 p.88)

Tests of 'prereading' ability attempted to isolate skills which in some way related to literacy, but which in themselves were not literacy, but teachers did not test or measure early literacy: they observed, described and recorded. Waterland's apprenticeship approach suggested new ways of observing and recording children's progress in reading, (Waterland 1985). As more schools developed their teaching of reading, often incorporating children's literature into a mixture of reading scheme books, more examples of assessment procedures emerged (Waterland 1989). In the early 1990s these focused on recording rather than assessing or measuring elements of children's reading. Measures for assessing literacy will be discussed more fully in Chapter 2.

Some adequate measures of aspects of oral language exist (Goswami and Bryant 1990; Frederickson, Frith and Reason, 1996), therefore this study focuses on the need for measurement to support strands of early literacy research rather than research into aspects of oral language support literacy development. There are few, if any, adequate measures of early literacy available. Assessment and measurement should attempt to embrace the complexities of early literacy, therefore the focus on specific strands of early literacy research: environmental print, books and early writing, offers a strong underpinning to assessment of literacy learning in the years when learning is fluid.

It seems that measurement of early literacy development has not kept pace with teaching, learning, research or government policy. Because children were not considered to have any literacy ability and because its existence was unacknowledged there were no ways of measuring children's abilities in this sphere. This problem needs to be addressed for the following theoretical, political and educational reasons.
New measures are needed for theoretical reasons

Theoretical positions outlined earlier emphasise a shift in perspective from getting children ready to develop literacy skills to getting them to develop their literacy from the beginning.

There have been attempts to develop measures of literacy, both for use by researchers, and by teachers in schools. Sylva and Hurry (1995) stated that

Measuring reading ability in the lower achievers in this young age group (6;0-6;6) is quite difficult.

(Sylva and Hurry 1995 p.12)

Their assertion points yet again to the need for new and better measures of literacy.

In the case of researchers, work has tended to concentrate on the development of instruments as an end in themselves or as a method of researching isolated literacy behaviours. For example, Jones and Hendrickson (1970) developed an instrument to measure children's ability to recognise products and book covers, and Goodall (1984) developed a measure of four year olds ability to read environmental print.

Studies of children's awareness of print (Jones and Hendrickson 1970) or their knowledge and understanding of print (Goodman and Altwerger 1981) meant that researchers had to develop instruments with which to measure children's literacy behaviours as part of their research projects. This trend has resulted in a 'bank' of ad hoc measures which are idiosyncratic and not easily transferable to other studies and as such of limited use to other researchers.

Most attempts at such measurement have focused on reading, some test children's recognition of environmental print and there are no apparent published measures of
early writing. An instrument which reflects strands of research in early literacy development is needed to measure preschool literacy development.

**New measures are needed for political reasons**

Despite the apparent agreement between policy, practice and research, methods and purposes of teaching and assessing literacy at the start of the 1990s became subjects of controversy and confusion in the UK. Literacy in 1992 was a political issue with claims that reading standards of seven year olds were falling (Cato and Whetton 1991) and concerns about literacy teaching and achievement have continued throughout the decade (Brooks, Foxman and Gorman 1995). Such claims were linked in some cases to criticism of 'progressive' teaching methods such as the use of 'real books' instead of graded reading schemes and the lack of teaching children 'phonics' (Turner 1991). Others suggested that the apparent fall in reading standards reflected other factors in children's lives, including poverty and a lack of parental involvement (Gorman and Fernandes 1992). There is a pressing need to develop ways of measuring children's literacy before the age of compulsory schooling, which might be used accurately to inform the ongoing debate about literacy achievement.

**New measures are needed for educational reasons**

The debate about standards of reading of seven year old children seems partly due to the lack of appropriate measures which researchers, and perhaps teachers, could use to assess trends in literacy development. Chittenden and Courtney (1989), in the USA, argued that increased pressures of accountability on teachers of young children made the need for appropriate assessment programmes more acute. They wrote:

> While teachers of young children are expected to view learning to read within the broader context of children's language and development, the standardised tests adopted by many school systems are incompatible with these expectations.
Most of what was available to teachers in Britain in the 1990s relied heavily on individual teacher's judgements as they observed and recorded aspects of literacy. Such records had a valuable place as a basis for teaching and learning, but they did not offer a reliable way of **measuring** children's **achievements**. In the UK, the National Curriculum and its assessment requirements laid down national criteria for the assessment of seven year olds. The setting of National Attainment Targets (and later revision of these to Level Descriptors) and the continued attempts to established criteria for interpretation and assessment of children's work, could not offer standardisation in the administration of related tests to young children at seven years. Standardised conditions did not exist and were not achievable in a system where the organisation of each classroom was decided by the teacher. Every classroom was different, every teacher was different and the National Assessments were open to teachers' judgements based on their own observations.

**Developments in Nursery Education with implications for early literacy assessment**

The need for measurement was further highlighted in January 1996 with the publication of the document outlining 'Desirable Outcomes' of nursery education (DFEE/SCAA 1996a). The document emphasised early literacy, numeracy and the development of personal and social skills and included a statement of what children should be able to achieve at the end of a period of pre-compulsory education and on entry to compulsory schooling beginning the term after the child's fifth birthday. The statement about language and literacy is clear about specific achievements of individuals. It is worth quoting in full:

> In small and large groups, children listen attentively and talk about their experiences. They use a growing vocabulary with increasing fluency to express thoughts and convey meaning to the listener. They listen and respond to
stories, songs, nursery rhymes and poems. They make up their own stories and take part in role play with confidence.

Children enjoy books and handle them carefully, understanding how they are organised. They know that words and pictures carry meaning and that, in English, print is read from left to right and from top to bottom. They begin to associate sounds with patterns in rhymes, with syllables, and with words and letters. They recognise their own names and some familiar words. They recognise letters of the alphabet by shape and sound. In their writing they use pictures, symbols, familiar words and letters, to communicate meaning, showing awareness of some of the different purposes of writing. They write their names with appropriate use of upper and lower case letters.

(DFEE/SCAA 1996a p.3)

Though individual achievement is detailed above, plans for assessment were confusing. The document stated that judgement would be made:

...through inspection, about the extent to which the quality of provision is appropriate to the desirable outcomes in each area of learning, rather than on the achievement of the outcomes themselves by individual children.

(DFEE/SCAA 1996a p.1)

It seemed that, given the above requirements that were intended to apply to the whole range of pre-compulsory provision receiving funding through the Governments' Voucher scheme (DFEE 1996b) these objectives would be widely addressed. It followed therefore that some means of individual assessment would be needed eventually even if plans in early 1996 excluded this possibility. This position provided further endorsement that further measures of literacy development were needed.

The need for individual assessment was officially acknowledged in September 1996 when the UK Government began official consultation on the Baseline Assessment of children at 5, on entry to compulsory schooling. Literacy, along with mathematics formed the core of proposals for a National Framework for the assessment of five year olds (SCAA 1996). The draft proposals for Baseline Assessment issued in September 1996 included performance criteria based upon the earlier document which described what children should be able to do as a result of some form of nursery education (DFEE/SCAA 1996a) and set out sample checklists for observations which focused on
skills in reading and writing. The document stated as a key principal that a National Framework for Baseline Assessment should:

focus as a minimum on early literacy and numeracy

(SCAA 1996 p. 12)

The decision to make Baseline Assessment a matter of National consultation illustrated political interest in early achievement in general and, more specifically, in the nature of early literacy and outcomes of its assessment.

The multiplicity of purposes in literacy assessment and measurement

There are obviously many different purposes of early literacy assessment. These include: teaching; screening; 'at-risk' identification; value-added and school effectiveness measures; research involving comparisons of groups (children, methods, ages); case studies and longitudinal studies. Equally, there are many different points in childhood and adulthood that assessments can be carried out. Figure 1.1 offers a way of identifying the purposes and timing of assessments. This grid can be used to identify the age range and purpose or purposes of a particular instrument. The dark shaded area represents the area of concern in this thesis, that is the measurement of children's literacy between the ages of three and five years, for purposes of comparison between children, methods and age bands. Other measures could be represented on the grid. For example the light shading in figure 1.1 shows the cells which might relate to the Primary Language Record (Barrs et al. 1989).

The question of purposes of literacy assessment will be considered more fully in chapter 3.
There are some blank rows in figure 1.1 because it does not purport to provide a comprehensive or definitive list of purposes. Purposes change, new purposes for assessment arise and others diminish in importance. What figure 1.1 is intended to show is how the focus of this study relates to the wider picture of literacy assessment from birth to adulthood. Further reference will be made to the contents of figure 1.1 and issues of purpose later in the thesis.
Chapter I

New views of early literacy development and the need for measurement

Basis for the development of a new measure of early literacy

This chapter has recognised the broad nature of literacy and highlighted new views of early literacy, leading to a consideration of strands of early literacy research which link with the teaching of early literacy; environmental print, book knowledge and early writing. This exploration has led to the view that for theoretical, political and educational reasons, there is a need for new measures of early literacy development. Given the multiplicity of purposes for measurement, the need for clarity of purpose in developing or selecting and instrument is important.

Later in the thesis a new measure will be developed and the processes of development fully described. This measure will have a primary purpose of contributing to research which involves comparisons: between groups of children, different methods of intervention and different age spans within the 3-5 year age range. Before developing this work it is important to define the basis on which a new measure might be constructed.

In order to advance the field of measurement in early literacy development, I seek to develop a new measure that will have certain characteristics. These will form the basis for the processes of its construction, its focus and serve as a means of evaluating the success of its development later. Definitions of literacy, views of early literacy and the identification of three strands of research into early literacy development point to a number of characteristics which I will seek to include in a new measure of early literacy. The characteristics set out below are those which suit the present task. They should not be taken as desirable characteristics for every measure since the purpose of any measure will define the characteristics to be sought.

This chapter suggests the following characteristics could form an appropriate basis for the development of a new measure of early literacy development in the context of this
thesis. The suitability of these characteristics will be considered later in the thesis, after the new measure has been developed, trialled and refined.

**Characteristics sought in a new measure**

<table>
<thead>
<tr>
<th>Characteristic 1</th>
<th>Suitable for research involving comparisons (between groups, age spans and experiences).</th>
</tr>
</thead>
<tbody>
<tr>
<td>Characteristic 2</td>
<td>Appropriate for use with children in the 3-5 year age range.</td>
</tr>
<tr>
<td>Characteristic 3</td>
<td>Coverage of aspects of literacy revealed by key strands of recent early literacy research: environmental print, books and early writing.</td>
</tr>
<tr>
<td>Characteristic 4</td>
<td>The potential for repeated use with children at different points in the 3-5 age range.</td>
</tr>
<tr>
<td>Characteristic 5</td>
<td>A scoring system allowing statistical analysis and comparison with results of other measures.</td>
</tr>
</tbody>
</table>

As these characteristics are a basis for the new measure to be developed within this thesis, each will be explained in turn.

**Characteristic 1**  Suitable for research requiring comparisons (between groups, age spans and experiences).

In order to make comparisons between groups of children, methods and across age bands some numerical outcome of the measure is needed. Numerical outcomes are not so important, (indeed may not be important at all) for teaching and learning purposes. However, scores are important for some research where quantitative methods are used. The inclusion of a scoring system leads to the need to make decisions about whether the new measure will be criterion or norm referenced. This issue is dealt with in chapter 2, but the it must be said at this point that the aim to include a scoring system does not necessarily imply the need to develop a norm referenced test with standardised scores. There is the potential in the development of this instrument to learn from the methods teachers use in assessing children and to develop a criterion referenced measure which assesses children according to specifically developed items.
but does not group scores into bands according to scores of a sample of the population.

**Characteristic 2**  **Appropriate for use with children in the 3-5 year age range.**  
The earlier sections in this chapter indicate that new measures are needed for specific research purposes involving children aged between 3-5 years. The new measure should include items which cover this age range, with sufficient breadth to measure the literacy of children across a broad spectrum of abilities and experiences at both 3 and 5.

**Characteristic 3**  **Coverage of aspects of literacy revealed by key strands of recent early literacy research: environmental print, books and early writing.**  
The new measure of early literacy should not narrow the range of outcomes to the degree that children's literacy abilities are underestimated and therefore under-measured. There should be a breadth of content in the measure - reflecting what has been revealed by key strands of early literacy research, which enables performance and progression in environmental print, book knowledge and early writing to be measured. The scope of items should be sufficient to measure abilities of children new to literacy and those with a high level of literacy interest and ability. This also means that there should be careful consideration of the emphasis placed on subskills. Skills such as letter formation and letter identification are important in the development of literacy, but in the research summarised earlier in this chapter subskills form only a small part of children's literacy development and learning. A new measure that unduly emphasises subskills will not fully reflect the depth of children's literacy achievements. Though subskills are a necessary part of literacy, items must be developed in ways which keep the importance of such elements of literacy in perspective.
The recent research identified in this chapter confirms that children learn and use literacy in everyday and meaningful contexts. A process of developing a new literacy measure should seek to include tasks which are as meaningful as it is possible to achieve in a decontextualised situation. Given that they are out of the flow of everyday life, items should be as closely matched as possible to the literacy acts in which young children often engage. The best way to ensure that items are relevant to children's developing literacy is to base them on what is known about how children approach literacy, the literacy acts they are involved in and the interests they show in the written word. Watching children as they go about their literacy in everyday home and community contexts can provide a basis the development of items.

**Characteristic 4** The potential for repeated use with children in the 3-5 age range.

In order to develop an instrument which can be used to measure early literacy development of children aged 3-5 years, at different points during that age span it should be possible to administer the measure to a child on several occasions without the risk of scores increasing because children become familiar with the correct responses. This has implications for the content of items and processes of administering the measure.

**Characteristic 5** A scoring system allowing statistical analysis and comparison with results of other measures should be incorporated.

A new measure is needed which will allow comparison of the performance of groups of children - such as an evaluation of a literacy intervention programme. To achieve this, the measure will need to yield a numerical score. As already stated in the first characteristic, numerical outcomes are less important for purposes of teaching and learning but are needed for some research studies.
The characteristics above form a basis for the development of one new measure later in the thesis. These characteristics are my strategic choice, arising from reflection on what currently exists. The basis is set out for the development of one particular measure and will be subject to evaluation and reflection later. It should not be assumed that this particular principled basis will be suitable for the development of other measures which may seek to satisfy different purposes.

In the chapters which follow there will be: further consideration of purposes of early literacy assessment; discussion of research questions and methods, and a survey of practice in early literacy assessment in schools. This will lead to a focusing on the particular purposes of early literacy assessment identified in figure 1.1 and the development of a new measure to fit these purposes.

First it is necessary to review the literature most relevant to this thesis, i.e. studies involving measures of early literacy development. Chapter 2 considers what currently known.
Chapter 2

Measuring and assessing early literacy development: A review of approaches

OUTLINE

A Introduction
B Identifying material from the literature
C Discussion of the literature

1 The beginnings of new measures of early literacy development
2 Measures of early literacy development in the 1980s
3 Tests of reading and reading readiness
4 Further development of measures of early literacy development which attempt to match current research
5 Specific assessment instruments for teachers
6 The development of assessment and measurement in the 1990s

D Summary of characteristics of existing measures

E Some issues arising from this review

1 Many existing ways of assessing preschool literacy development are out of step with what is now known about how children acquire their literacy
2 The measurement of early literacy development is in its early stages
3 Culturally transferable tests are difficult to develop
4 A new measure is needed
A Introduction

This chapter identifies and discusses ways of measuring and assessing early literacy development. Relevant literature is considered in broadly chronological order (see table 2.1) giving an historical perspective to the development of work in the field.

<table>
<thead>
<tr>
<th>Instrument</th>
<th>Date</th>
<th>Title/focus</th>
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<tbody>
<tr>
<td>Jones and Hendrickson</td>
<td>1970</td>
<td>Environmental print</td>
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<tr>
<td>Clay</td>
<td>1972</td>
<td>The Diagnostic Survey</td>
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<td>Thackray and Thackray</td>
<td>1974</td>
<td>Reading readiness</td>
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<td>Downing and Thackray</td>
<td>1976</td>
<td>Reading readiness</td>
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<td>Ylisto</td>
<td>1977</td>
<td>Environmental print</td>
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<tr>
<td>Brimer and Raban</td>
<td>1979</td>
<td>Reading readiness</td>
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<td>Goodman and Altwerger</td>
<td>1981</td>
<td>Six Literacy Tasks</td>
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<td>Clymer and Barratt</td>
<td>1983</td>
<td>Reading readiness</td>
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<td>Downing et al.</td>
<td>1983</td>
<td>Reading readiness</td>
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<td>Heibert</td>
<td>1983</td>
<td>Environmental print</td>
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<tr>
<td>Goodall</td>
<td>1984</td>
<td>Environmental print</td>
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<tr>
<td>Manchester LEA</td>
<td>1988</td>
<td>Literacy</td>
</tr>
<tr>
<td>ILEA (Barrs et al.)</td>
<td>1989</td>
<td>Language</td>
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<tr>
<td>Waterland</td>
<td>1989</td>
<td>Reading</td>
</tr>
<tr>
<td>Armstrong</td>
<td>1990</td>
<td>Writing</td>
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<td>Sulzby</td>
<td>1990</td>
<td>Writing</td>
</tr>
<tr>
<td>Teale</td>
<td>1990</td>
<td>Informal assessment</td>
</tr>
<tr>
<td>Kent LEA</td>
<td>1992</td>
<td>Reading</td>
</tr>
<tr>
<td>LARR</td>
<td>1993</td>
<td>Reading</td>
</tr>
<tr>
<td>Wandsworth</td>
<td>1994</td>
<td>General - includes literacy</td>
</tr>
<tr>
<td>Infant Index</td>
<td>1995</td>
<td>General - includes literacy</td>
</tr>
<tr>
<td>SCAA</td>
<td>1996</td>
<td>General - includes literacy</td>
</tr>
</tbody>
</table>

Initially the literature search reported here was conducted with the hope of finding measures of early literacy development which reflected the discoveries of recent research. As few of these exist, the review was extended to a wider spectrum of literacy measures. However, where specific measures of early literacy development are discussed they are considered in some detail because the present study will draw upon and build on them.
B  Identifying material from the literature

A detailed search was made at the outset of the study. The main search was done in Spring of 1992, with additional sources being added later as they were located.

A search of ERIC used five descriptors (ERIC 1991) to identify the required literature: measures; preschool; literacy; writing ability; reading. Other sources used for this literature search included Pumfrey (1985) who stated:

the majority of pre-reading materials contains games intended to develop the child's aural and visual discrimination and visual - motor co-ordination. These can be used as informal screening tests in many instances

(Pumfrey 1985 p53)

This suggested that measures of early literacy development were in short supply. Other sources consulted in the search included Contents Pages in Education 1991. This index gives current publications, therefore references not yet included in ERIC were identified.

C  Discussion of the literature

Each instrument is discussed here with brief details of the study, the focus, and the instrument or instruments.

1  The beginnings of new measures of early literacy development

In a study to ascertain if there were developmental levels of print awareness, Jones and Hendrickson (1970) tested a total of 57 children (26 boys and 31 girls). They were divided evenly into three age groups, three, four and five years, each group held 19 children. The study focused on children's ability to recognise words and images selected from environmental print. The tests involved recognition of two commercial products and two book covers which the researchers were certain were known to the children. Test conditions involved child and tester sitting at a table and the child being shown products and books one at a time. Each time the child was asked a question of
the form, 'Do you know what this can is?' Children were shown five examples of the same soup can, each with increasing elements of packaging made more visible. First examples gave blocks of colour only, then some words were added, and eventually the whole can was presented. A similar process was used for book covers. Scoring was numerical with one point for not trying or an inappropriate reply, and two for a correct answer. Credit was given for how children got the correct answer, one for using colour, two for using the format, and three for word recognition. The test was designed to assess children's reactions to environmental print in order to establish the extent to which children can 'identify' or 'read' words in the environment. This appears to be the first published measure of early literacy development which used environmental print. Later measures took up Jones and Hendrickson's notion of print recognition.

In a study to test the belief that the onset of reading is not dependent upon phonic instruction, Ylisto (1977) tested 62 Finnish children aged between four and six years old. Children were shown 25 'printed word symbols in the everyday world of a child' (Ylisto 1977 p.168). The 25 words used were listed in Ylisto's report (Ylisto 1977) and details of children's total scores are given. Children were tested, interviewed and observed. The test included five stages, listed below, where children were shown print in five different degrees of context and asked 'What does this say?'

i. a photograph of a word in its context, e.g. a label on a door
ii. a drawing or representation of the photograph including the word
iii. the printed word with less context
iv. the printed word with no context
v. the written word in a sentence

Ylisto gave detailed consideration to the skills and knowledge children used to identify the print they were shown and her conclusions relate to implications for the teaching of reading. No conclusions are drawn about the type of measure which was developed to carry out this research.
Chapter 2  Measuring and assessing early literacy development: A review of approaches

A more substantial battery of measures was developed by Clay (1972a). Clay's Diagnostic Survey has been developed for use with 5,6, and 7 year old children. It contains tests for: running reading records; letter identification; 'ready to read' word test; writing samples and writing vocabulary as well as the well known Concepts about Print test. Because this test is still unique and now widely used it is worth some detailed consideration.

Running Reading Records were based on Goodman and Burkes' (1972) miscue analysis and taken as the child read using a coding system to indicate errors and corrections. The letter identification test consisted of a page of 54 letters comprising upper and lower case including two styles of letters a and g printed in alphabetical sequence from top to bottom and left to right. The child was asked to identify each letter reading across the page so that the letters were not in alphabetical order. The 'ready to read' word test comprised three lists of words (A, B and C) all identified as the most frequently occurring words in the 'Ready to Read' series of basic reading texts for young children. The lists were said to be of comparable difficulty. The child is asked to read one of the three lists (chosen by the tester) and performance is scored. The three lists were constructed from material written in the early sixties but could be updated using reading vocabulary to which young children in the 1990s have been exposed.

Instructions on how to score writing samples are also included in Clay's Diagnostic Survey. Clay asserts that

> By observing children as they write we can learn a great deal about what they understand about print, and messages in print, and what features of print they are attending to.

(Clay 1993 p.57)

Three samples of story writing taken on consecutive days are needed to assess language level, message quality, and directional principle.
The *writing vocabulary* element of the Diagnostic Survey consists of asking individual children to write all the words they know in 10 minutes. Clay claimed that the test was reliable and had a high relationship with reading words in isolation. Details for scoring are given with 1 point for each word correctly spelled.

Perhaps the most widely known and used element of Clay's Diagnostic Survey is the *Concepts about Print* test. This tests 24 'concepts' using one of two test books, written by Clay, (Sand, 1972b and Stones 1979a). The book is read to the child by the tester who asks specific questions about the text on each page. The books contain aberrations such as upside-down text and misspelled words, which children are required to identify and explain. 'Stones' (Clay 1979a) follows similar patterns to 'Sand' (Clay 1972b), but was written later, when Clay in 1979 republished Early Detection of Reading Difficulties and included Reading Recovery Procedures for use with children who were identified through the Diagnostic Survey as having specific reading difficulties at six years of age (Clay 1979b).

Clay suggests that children aged 5-7 should learn the 24 concepts listed in the test in the first two years of schooling, therefore 5 year olds would be expected to score lower than 7 year olds. This test gives a possible score of 24, converted to a possible stanine score of 1-9. Average ages at which children should 'pass' each item are given but it is stressed that this depends on curriculum and teaching methods. Clear details of administration and scoring of the test were given.

 Apparently straightforward and quick to administer, Clay's *Concepts about Print* test attempted to use book format on a one to one basis to assess which out of 24 items a child knows about print. This battery of instruments was designed to detect reading difficulties early. For Clay the greatest value of this battery of instruments lay in its diagnostic potential. She stressed the importance of observation of children's capabilities; solving problems early; matching 'test' tasks to 'learning' tasks of
classrooms (rather than standardised tests); and analysis of reading performance (not puzzles or scores). Clay (1972a) stated:

There is only slight emphasis on scores and quantifying progress - the real value is to uncover what processes and items a particular child controls and what processes and items he could be taught next.

(Clay 1972a p.3)

Whilst the Diagnostic Survey addressed several aspects of children's skill and understanding in reading and their ability to process texts using meaning, structure and visual clues, there were some drawbacks. If the Concepts about Print test was to be used with the same child over a period of 2 years he or she might become familiar with the pattern of the test, what it required, and the test material. This offers one possible reason for increasing scores, other than extended development. This practice effect needs to be taken into account when increased scores are reported. Most of the 24 concepts could be tested with an ordinary book though this would lose a few items which test children's reaction to printed errors and some opportunities to test children's processing of text using visual clues in the print. The usefulness of this aspect of the test would need to be evaluated. Children reading for meaning may not respond verbally to some errors because in the process of reading they make corrections in order to make the text make sense.

Aspects of the Concepts about Print test are within the capability of many four year olds. Further work would be needed on age range, but it may be useful to consider the suitability of the test for younger preschool children. In the light of research carried out since Clay developed this test it is important to ask why, in Clay's sample 'average' children were not expected to be able to identify, for example, 'the front of the book' until they were 5,6 years old. The only behaviour expected of average five year olds was to identify print as different from pictures. A reason for this apparently low
expectation could relate to children's previous early literacy experiences or it may simply be due to the expectations teachers had of children in the early 1970's.

Perhaps because Clay's test marked a milestone in attempts to measure early literacy development which matched the way children learned, it has attracted other researchers to use it and to publish their comments. Two responses are considered here, the first from Hartley and Quine (1982) and the second from Goodman (1981).

Hartley and Quine (1982) undertook to assess the efficiency of Clay's test with 42 children aged 4;11. They made a number of criticisms about administration. First a difficulty about being 'standardised' as well as 'flexible', was identified, and a second problem was concerned with explanation, when the child is told 'help me to read' and is then questioned on elements appearing on each page. They felt that this could confuse children. In their study, Hartley and Quine found that children tried to search for errors in meaning when they were asked to say what was wrong with the page, and they tended to listen, rather than look, when the test required them to look for printed errors. The following example may help to illustrate how confusion could arise. In the test book Sand (Clay 1972b) the text reads:

and I splashed with my feet.
I jumped in the hole (sic.)

(Clay 1972b p 10)

The tester is instructed to

Read immediately the bottom line first, then the top line. Do NOT point.

(Clay 1972a p.13)

The correct response to this is to say that the sentence should read: I jumped in the hole and I splashed with my feet. A child who was reading for meaning might miss the
error, as the sentence makes some kind of sense read either way. If the child did not comment on order no score was given for this element of the test. Hartley and Quine questioned the instructions given to the children and expressed concern about such potential confusion. They argued that children may have certain 'concepts' of literacy items which work for them but which they cannot label or yet explain. This is part of the problem of competence and performance. Hartley and Quine end their criticism by summarising 7 areas of concern in the following questions:

i. Is the task of supposedly helping the teacher read while actually being tested confusing to the child?

ii. Is the child given enough guidance as to what he is meant to be doing and where he is meant to be looking?

iii. Is the format of the booklet with inverted print and pictures, and jumbled words, confusing?

iv. Does Clay impose a rigidity of questioning and responses which fails to allow the teacher to judge whether a child has acquired a concept? Should the questions allow greater freedom to the child to demonstrate his knowledge and greater freedom to the teacher to evaluate his response?

v. Is Clay testing two areas: namely, concepts that could be acquired before a successful start can be made with reading, and also concepts more likely to be acquired once a mastery of reading is underway?

vi. Has the differentiation between the 'concept' and the 'labelling' term been successfully accomplished?

vii. Do teachers need more guidance on how to help children acquire these essential concepts?

(Hartley and Quine 1982 p112)

Goodman (1981) also responded to Clay's Diagnostic Survey, seeing her main objectives in Concepts about Print as:

...observing precisely what a child is doing; uncovering the processes a child controls; discovering reading behaviours which need to be taught.

(Goodman 1981 p445-446)
Goodman considered that Clay's contribution to 'more natural measurement' was significant and that her three objectives are achieved through the test but she recommended that the test should be 'explored' by others in the field, as it provided a basis for discussion. She suggested that it raised questions, provided insights and information of a child's knowledge in an alternative way to 'question and answer' or 'paper and pencil' tests, and was an 'innovative foundation' which should provide a basis for further development of 'natural observation devices'.

Having used the test, Goodman disputed Clay's norms, reliability and validity figures, finding discrepancies between her sample and the scores given by Clay. Goodman suggested that Clay's test was best used for developmental insights to individual children rather than to obtain norm-referenced scores. Throughout her review of Concepts about Print, Goodman stressed 'the greatest value lies in its innovative approach to evaluation'. Suggestions were made about the administration of the test and criticism included the aberrations in print which, like Hartley and Quine, Goodman felt children reading for meaning might ignore. She argued fundamentally with Clay about the use of errors in print, and disagreed about the importance in reading development of overtly noticing certain mis-orders and mis-spellings. Goodman also questioned the cultural relevance of the 'sand' and 'stones' books. If these books, unchanged since they were first produced in two colour printing the 1970s, are compared to the best of children's publishing in the 1990s it is clear that children are unlikely to be motivated by their appearance or the plot. Despite her criticisms, however, Goodman saw the Concepts about Print test as 'a unique contribution to the evaluation of beginning readers' (Goodman 1981 p446), and

a significant beginning in evaluative measures that provide insight into what children know about written language. It is the first instrument I have seen which uses a real reading experience with very young children to provide information to an observer about the knowledge of how to handle books and of the written language in books.

(Goodman 1981 p447)
These two responses to Clay's test indicate a fundamental problem which needs to be acknowledged and addressed when measuring literacy development. That is one of viewpoint about how children learn, how learning should be measured and what measurement is for. Clay seemed to focus on assessing a range of skills of text processing which eventually came together to make the child a proficient reader. By contrast, Goodman emphasised reading as a holistic behaviour from the start, in which meaning seemed to have a more significant place than in Clay's work. Clay's test was intended to identify teaching and learning needs of children who struggled with reading. It is not specifically a research tool, though it has been used in evaluation (Sylva and Hurry 1995) and continues to be used in research studies (Neuman 1996). Given its primary purpose of individual diagnostic assessment to inform teaching, the problem about standardisation could be less relevant, but other factors, strengths and weaknesses are important.

The criticisms of Hartley and Quine and of Goodman provide useful perspectives from which to begin the 'exploration' which Goodman suggested was needed. Clay's test could be helpful for teachers who want to help children having difficulty in learning to read - the purpose for which it was designed. It could also be useful as a starting point for further test development, it clearly illustrates how difficult it is to develop methods of testing and assessing early literacy which match current research. More than twenty years since it was first published, it has no apparent successor.
Measures of early literacy development in the 1980's

Having used and criticised Clay's *Concepts about Print Test* (Clay 1972a), Goodman and Altwerger (1981), almost 10 years later, developed a set of 'tasks' which were used to assess different aspects of early literacy development of three, four and five year old children (Goodman and Altwerger 1981). This work was an attempt to develop strategies for the measurement of elements of early literacy understanding. Goodman worked from the standpoint that children in a literate society develop the abilities to decode symbols between the ages of two and four years, and that they focus on meaning before they concern themselves with letters (Goodman 1980 p 10-11).

As part of a study to explore preschooler's awareness and responses to environmental print, their attitudes and concepts of reading and writing and their knowledge and familiarity with print in books, Goodman and Altwerger developed a set of 6 tasks: 3 print awareness tasks, 2 Concept and attitude tasks, and the Book Handling Knowledge Task. Details of the tasks show a development from the work of Clay (1972a).

Three Print Awareness tasks were presented to children on the basis of one each week for three weeks. The time interval was needed to administer all the tests to the children in the study and to allow the children space between each task. They increased in difficulty each time as the following details show.

*Task 1 Print Awareness*

18 logos selected from household, toys, food and street signs, were shown, in context, one at a time to the child.

*Task 2 Print Awareness*

A week later the second task uses the same labels with less context (the pictures and other cues removed)

*Task 3 Print Awareness*

A week later the words from the same logos used in tasks 1 and 2 were printed in black ink on white card and shown one at a time to the child.
On each occasion the items were shown in a random order and the child was asked what was on the card.

Results given for these tests appeared to show that meaning was important to children (Goodman and Altwerger 1981). Test three was abandoned for many children. Goodman and Altwerger surmised that children were 'clearly bored' by being asked to simply read words, but they may well have found this task much more difficult. The previous tasks (Tasks 1 and 2) seemed to have more relevance to the children.

There appear to be two difficulties which may have occur in the use of these tasks

\( a \) \hspace{1cm} \textit{time and resources}

Two people were involved in each task, the administrator and an observer who took notes. This meant that the child was being assessed whilst the assessor was also being assessed for objectivity. In practical terms this rendered a replication of such an instrument impossible due to the cost of two people. Adaptations would need to be made.

\( b \) \hspace{1cm} \textit{selection of test items}

Whilst details of the actual words used are given, there are no clear details, other than reporting that the selection was define 'carefully and systematically', as to how there were selected.

\( Task 4 \) \textit{Concepts of Reading} \hspace{0.5cm} \text{and} \hspace{0.5cm} \text{Task 5} \hspace{0.5cm} \textit{Concepts of Writing} \\
These two tasks were administered by individual interviews. In task 4 the child was asked questions which demonstrated his or her knowledge about reading and in task 5 a writing sample was collected.

\( Task 6 \textit{Book Handling Knowledge} \\
This task was adapted from Clay's \textit{Concepts about Print} test and was designed to reveal the child's knowledge and use of print.
These 6 tasks offered potential for assessing observable literacy behaviours, especially as the authors provide details of each one. The tasks offered a way of assessing the early literacy development of children age three to five which, though time consuming, was balanced and straightforward. They were a set of literacy tasks which contributed towards a solution of the problems of measurement. Particularly useful was the development of the Book Handling Task, which built on Clay's work, yet used real story books rather than 'test' books and reduced the problems of children misunderstanding instructions which were highlighted earlier. The administration and recording sheet was also very accessible. Unfortunately Goodman and Altwerger's work does not appear to be widely available as it appears only in a working paper, whilst Clay's work is in a fully published form.

3 Tests of reading and reading readiness

In the ten years between Clay's Diagnostic Survey and Goodman and Altwerger's battery of tasks, other tests were developed which focused on different aspects of reading readiness and reading ability.

The Thackray Reading Readiness Profiles (Thackray and Thackray 1974) were developed for use with children of about five years old. Four profiles were devised for testing: vocabulary and concept development; auditory discrimination; visual discrimination, and general ability. They took a total of 70 minutes to administer. The purpose of these Profiles was to identify areas of pre-reading activity which it was thought would help to prepare children to learn to read. In a review of this test Vincent et al (1983) noted some confusion over its usefulness, observing that:

The profiles are fairly time-consuming in that they require four sessions which will need to be spread over more than one day. Time is also required for the teacher to be thoroughly prepared and conversant with the contests and exact mode of administration...One useful purpose of these Profiles might serve
would be to demonstrate to anxious parents clear reasons why a child had not yet started on a formal reading programme. On the other hand, in no way should results be used as a reason to neglect the child's development in early reading skills.

(Vincent et al. 1983 p 90)

A further attempt to document children's readiness for the reading process was made by Downing and Thackray (1976) in the *Reading Readiness Inventory*. The inventory consisted of series of 50 questions which were mostly to be answered 'yes' or 'no'. Factors relating to four areas were covered: physiological; environmental; emotional; motivational and personality, and intellectual. This checklist would need to be used to supplement other assessment or measurements procedures, being insufficient in itself. It was concerned with certain factors which might have influenced a child's reading ability.

The Infant Reading Test (IRT) developed by Brimer and Raban (1979) is a measure of word recognition, listening and reading comprehension. It is a testament to either the robustness of the test, or a further indication of the lack of research to develop new measures, that this test was still used by researchers in 1996. Lazo and Pumfrey (1996) reported their use of the IRT in a study of predictors of what they called 'pre-literate' children's later reading and spelling ability.

The 1980's saw a continuing effort to develop ways of measuring early literacy development, including further work on assessing 'reading readiness'. Measures included the Clymer-Barrett Readiness test (CBRT) (Clymer and Barrett 1983), a revision of the Clymer Barrett Pre-reading Battery which was first published in 1967, for use with children aged five to seven years. 'Readiness' was assessed by teacher ratings of children's performance on mostly non-literacy abilities: oral language, vocabulary, listening skills, thinking abilities, social skills, emotional development, learning attitudes and work habits.
The Linguistic Awareness in Reading Readiness (LARR) Test (Downing et al. 1983) was developed in British Columbia for use with children aged 4:06 - 8:00 years. This test was designed to take up to one hour to administer and was intended to measure the extent to which children developed understanding of written language. The test was in three parts, recognising literacy behaviour, understanding literacy functions, and technical language of literacy. In the first part children were shown pictures and asked to identify things which could be read, people writing and writing tools. The second part required children to identify from pictures, people who were using the written word, for example sending or receiving a message. In the final part of the test children had to demonstrate their understanding of the concepts in terms such as 'writing', 'line', 'word', and 'sentence'. A total of 75 items could be tested, with considerable administrative work and preparation. The test was not standardised and there was no norm by which children's progress or achievement in the test could be compared.

LARR was revised in 1993 to produce a short form of LARR for use in the UK (NFER-Nelson 1993), known as the LARR test of Emergent Literacy. The full title represents something of a paradox: Linguistic Awareness for Reading Readiness Test of Emergent Literacy. Since emergent literacy as discussed in chapter 1 rejects the notion of 'readiness' or 'prerequisites' for literacy the title of this test presents something of a problem - does the test measure 'readiness' or 'emergent literacy'? As the theoretical basis for 'reading readiness' is in opposition to the theoretical basis for 'emergent literacy' it cannot adequately be argued that both could be measured by the same test.

The 1993 version has 19 questions preceded by 2 practice questions. There were two main types of questions in the test, the first group asked children to show that they recognised when reading and writing were taking place and the second group of questions related to pupils knowledge of terms used in written language. Five of the 19
questions on the LARR could attract up to two marks while the other questions received one mark, the maximum score was 24 points.

4 Further development of measures of early literacy development which attempt to match current research

In addition to the measures discussed so far, other researchers were attempting to develop methods of identifying children's ability in literacy which were better matched to their everyday literacy behaviours. Heibert (1983) reported an investigation of preschool children's concepts about reading. The study focused on 60 children aged three to five years, (20 from each year group), drawn from a predominantly middle class area. It found that a majority of children could identify what reading was; 56 out of the sample of 60 evaluated their own reading ability correctly, and 5 year olds were more able to demonstrate that they knew print was necessary for reading than were three year olds, and four year olds did better than three years olds on this task. Three tasks, presented individually, were designed to:

i. assess children's ability to identify reading, both oral and silent: the child saw an adult reading silently and then aloud and was asked each time what the adult was doing

ii. establish children's perceptions of their own reading ability: children were asked to 'read the secret message' from a page of text. If they said they could read they were asked to do so, if they said they couldn't read the text they were asked if there were other things they could read.

iii. investigate children's ability to recognise what it was on a page that was read: children were shown several books with different amounts of print, pictures only, picture and text, text only and blank pages only. Children were asked whether someone who could read would be able to read each book, and if they could, what on the page would they need to look at. A scoring scheme was used to record children's responses to this task.
The purpose of these instruments was to identify preschool children's concepts about reading which could then be used to suggest experiences which preschool teachers might use in order to support children's development. Heibert (1983) suggested that:

Continued investigation of preschool children's print awareness is needed if educators are to design instructional experiences that build on the knowledge that children have as well as to develop appropriate reading experiences for children who come to school having had few experiences with print.

(Heibert 1983 p 260)

The instrument, in part, serves the purpose for which it was designed. However, to be useful in identifying what children know in order to plan teaching strategies and experiences, other aspects of children's literacy, such as book handling, and identification of logos, would need to be added.

Other researchers have developed measures of literacy development as part of their research methodology. Goodhall (1984) studied 20 children aged between 4 and 5 years. Children were shown 22 slides of environmental print in context and later 15 slides were shown with part of the context removed. No details of how the slides were selected or of scoring were given. The purpose of this study was to identify what factors influenced children's ability to identify print in the environment and whether they used letter knowledge or environmental cues when they appeared to read. This instrument was specific to the purpose of the study, and provided an example of a measurement instrument which incorporated environmental print.

Whilst some researchers focused on environmental print and reading, Sulzby (1985b) developed a way of observing aspects of writing development. Sulzby's work on assessing writing and reading using checklists (Sulzby 1985b) provides innovative criteria for observation. A checklist of Forms of Writing (p 94) was used by Sulzby (1985b) to observe children's writing behaviour in the kindergarten.
5. Specific assessment instruments for teachers

As schools in the 1980s developed their thinking and practice in the teaching of reading and writing, new ways of assessing children's skills and progress were needed. Waterland (1989) illustrated this with a collection of reading records which were compiled by schools. All consisted of detailed lists of literacy behaviours which teachers checked off in various ways when they thought the child was capable of them. Some Local Education Authorities responded to the need for different assessment materials and developed language and literacy records which were more in keeping with the increased interest in teaching reading through children's literature rather than only through the use of reading schemes. Records developed by LEAs are intended for use by teachers in classrooms rather than researchers. Standardisation is rare, and because the purpose is diagnostic it is probably not necessary. Some LEA assessments offer useful ideas on aspects of literacy which should be included in the development of new measurement instruments.

The Manchester Literacy Record (Manchester LEA 1988) was developed as part of the Manchester Literacy Project. It suggested formats and criteria for different aspects of early literacy assessment. Profiles of reading and writing were based on observations of children aged three to eight years. These were a guide for the teachers who completed the record sheets, included in the booklet, 'A Framework for Assessment'. 'Essential' and 'additional' assessment and recording procedures were given for use at each of the defined stages: Nursery (3-4 years), Reception (4-5 years), Middle Infant (6 years) and Top Infant (7 years). This assessment framework provided teachers with a comprehensive range of assessment processes with formats and techniques including a form of running record of reading using miscue analysis. Those using this system were involved in ongoing assessment and recording of children's literacy from 3 - 7 years. This aided continuity and progression in early literacy development which are the major purposes behind this set of assessment strategies.
Perhaps the weakest section of the Manchester Literacy Record is that on parental involvement although this reflects the stage at which the project reported. The questions about 'sharing in the literacy assessment' (p50) can prompt further discussion around the issues and practicalities of involving parents and they provide an agenda for conversation between teachers and parents, suggesting that the outcomes might be information for parents and a sensitising of parents to literacy learning.

The Primary Language Record (Barrs et al. 1989) set out a system for recording all aspects of language for children throughout the primary age range including those in nurseries. The purposes of this document were made explicit. It was based on four principles which stated the purposes of record keeping:

- to inform and guide other teachers who do not know the child
- to inform the head teacher and others in positions of responsibility about the child's work
- to provide parents with information and assessment of the child's progress
- to support and inform the day to day teaching in the classroom

The record took account of bilingual language development and set out to provide a framework for the teaching of language and literacy.

The Primary Language Record was a 'package' for assessing and recording language and literacy. Inservice training was recommended before it was introduced into a school. It consisted of three parts:

Part A  Space for administrative information and for a record of a discussion between teacher and parents in a 'language and literacy conference'

Part B  *The Child as a Language User* with sections on Talking and Listening, Reading and Writing
Part C  To be completed at the end of the school year recording comments by parents after seeing the record, a language and literacy conference held with the child and information for the receiving teacher.

Alongside this record was a format for recording dated observations of the child's language and literacy with the following specific headings included in the recording sheet for use when recording samples of reading:

- title of the book
- whether it was known or unknown
- the sampling procedure used (informal, running record, miscue analysis)
- overall impression of the child's reading
- strategies the child used when reading aloud
- child's response to the book
- what the sample showed about the child's development as a reader
- experience and support needed to further development.

Details of all aspects of the record were given in the accompanying handbook including how to carry out Informal Reading Assessments, Running Records, and Miscue Analysis.

Materials developed by Manchester (1988) and ILEA (Barrs et al. 1989) both had multiple elements which employed a range of strategies to assess different kinds of literacy. The result would provide a comprehensive assessment of a child's literacy. Both records involved lengthy tasks and were time consuming for teachers. This has been a particular problem experienced by teachers using the ILEA record though no published reports state this.
Mitchell (1992) reviewed the Primary Language Record and its suitability for the American school system. She suggested that it 'imperceptibly improves teaching' (p150) because teachers are involved in ongoing observation and evaluation of children's language abilities. She wrote:

The Primary Language record succeeds because it is a team product, it doubles as assessment and as a guide to practice, and it focuses attention on what children can do.

(Mitchell 1992 p151)

Barrs and Thomas (1991) reported on a validation survey of Reading Scale 1, which formed part of the Primary Language Record. They stated that an early unpublished report in 1986 surveyed 4,000 seven year olds and showed that the scale had 'obvious potential for assessing reading achievement' (Barrs and Thomas 1991 p 108).

6 The development of assessment and measurement in the 1990s

Some LEA material developed in the UK in the early 1990s, seemed less comprehensive than measures developed in the 1980s, and more focused on particular areas as detailed in the National Curriculum. The Reading Assessment Profile (Kent LEA 1992) stated that the materials were designed to:

enable teachers to assess and plot the progress of pupils in the primary years and report to parents with more specific information

(Kent LEA 1992 p2)

The materials were presented in the form of checklists, with no space for comments, just the words YES and NO which the teacher was instructed to circle as appropriate. National Curriculum Attainment Targets were boxed, additional reading skills and behaviours were also listed. These materials presented a narrower, if more manageable, format for recording but not assessing reading. They seemed to be less appropriate to
early literacy development than those developed in the 1980s. The profile content was heavily influenced by the National Curriculum, and apparently encouraged 'plotting' reading behaviour on a checklist. If this was an example of a developing trend in early literacy assessment in the early 1990s there was cause to worry that assessment of literacy in the 1990s was gradually being narrowed to government set criteria.

Two further examples of baseline assessments, the Infant Index (Lindsay and Desforges, 1995) and Wandsworth LEA Baseline Assessment (Wandsworth Borough Council, 1995) both published after the introduction of the National Curriculum provide further indication of a narrowing view of what counts as worthy of assessment in early literacy development, and of increasing compliance with the Government view of early literacy. The Infant Index (Lindsay and Desforges 1995) is an example of a standardised baseline assessment which includes personal and social development as well as literacy and mathematics. The assessment is mainly a checklist for teachers and though scores have been standardised many items are left to the judgement of individual teachers and therefore administration may not be comparable from one setting to another. The Infant Index focuses on the following literacy related items:

**Reading - (One of the following can be selected to best describe child's ability)**
1. Shows an enjoyment of books, and knows how books work - (front/back, left/right, top/bottom)
2. Can recognise individual words or letters in familiar context.
3. Can read from a simple story book
4. None of the above

**Writing - (One of the following can be selected to best describe child's ability)**
1. Can write own forename (copy writing)
2. Produces isolated written words or phrases to communicate meaning
3. Produces a short piece of written prose
4. None of the above

**Spelling - (One of the following can be selected to best describe child's ability)**
1. Can discriminate letters from non-letters of letter-like form or numbers
2. Can write some letter shapes in response to speech sounds or letter names
3. Can spell some phonetically regular three-letter words
4. None of the above
Wandsworth Baseline Assessment (1995) comprises a baseline checklist and the LARR test of Emergent Literacy (NFER 1993). The checklist items for 'language' include the following literacy items which are directly related to National Curriculum requirements:

- listens and responds to stories
- reads pictures and sequences
- looks at books for pleasure
- reading
- names or sounds some letters
- uses some letter symbols
- writes own name

Each of the above items can score 1 (developing competence), 2 (competent) or 3 (above average) on a checklist. Teachers can refer to the handbook of guidance (Wandsworth 1994) in order to judge at what level the child performs on each item. These assessments have been used by Wandsworth LEA to calculate the value-added by the school as well as for teaching and learning purposes, (Strand 1996). However, it is difficult to see how these two purposes can be fulfilled in the single instrument, knowing that a child's literacy is scored at 1, 2 or 3 does not adequately inform teaching plans.

The Government continued this trend of baseline assessments and narrowing of the view of early literacy with the publication in 1996 of its proposals for a National Framework for Baseline Assessment of all children on entry to compulsory schooling. Literacy items focused attention on National Curriculum literacy, with little value placed on broader literacy knowledge and understanding.

In the UK at the start of the 1990s the National Curriculum set out content of teaching and learning and corresponding criteria for, and methods of, assessment. The processes and content of assessment in the National Curriculum has caused ongoing controversy, and as the above examples illustrate, has in some cases, narrowed literacy assessment to some isolated skills and ignored others which research shows to be
important. Armstrong (1990) was critical of this trend and suggested a different way of looking at and of assessing children's writing which considers meaning in the evaluation. Taking a single piece of writing by a child of six years, he suggested that children's writing should be considered in several different ways and warns against the use of narrow, nationally set criteria for assessment as this reduces powerful and emotional creative and meaningful writing to a level, a number or a mean score.

Armstrong's treatment of the child's writing gives it respect and worth as a piece of literature. His consideration of this way of assessing children's writing gives further 'criteria' which might be drawn upon if a more holistic approach to the assessment of early literacy development were to be developed. Armstrong argues strongly that children can choose their words carefully and precisely, mixing narrative and illustration to convey power relationships, fear, and anxiety in their writing. He suggests that teachers should view the 'whole' of the writing in order to make a valid assessment, which conveys children's efforts. He argues that elements such as spelling, handwriting and full stops need to be assessed alongside these other attributes which are valued features of literacy as used in novels and play criticisms.

Armstrong suggests that the assessment of writing might consider elements such as: patterns of intention, motifs, orientations, interplay between form and content, technique and expression, and the relationship of words children write to the pictures they draw. This view of writing leads to a number of questions:

- how do we create a form of assessment which takes account of these things?
- do teachers have sufficient detailed knowledge needed to be able to do justice to children's writing in this way?
- do teachers have the time it would take to adopt this approach?
- how much do teachers know about writing? How many teachers could appreciate a child's writing to this kind of depth?
Whilst there are only a handful of specific assessment tools for early literacy, in the main they concentrate on the assessment of reading abilities and behaviours. Armstrong shows the importance of giving consideration to the assessment of writing as well, although his suggestions apply to children who are able to follow writing conventions sufficiently to be able to compose their own messages and bring meaning to their writing. Whilst this may be the case for some young children, in the main it is unlikely that children under five would be using writing independently in this way to any great degree and therefore assessments of this quality for preschool children are unlikely.

Sulzby (1990) provides useful definitions of the terminology used in the field of early literacy development, detailing and describing specific items of behaviour. She gives, for example, a detailed list of 'elements':

'...scribble, drawing, non-phonetic letter strings, copying of conventional print, invented spelling, producing conventional print, rebus, abbreviation, pseudoletters, idiosyncratic forms'

(Sulzby 1990 p89)

Useful too is Sulzby's consideration of timescale.

'One way of looking at writing development is to consider the 'time of onset' or first appearance of the use of various writing and reading forms (Sulzby and Teale 1985). Time of onset is fairly easy to trace for the forms of writing since the graphic traces are easily observable; children's speech during composition is less well documented'

(Sulzby 1990 p 89)

Purposeful assessment instruments might be developed which map some of the graphic traces described by Sulzby and matched against development of writing. Sulzby (1990) considers that some methodological issues of reliability and validity need to be addressed, and reiterates a key problem:
'The more naturalistic the assessment, the more difficult it becomes to specify the criteria that observers are using or should be using'

(Sulzby 1990 p 104)

Sulzby (1990) acknowledges methodological difficulties but suggests that commonalities in findings about emergent writing are encouraging especially as they have been arrived at through diverse methodologies (she cites Ferrerio and Teberosky (1982), Dyson (1984) and Clay (1972a)).

In the final paragraph Sulzby raises a number of valid points about measuring early literacy development.

'So what do we have to think about to assess writing by young children who are not yet writing conventionally? We have to be concerned about how close children are to conventional writing and how they are developing toward it. We have to be concerned with the context. We have to worry about the wording we use in assessment. We also need to take into account motivational aspects - Is the child trying? Is the teacher/assessor encouraging (or discouraging) the child? Writing is a production task, so assessment needs to consider the open-ended nature of the tasks. Writing is variable across contexts, so multiple assessments are crucial. We must keep in mind that we are always assessing the behaviour of one child and thus multiple assessments, while making comparisons with other, usually anonymous, children, have to be related back to this one child'.

(Sulzby 1990 p 105)

Teale (1990) considers the 'promise and challenge of informal assessment in early literacy' and argues that:

'...formal tests impose the greatest restrictions on performance since their items tend to be specific and the range of acceptable answers narrow'

(Teale (1990 p 46)
Teale presents a scale of assessment possibilities which can be represented in terms of a scale/continuum as in figure 2.1.

**Figure 2.1 Scale/continuum of Assessment Possibilities**

<table>
<thead>
<tr>
<th>Informal Observation</th>
<th>→</th>
<th>→</th>
<th>→</th>
<th>Performance Sampling</th>
<th>→</th>
<th>→</th>
<th>→</th>
<th>Testing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Informal</td>
<td>→</td>
<td>→</td>
<td>→</td>
<td>→</td>
<td>→</td>
<td>→</td>
<td>→</td>
<td>→</td>
</tr>
</tbody>
</table>

Teale highlights the need for:

'...research and development that will produce for teachers....valid and reliable tools for conducting informal assessment of early reading and writing'

(Teale 1990 p 47)

Arguing that formal testing of young children is inappropriate, Teale (1990) points out that they are inexperienced in test situations (though may have quite some literacy experience); they are easily distracted; and the tests available do not measure 'All the right things' (p48). He goes on to suggest that what is measured should be determined by what we know about early literacy,

'becoming literate is a multifaceted process involving attitudes, knowledge, skill, and self-monitoring'

(Teale 1990 p48)

Because young children acquire literacy skills by being involved first in the activity and the 'whole' literacy experience, the kinds of assessments which focus on parts do not measure things which 'emergent literacy' emphasises (Teale 1990 p 49). Teale refers to several studies of literacy development in home settings to make the point that context is crucial to the assessment. He argues that 'reading readiness' tests do not assess what should be assessed. Conclusions from such tests cannot provide full information about a child's literacy ability, which includes understanding and meaning as well as the technical skills of interpreting written symbols.
'young children's concepts of the functions of literacy are of fundamental importance to literacy learning'

(Teale 1990 p50)

He reiterates the problem that somehow our current practices in early literacy development, our present knowledge and children's ways of learning about literacy, are not reflected in assessment procedures. Teale states that this is the case in the US (Teale 1990 p 52) and this review of measures suggests that the same is so in the UK.

Teale suggests that informal assessment can be carried out by teachers through observation, collecting children's work, and making performance samples, (Teale 1990 p 53). He ends his paper with four challenges:

i. More needs to be known about early literacy development

ii. 'There is currently a paucity of high quality- informal measures of early literacy. Large scale efforts must be mounted to develop and field test informal assessment procedures'(Teale 1990 p56)

iii. The quality of informal measures is highly dependent upon teacher knowledge and Teale acknowledges that this necessitates vital Inservice education and training for teachers. Perhaps less of a problem for researchers in the field.

iv. To be successful in schools informal assessment must be legitimised and politically acceptable.

Teale concludes:

'It will not be simple but it is certainly possible to bring literacy assessment and literacy instruction together in developmentally appropriate ways'

(Teale 1990 p58)
D. Summary of characteristics of existing measures

In chapter 1 five desirable characteristics were set out for the development of a new measure in this thesis (p. 28). These characteristics have implications for the style and range of content of a new measure. In terms of style the new measure will need to: set the tasks in a meaningful context; be repeatable and have a scoring system. The content of the measure will need to cover aspects of literacy revealed by key strands of recent early literacy research: environmental print; book knowledge and early writing. If the measure has these features it is likely to be suitable for research involving comparisons (between groups, age spans and methods). Figure 2.2 summarises the instruments reviewed in this chapter in terms of four of the five stated characteristics. The existence of a further characteristic, the suitability of the measure for research involving comparisons can be determined on examination of figure 2.2.

Figure 2.2 Summary of instruments reviewed in this chapter in terms of some desired characteristics of a new measure of early literacy.

<table>
<thead>
<tr>
<th>Test</th>
<th>Sets tasks in meaningful context</th>
<th>Covers knowledge of environmental print</th>
<th>Covers knowledge of books</th>
<th>Covers early writing</th>
<th>Can be repeated</th>
<th>Has a scoring system</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jones &amp; Hendrickson 1970</td>
<td>-</td>
<td>✓</td>
<td>-</td>
<td>-</td>
<td>?</td>
<td>-</td>
</tr>
<tr>
<td>Clay 1972</td>
<td>-</td>
<td>✓</td>
<td>-</td>
<td>-</td>
<td>?</td>
<td>-</td>
</tr>
<tr>
<td>Thackray &amp; Thackray 1974</td>
<td>-</td>
<td>✓</td>
<td>-</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Downing &amp; Thackray 1976</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Ylisto 1977</td>
<td>✓</td>
<td>✓</td>
<td>-</td>
<td>-</td>
<td>?</td>
<td>-</td>
</tr>
<tr>
<td>Brimer &amp; Raban 1979</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>?</td>
<td>✓</td>
</tr>
<tr>
<td>Goodman &amp; Altweger 1981</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>?</td>
<td>-</td>
</tr>
<tr>
<td>Downing et al. 1983</td>
<td>-</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Clymer &amp; Barratt 1983</td>
<td>✓</td>
<td>-</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
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<tr>
<td>Heibert 1983</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>?</td>
<td>-</td>
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<tr>
<td>Goodhall 1984</td>
<td>✓</td>
<td>✓</td>
<td>-</td>
<td>-</td>
<td>✓</td>
<td>-</td>
</tr>
<tr>
<td>Manchester 1988</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
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<tr>
<td>Barrs et al. 1989</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
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<tr>
<td>Waterland 1989</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
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<tr>
<td>Sulzby 1990</td>
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<td>✓</td>
<td>✓</td>
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<td>✓</td>
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<tr>
<td>Kent LEA 1992</td>
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<td>✓</td>
<td>✓</td>
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<tr>
<td>LARR 1993</td>
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<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
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<tr>
<td>Wandsworth 1994</td>
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<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
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<tr>
<td>Infant Index 1995</td>
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<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
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<tr>
<td>SCAA 1996</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

KEY: ✓ adequate coverage  ● minimal coverage
The summary in figure 2.2 illustrates that though many instruments have some of the characteristics I seek in a new measure, many give minimal attention to some features. Of the measures summarised, there are three which adequately feature environmental print and a further three which give minimal attention to environmental print. Five give adequate coverage of book knowledge and a further eleven which include reading skills and some book knowledge items but at a level which can only be considered minimal. In terms of writing four give adequate attention and five feature writing at a minimal level.

Three current assessments emerge as the 'best fits' to my characteristics: *A Diagnostic Survey* (Clay 1972), *A Framework for Assessment* (Manchester 1988), and the *Primary Language Record* (Barrs et al. 1989). It is interesting to note that all three have been developed for the purposes of teaching. The latter two are designed for use with all children in the age range, and Clay's *Diagnostic Survey* (Clay 1972), though often used in research studies (Sylva and Hurry 1995, Neuman 1996), was designed for specific compensatory teaching purposes through the Reading Recovery programme (1979b).

The summary in figure 2.2 illustrates that these is currently no instrument which, in entirety, fulfils my five desired characteristics.

**E Some issues arising**

This chapter has reviewed ways of assessing the literacy development of young children, and given a picture of the evolution of early literacy assessment and the present situation. The considerable lack of available measurement tools in the field has been highlighted and leads to four areas of concern which will be discussed in turn.
1. Many existing ways of assessing preschool literacy development are out of step with what is now known about how children acquire their literacy.

2. The measurement of early literacy development is in its early stages

3. Culturally transferable tests are difficult to develop.

4. A new measure is needed

1. Many existing ways of assessing preschool literacy development are out of step with what is now known about how children acquire their literacy.

Goodman and Altwerger (1981) wrote...

'...evaluation of reading development based on knowledge of print in books alone is inadequate to gain insight about what children know about print in all environments'

(Goodman and Altwerger 1981 p27)

Most tests and assessments de-contextualise small elements of literacy for the purpose of assessment. Tests may focus a range of skills such as, letter recognition, knowledge of letter sounds, ability to match letters and sounds. Few tests provide a means of assessing or measuring children's literacy development which takes account of literacy as a complex behaviour. Children's reading and writing ability often depends on their understanding of the purpose and audience and the context in which they find themselves. Given the importance of context to the process of literacy learning, it could be argued that tests which disregard context and focus on small elements of behaviour which are part of reading or writing processes lack validity as tests of literacy.

2. The measurement of early literacy development is in its early stages

Despite three decades of research and development involving assessment of literacy skills, the fact that researchers are developing test material as and when they need it for
specific research projects shows that there continues to exist a need for naturalistic means of measuring early literacy development.

'The standardised reading readiness test we know of measures children's attitudes or concepts of reading, their knowledge of environmental print or their experience with books'

(Goodman and Altwerger 1981 p 31)

Teale (1990) argued that formal testing of early literacy development is inappropriate, while Sulzby (1990) offers some help in deciding what informal assessment might include. She points out that different researchers, using a range of methodologies, have now contributed to a resource of information about how young children develop their early literacy behaviour and understanding. This, argues Sulzby, gives validity to the claims about early and emergent literacy, and she suggests that we move from what we know about literacy, to develop assessment tools based on the same knowledge. Sulzby's position is that such assessment tools would be equally valid because they are derived from a valid base.

The literature supports the conclusion that the measurement of early literacy development would benefit from the development of a holistic approach with instruments which take account of the multifaceted nature of literacy itself. Batteries of tests, or tasks, would probably be most useful if comprehensive detail is to be obtained about a child's performance, but concerns with such a solution to the assessment problem would include its potentially time consuming nature.

Material exists for teachers, largely due to the fact that many Local Education Authorities have produced assessment material for early years. Literacy has been viewed as part of a whole curriculum approach to assessment. Less material is available for researchers who may seek ways of measuring, early literacy development of children aged 3 - 5 years, as part of experimental work involving comparisons
between groups of children, different methods and age bands. This problem needs to be pursued.

3 Culturally transferable tests are difficult to develop

Clay (1972a) and Goodman and Altwerger (1981) are examples of attempts to create a balanced set of measures for early literacy development. They are both different. Clay's material gives the impression of being transferable from one national context to another, yet it is less 'natural' whilst Goodman and Altwerger's Print Awareness Tasks cannot be directly transferred to other countries and contexts.

For any test of environmental print awareness to be useful in the UK, Europe, or the wider world it would have to include a different set of logos, therefore any test development would need to seek a way of selecting logos for such tests as a more important factor than the specific logos used. Only in this way could the test be adopted in different countries and have some form of standardisation, being culturally appropriate, with reduced bias, and 'fair' (i.e. appropriate to children living in the area). Even within the UK, taking only English words, there is a risk of cultural bias amongst children who speak English as a first language or who live in different parts of the same country.

The system of selection is therefore much more important, in terms of transferability, than the final list of logos used. To be used at intervals, logos may need to change so that there is continued relevance and they should therefore be selected according to the same criteria as the initial set. For example, by identifying from sales figures the ten best selling household products and confectionery and selecting a sample of these for use in the test.
4. A new measure is needed

In terms of my desired characteristics, the summary in figure 2.2 illustrates that there is currently no instrument which:

- is suitable for research requiring comparisons (between groups, age spans and experiences)
- covers the 3-5 year age range
- covers aspects of literacy revealed by key strands of recent early literacy research: environmental print, books and early writing
- can be repeated
- has a scoring system.

This chapter has reviewed in detail a number of instruments which attempt to assess aspects of early literacy. Chapter 3 will draw on this review to examine some purposes of assessing literacy.
Chapter 3

The purposes of assessing early literacy development

Introduction

This chapter considers the purposes of measuring and assessing children’s early literacy development. Decisions about which measurement instruments to use will depend on the reasons for assessment. Different groups of people, with varying interest in children's literacy development, require different measures. Their choice of measurement techniques will depend on their reasons for assessment and the purpose for which they intend to use the results. The way results are presented also reflects purpose, for example, if results are to be used to compare groups of children, performance of schools, and so on, statistical results will be required. Teachers, however, may be more interested in individual diagnosis of learning and development and therefore details of children's knowledge and understanding is of more use to them than a single, final score.

Some instruments outlined in chapter 2 are examined here in terms of their purpose.

The literature suggests five main questions:

1. Who assesses children's early literacy development?
2. Who is concerned with assessment results?
3. Why should early literacy development be assessed?
4. Which purposes are served by existing instruments?
5. Which purposes might be better fulfilled?

These questions form the basis of this chapter.

A. Who assesses children's early literacy development?

In the UK a number of different groups carry out some form of assessment of preschool children's literacy development. They include: class teachers, special needs teachers, headteachers, parents, psychologists and researchers.
Class teachers carry out formal and informal assessments as part of the teaching and learning process, to aid planning and also as a legal requirement at the end of Key Stage 1 in the National Curriculum.

Special needs teachers use diagnostic assessments in order to decide on necessary teaching and later to ascertain the effectiveness of that teaching.

Headteachers sometimes administer reading tests, including reading assessment tasks for National Curriculum end of Key Stage 1 assessment.

Parents assess their children's performance informally, though rarely formally. Their assessments are ongoing, they may compare their child's abilities with those of other children, checking what they can do and what they know.

Psychologists carry out diagnostic assessments of children who are considered to have particular needs.

Researchers need to carry out assessments: at the start of research projects and throughout projects; to evaluate intervention programmes; to investigate hypotheses.

With this diversity of assessors, purposes clearly vary. Teale (1990) considers assessment to be

...a process of gathering data and using those data to make decisions.

(Teale 1990 p 45)

This leads us to consider the greater diversity amongst those interested in the outcomes of assessment and the nature of decision making which ensues.
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B. Who is concerned with assessment results?

In addition to class teachers, special needs teachers, headteachers, parents, psychologists and researchers mentioned above, there seem to be two other main groups interested in the outcomes of early literacy development assessment: Local Education Authorities and politicians (particularly the Government of the day). In both cases children's assessment results are used as forms of accountability. In the case of politicians, assessment outcomes may be used to illustrate the effectiveness of certain political initiatives or a justification for government decisions. Test results can be used in the debate about standards of literacy, and also wider political issues such as teaching methods, or the politics of Local Education Authorities. Assessments which are of practical use to teachers and parents, may not provide the statistical information required by politicians as the information for debate or for decision making is often required in the form of statistical evidence. This leads us to a deeper consideration of the purposes of assessment.

C. Why should early literacy development be assessed?

Appropriate measures of children's literacy development are needed for work in three broad areas: teaching, research and policy.

1. Teaching

Measures include: charting development, monitoring progress, saving examples of work, and diagnostic testing.

Teachers need effective measurement tools which reflect teaching methods and support teaching and learning. They presently have no quantitative means of defending or advocating their practice. Gardner (1986) suggested that:
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...formal testing of reading is unlikely to be more reliable than some form of teacher judgement.... observing the response of individual pupils to a variety of reading assignments over a period of time provides the essential information from which an assessment of progress and ability can be made.

(Gardner 1986 p 67)

The kind of assessment advocated by Gardner does not provide the statistical data required to challenge the debate about standards but it may provide valuable information for teachers to make decisions about teaching and learning needs. However, current pressure to raise standards in primary education means pressure for teachers. Presently there is no means of knowing whether teachers, teaching methods, resources, parental involvement, or outside factors such as family poverty are in part or in whole responsible for levels of children's reading ability. Neither does there exist any reliable way of determining trends in young children's reading ability. The introduction of teacher appraisal also makes accurate measurement of children's abilities important. Whilst it may not be appropriate for teachers to be burdened with extra testing and measuring of children's literacy ability in order to satisfy political and policy pressures, it does suggest that there is a key role here for the second area of concern, that of research.

2. Research

As chapter 1 highlighted, there are many purposes for assessing literacy (page 25). This is also the case in the field of research in early literacy development, where different research methods can be used to focus on different research questions. As figure 1.1 (page 25) illustrates there are many aspects of literacy assessment, these may also be the focus of research, and research interests can include, for example:
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The purposes of assessing early literacy development

- literacy development
- literacy teaching and curriculum
- screening
- 'at-risk' identification and intervention
- 'value-added' by the school and school effectiveness studies
- comparisons between groups of children, methods and age spans
- individual, group or school case studies
- longitudinal studies

This thesis is concerned with the development of a measure which will contribute to research in one of the areas listed above, comparisons between groups of children, methods and age spans within the 3-5 year age range.

There are clearly many purposes for research in early literacy development and a range of measurement possibilities. Measures in this category include instruments for 

*evaluation* (of for example - research programmes, intervention studies, teaching methods and content) and instruments which could identify *trends* in literacy acquisition making it possible to understand relationships between different factors (for example- gender and literacy, literacy and poverty, teaching, learning and achievement).

### 3. Policy

Assessment which satisfied political purposes would need to provide statistical evidence of evaluation of initiatives and trends in literacy standards. Such figures might then be used to provide the public with information which make political points, local and national *league tables* of school performance which are then used to judge school and LEA performance are one example of such use. Assessments used for this purpose in the UK are devised centrally and administered by teachers as a legal requirement. The SCAA consultation on Baseline Assessment of children on entry to school (SCAA 1996), focused on two purposes for assessment, i) teaching and learning, and ii) the 'value-added' by a school. The subsequent report of that consultation endorsed the view that these two purposes were to be achieved within a single instrument (SCAA
1997). The theoretical credibility of measures may not be a major concern in this use of assessment in comparison to political needs to demonstrate 'failures' or 'successes'.

D. Which purposes are served by existing instruments?

Of the three main purposes for assessment; teaching, research and policy, some seem better served by existing instruments than others. From the review of the literature in chapter 2, it appears that a number of assessment processes exist for teaching purposes, (Manchester 1988, Barrs et al. 1989, Clay 1972a).

Whitehead (1990) argues that education and testing are different and separate activities:

...we and the children must be clear that these test exercises are separate from the real business of learning and doing in the early years classrooms. Playing the testing game must be organised in ways that produce the statistics while protecting the young learners from the stresses of competition and early failure. The activities of education and testing are different, they have different purposes and involve very different processes

(Whitehead 1990 p 93)

Teale advocates that systematic observation and performance sampling are:

...the most appropriate means of assessing young children to obtain information that promotes good literacy instruction

(Teale 1990 p.46)

Such measures as those suggested by Teale (1990 p 53) are encouraged in the UK with instruments available for teachers to use to assess children's literacy. They are not without flaws. Teachers are urged to encourage vigorous and committed writing, yet such qualities are not considered in terms of measurement. Armstrong (1990) is critical of the neglect of meaning in the National Curriculum. He quotes from the first report of the National Curriculum English Working Group who stated:
The best writing is vigorous, committed, honest and interesting. We have not included these qualities in our attainment targets because they cannot be mapped onto levels.

(DES 1988 para 10.19 p 48)

Meaning is also considered a crucial factor by HMI

Some of the best writing was a direct and sincere response to personal experience

(DES 1990 p 5)

The National Writing Project found that children did not see meaningful writing as a priority in assessing its quality:

...Often the superficial features of writing- neatness, presentation, correct spelling - were considered to be most important, and were used by children to assess whether writing was good and whether the writer was successful

(National Writing project 1989 p 17)

The notion of teachers carrying out informal assessment of early literacy development, rather than more formal testing, seems more 'in tune' with present philosophy in the UK and the USA of how young children develop literacy skills. Chittenden and Courtney (1989) suggested ways of 'documenting' children's literacy development, following uniform criteria, but allowing for flexibility according to development and performance. They argued that this was a more appropriate way of generating information about children's progress in literacy development than testing.

E. Which purposes might be better fulfilled?

Few appropriate measures exist for research studies in early literacy development which require statistical outcomes (specifically, experimental studies involving comparison between groups of children, comparison of methods and comparison between age spans). There is little which can be used for quantitative evaluation either
of teaching programmes (including National Curriculum), curriculum initiatives, or other interventions. Measures for some specific research purposes can require a different kind of accountability, a different set of characteristics and different level of detail. Where children's literacy development is measured as part of a research initiative, issues of standardisation, validity and reliability may also need to be resolved. Measures often need to be carried out in a short space of time. Because of this, the types of assessment procedures used by teachers who observe and assess their pupils over a period of time, and through daily interaction with them, cannot be easily used by researchers who require a briefly taken measure. Present measures of preschool literacy which satisfy researchers who require a brief assessment do not always reflect current understanding about early literacy development in which researchers are now increasingly interested.

Sulzby (1990) points to this problem when she states:

The status of research on the assessment in young children's writing currently is thriving but only just beginning

(Sulzby 1990 p85)

As research extends the knowledge base of early literacy development, so approaches to assessing and measuring literacy need to change to take account of this. Morrow and Smith (1990) are clear about the place of assessment and measurement in education:

Assessment and measurement should match educational goals and practice. Many early literacy researchers argue that traditional standardised tests do not reflect the practice that has evolved from the new theories based on research. In addition, standardised tests are only one form of measurement; we have come to realise that these alone are not adequate assessments of total literacy development

(Morrow and Smith 1990 p3/4)

Perhaps measures used by researchers need to be informal in their administration, but formalised in their construction and analysis. Credible research can depend upon appropriate and thorough measures. Assessments which rely upon observations of children using literacy do not always fully satisfy this criteria. There have been some
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Attempts to develop assessments which draw upon current research into children's literacy (Goodman and Altwerger 1981; Goodall 1984; Jones and Hendrickson, 1970) but these can present some problems. Such tests as these need to be more reliable, with a clear method for selecting test books and logos and criteria for presenting the logos in grades of difficulty to children. Scoring needs to be developed and ways need to be found of interpreting the data and relating it to literacy behaviours.

Problems of assessment of reading of seven year olds in the UK are apparent in the development of a national testing programme. The tests were rewritten after the first year and continue to be revised. Problems include massive administration work for teachers, time consuming activities and unresolved issues of standardisation. If research can begin successfully to address the issue of measurement of early literacy development, this may have an effect on the information which then becomes available through research to policy makers.

A key problem has emerged:

- **Measures are needed of early literacy development which are appropriate, holistic and relevant over time.**

This chapter has discussed issues of purpose in early literacy measurement. Chapter 4 will discuss the research questions that now form the basis of this thesis and the methods that will be used to investigate them.
Chapter 4

Research questions and methods

In this chapter I review the main points from earlier chapters, set out research questions which will govern the research to be reported in this thesis, and discuss the methods I shall use to answer them.

A. Research Questions

Chapter 1 discussed new views of early literacy development and the need for measurement. It suggested theoretical, political and educational reasons why the assessment of early literacy development needed to be addressed. These were underlined by developments during the 1990s in nursery education (DFEE/SCAA 1996, SCAA 1996).

Chapter 2 reviewed approaches to measuring and assessing early literacy development and indicated a lack of measurement tools. Four main issues were highlighted: that many existing ways of assessing preschool literacy are out of step with what is now known about how children acquire literacy; measurement of early literacy development is in its early stages; that culturally transferable tests are difficult to develop; and finally the need for a new measure.

Chapter 3 considered three main purposes for assessing early literacy development - teaching, research and policy. It showed that a number of assessment processes exist for teaching purposes but that few appropriate measures of early literacy development exist for the purposes of research where a statistical outcome is required. Chapter 1 discussed the aspects of early literacy development which now interest researchers. Present measures of preschool literacy which are used by researchers do not reflect those current interests. Chapter 3 suggested that if research can address the issue of measurement of early literacy development, this may have an effect on the information
which then becomes available through research to policy makers. A key problem was identified at the end of chapter 3: 'measures are needed of early literacy development which are appropriate, holistic and relevant over time'. The review of the literature and consideration of purposes shows that measurement instruments are needed for particular research studies involving, for example, the evaluation of interventions or comparisons between groups of children, methods and age spans. Many existing measures do not match the theoretical basis upon which many research studies in early literacy development are designed. This problem provided the springboard for the rest of the thesis and influenced the formulation of other research questions.

I identified six main research questions:

1. **How is early literacy development currently assessed by teachers?**
   This would show what methods: observation, portfolios, testing, teachers currently used to assess literacy.

2. **What is the focus of teachers' early literacy assessment?**
   This would show what aspects of early literacy development were assessed by teachers and how these match with new views of literacy development.

3. **What are teachers' purposes for assessing early literacy development?**
   This would illuminate teachers' thinking on the reasons for assessment, and the factors that governed their assessment practice.

4. **What are teachers' needs in terms of assessment of early literacy development?**
   An understanding of teachers' needs would help to find ways of understanding more fully the nature of the problem.

5. **How can researchers better assess early literacy development?**
   This would be a major undertaking as a useful answer would necessitate the development of a new measure.
   **This question forms the major part of the thesis.**

6. **Can early literacy development assessment instruments developed for researchers also be useful to teachers?**
   This would provide some understanding of the potential links between research and practice.
B. Research Methods

Having decided upon the research questions I considered the best methods for investigation. This section discusses my dilemmas, choices and decisions.

Selection of educational research methods is a complicated process. Convention and tradition and the need for rigour dictate that clarity of 'method' in educational research is essential. It has been argued (Carr, 1995) that distinct paradigms and scientific method are less appropriate for educational research and that this creates a demand for divisions between researchers and teachers. Naturalism (or normative) and interpretive approaches, he argues should be repudiated and the development of research that is 'both educational and scientific' should be the goal.

Text books on educational research methods offer information on 'contrasting' approaches (Cohen and Manion 1994) but in reality, working with teachers to find answers to my research questions I cannot select one research paradigm to answer all my questions, choosing either a normative or interpretive approach. It is unrealistic to select 'either' the 'objectivity' of a normative model 'or' the 'subjectivity' of the interpretive model. In the methods I shall discuss I move between these broad approaches selecting the most appropriate from each for my research questions. The issue is not which paradigm to use but when to use each one (Merton and Kendall 1986). The selection of methods is crucial because they form the bridge between my research questions and the data which may provide some answers.

The first four questions formed a cluster of research concerns that could be investigated together.

- **Question 1.** How is early literacy development currently assessed by teachers?
- **Question 2.** What is the focus of teachers' early literacy assessment?
Chapter 4  
Research questions and methods

Question 3. What are teachers' purposes for assessing early literacy development?

Question 4. What are teachers' needs in terms of assessment of early literacy development?

To answer these questions I needed information from teachers and a way of finding out about their practice and thinking. I needed to find a way of communicating with them. Bringing groups of teachers together and working with them to discuss the questions was one option but there were two reasons why this might have been less than effective. First, teachers were fully occupied with meetings relating to the introduction of the National Curriculum and Assessment and it was likely that they may not have time to respond to my invitation. Second, I wanted specific and detailed information about how individual schools approached early literacy assessment, not a collective view moulded as the result of group discussion and interaction. Some form of survey seemed to be a workable tool that would give me the kind of information I wanted.

Question 1: 'How is early literacy development currently assessed by teachers?', and question 2: 'What is the focus of teachers' early literacy assessment?', would need an analysis of teachers' current record keeping and assessment documentation as well as information from the teachers themselves about processes. It was unlikely that the information I needed to answer question 3: 'What are teachers' purposes for assessing early literacy development?' and question 4: 'What are teachers' needs in terms of assessment of early literacy development?' would be available in school documentation. For answers to these questions I needed information from teachers that could best be derived from questionnaire or interview, these methods being the most appropriate to elicit responses from teachers on different aspects of their assessment practice and needs.
I decided to take questions 1, 2, 3 and 4 together and to investigate them by surveying schools with children in the 3-5 age range in one Local Education Authority. I needed to decide whether to conducted the survey by interview or questionnaire.

**Interviews**

There were a number of decisions to be made about the form of any interviews: arrangements, format, the length of time, my role as interviewer, method of collecting data, ethical considerations, ownership. Fontana and Frey (1994) offer a summary of interview styles, settings, roles, question formats and purpose. This suggests that the best approach for my purposes would be a semi-structured interview. Preset questions could be designed but the interviewer can allow the interviewee to take some control, using the questions as aide memoirs and thus maintaining a common focus for each interview whilst obtaining individual and unique data about each school in the survey.

Methods of recording data was another factor to consider, balancing the desire to preserve the detail of respondents with their need to feel comfortable with the process. The two main options were taking notes or tape recordings. Lofland (1971) argues that regardless of the circumstances one should: take notes regularly and promptly; write everything down, no matter how unimportant it may seem at the time; try to be as inconspicuous as possible in note taking, and analyse one's notes frequently. Since that advice in the 1970s, tape recorders have become smaller and much more discreet, though taped interviews do take time to transcribe after the event. Technology can go wrong so written notes would be needed to back up any recorded interviews. It would seem reasonable to offer interviewees the choice of being tape recorded or simply having their comments noted as we spoke, but to aim to tape as many interviews as possible.
Questionnaires

A postal questionnaire could be used to investigate questions 1, 2 and 3. A number of factors as discussed by Hoinville and Jowell (1978) would need to be considered: questionnaire design to encourage respondents to participate; clarity of wording to ensure that respondents complete the questionnaire as intended; careful selection and organisation of questions to maximise co-operation. I would also need to consider my system for initial mailing, contents of a covering letter, follow-up procedures and any incentives.

A disadvantage of using a questionnaire was its inflexibility for additional clarifying of statements or comments respondents might make. Questions, however well phrased, even after piloting and revisions could be misinterpreted. Respondents may well write less than they would say in face to face communication and information offered cannot be further probed in an interactive process.

Time

Another factor to consider in deciding how to carry out the survey was time. Interviews would be lengthy as would arrangements, visits to schools, transcription and analysis. Questionnaires could reach more people but there was an unpredictable factor of the number of returns.

A survey by interview

I wanted to obtain as much detail as possible so, having considered the advantages and disadvantages I decided that face to face, prearranged, semi-structured interviews were more likely to provide this than the other alternative which was a postal questionnaire. Hoinville and Jowell (1978) argued that postal questionnaires, properly designed do not necessarily result in a lower response rate than that obtained by interview but given the climate in the early 1990s I felt that this might not be the situation in this study.
When making decisions about sampling I had to take account of the time available and therefore the number of schools I could visit to carry out interviews. I worked on the basis of one interview per half day, allowing for such things as travelling time and organising data collected before moving on to the next school. I was able to allocate 15 days over two terms to conducting the interviews so could visit 30 schools over two school terms. I opted for a form of 'quota sampling' (Bailey 1978), which allowed me to draw from schools which catered for children in the three to five age band in different kinds of classes and groupings. Decisions about which schools to interview within each 'quota' employed two other kinds of sampling, selecting schools using 'cluster' and 'convenience' sampling strategies. That is to say, my first priority was a range of under fives settings, the second was a geographical spread and finally a few schools were included because I had other professional reasons for visiting them and was able to arrange interviews at the same time.

Interviews in 30 schools represented 25% of schools with children in the 3-5 age range in one Local Education Authority. Questionnaires could have reached more people. I could have sent questionnaires to 100% of schools in the LEA but returns were not guaranteed and at the time teachers and head teachers were complaining bitterly about overwhelming workloads as the impact of the Education Reform Act (1988) took hold in Infant and Primary schools. A poor return was therefore likely in terms of quantity and quality of responses.

I therefore opted for a survey by interview and planned to collect appropriate assessment documentation where possible. Interview data and assessment documentation would be used to answer question 1 and interview data alone to answer questions 2 and 3. This survey would provide data from which interpretations of practice including 'the perspectives and voices of the people' being studied (Strauss and Corbin 1993 p. 274). However, I would accept the responsibility for my
interpretation and not simply 'report or give voice to the viewpoints of the people, groups or organisations studied' (Strauss and Corbin 1993 p274). Issues emerging from this survey would be used to inform the subsequent development of this study. Chapter 5 presents details of the processes and outcomes of the survey.

**Question 5. How can researchers better assess early literacy development?**

There were a number of ways to pursue this major question all of which were likely to lead to recommendations for new ways of measuring early literacy development.

One option was to bring together groups of teachers to discuss their current practice and suggest the elements of literacy and processes that should be included in any form of assessment that researchers might develop. This approach has been used successfully by Drummond (1993) and Drummond, Rouse and Pugh (1992). If I followed such a route recommendations and ideas could have been revised and refined until some form of assessment was agreed upon. This might then have been tried by researchers and further developed. The climate of teachers being heavily overworked discouraged me from developing this method of working. Also I was not confident that such a difficult process could be adequately handled by a group, many of whose members may lack specialist theoretical knowledge because other pressures had eroded professional development and theory in some cases was weak.

Another option was to examine an existing group reading test such as LARR (NFER 1993) and find ways of extending this to include other strands of literacy, leading to the development of a group literacy test. This seemed a less attractive proposition for two reasons: I had doubts about the validity of the LARR test, and I believed that research required measures of individual literacy ability which did not rely solely on 'pencil and paper' tests.
A third option, and my chosen method, was to draw on existing measures, research and knowledge of current practice to develop a new measure for use with individual children and to refine and develop it until it was sufficiently well developed to be used as a measurement tool in research studies. I decided to develop and trial a first version, using the ideas of 'strands' of literacy and tried and tested elements of previous research (chapter 2) that fitted with current research interests and that measured literacy by using literacy tasks. I planned to involve teachers in some later trials and subsequent development as the need arose and as their time permitted.

This process drew on practices from action research: defining a problem, planning and implementing 'action', redefining the problem, planning further action and so on (Bassey 1986, McNiff 1988). McNiff (1988) and Whitehead and Foster (1984) argue that teachers should take control of the research as a means of self and professional development. By working with teachers to answer this and my other research questions I was not offering control of the research to teachers as advocated by action researchers, but I was working with teachers to find a better way of assessing early literacy. Teachers had much to offer researchers at this point they had developed their early literacy teaching practices from innovative research and were in the best position to advise a researcher on whether or not certain ideas worked or not. In asking teachers to work with and comment on assessment measures, I was placing them in the role of teacher researchers and inviting collaboration between the representatives of the teaching profession and developers of current practice and myself in the role of a researcher. This approach was most likely to produce a workable measure that was acceptable to children, teachers and researchers.

This point in the study would call for the use of quantitative as well and qualitative methods. Teachers' views would be best analysed using qualitative approaches, sifting and sorting their comments until themes and trends emerged (Glaser 1978, Walker
1985, Miles and Huberman 1984), and children's score sheets would be best analysed using a statistical package. This illustrates the complexity of decision making in relation to research methods and the importance of flexibility so that the best method for each point in the study can be selected.

Chapter 6 sets out the beginning of the process for the development of an assessment instrument and subsequent chapters chart the development of the new measure.

Question 6. Can early literacy development assessment instruments developed for researchers also be useful to teachers?

This final question is an interesting one. Earlier chapters have suggested that teachers have the tools they need to assess early literacy development. I am interested to find out whether a new measure, developed primarily for researchers to use in research studies will be of use or interest to teachers. This question gives an opportunity to look at possible bridges between the work of teachers and researchers and the potential contribution of research to practice. Teachers views are necessary to answer this question. They will be sought through a process of co-operative working that will result in teachers discussing and writing about their views of the measure they try out during the development of the instrument.

Ethics and Ownership

Finally I want to consider issues of ethics and ownership, crucial considerations for any research involving people and this research involved teachers and young children.

Denzin and Lincoln (1993) wrote of the difficulties that qualitative researchers face both methodologically and ethically:

The age of value-free inquiry for the human disciplines is over, and researchers now struggle to develop situational and trans-situational ethics that apply to any given research act.

(Denzin and Lincoln 1993 p.12)
Their expression of the problem does not characterise my concerns in undertaking the research reported in this thesis. I was clear that there were ethical considerations and wanted to be clear about the ethical principles on which the work rested. To me the study seemed straightforward but there were points, as in every piece of research that needed clarity and agreement and I drew on the British Educational Research Association 'Ethical Guidelines for Educational Research' published in 1992 following adoption by the Association in that year. Those guidelines state that:

...all educational research should be conducted within an ethic of respect for persons, respect for knowledge, respect for democratic values, and respect for the quality of educational research.

I have attempted to apply the spirit of this statement to the research reported in this thesis and using the BERA guidelines I developed the following ethical code for this research study.

'Responsibility to the research profession',
maintaining the integrity of research design and an honesty about data collection, analysis and reporting.

'Responsibility to the participants',
clear and concise information about the study to teachers; consent of teachers, head teachers and parents where appropriate; honest and understandable information for children; the right to withdraw at any point.

'Responsibility to the public',
appropriate reporting of findings; the right to anonymity and where this was not possible clear agreement about identification.

'Publication',
clear information to participants that the research would be written up, first as a thesis and later in other published forms that would then be publicly available.

'Intellectual Ownership',
clear information that ownership rested with me as researcher and author; contributions of the schools, teachers and children to be acknowledged, though not by name as this would contravene confidentiality.
In this chapter I have set out six research questions and decisions about research methods that form the basis for the rest of this thesis. Chapter 5 focuses on the first four research questions and documents the survey which was devised to answer them.
Chapter 5

Survey of Practice in Early Literacy Assessment in Schools

A. Introduction and research questions for a survey

B. Details of survey
   1. Selection of schools
   2. Interviewees
   3. Interviews
   4. Data
   5. Analysis
      a. of interviews
      b. of record keeping and assessment documentation

C. Main findings from the survey
   1. Teaching
      a. Continuity and progression
      b. Parental involvement
      c. Record keeping and assessment tools
         i. Procedures and processes
         ii. Philosophy - need to record literacy
      d. Teachers purposes for assessing and recording
         i. Tracking, mapping and plotting development
         ii. To aid teaching and learning
         iii. National Curriculum Assessment
   2. Research
   3. Policy
      a. Reaction to government policies
      b. Assessment as a means of accountability
   4. Teachers assessment needs
      a. Time
      b. In Service Education and Training (INSET)
         i. The need for INSET
         ii. The effect of INSET
      c. LEA support
   5. Record keeping and assessment documentation

D. Conclusions
A. Introduction and research questions for a survey

The literature discussed in chapter 2 showed that a range of assessment procedures were available and chapter 3 discussed, from a theoretical viewpoint, some issues relating to the purposes of assessing early literacy development. It was suggested that existing measures may be adequate for teachers, but there may be a need to find new ways of assessing meaning in writing. Chapters 2 and 3 suggested that teachers may have the tools available to carry out holistic assessments of early literacy development over a period of time using mainly observation and reflection, but researchers certainly need better ways of measuring the different strands of early literacy development. These suggestions needed to be checked against existing practice to see whether I was right in my supposition that it was researchers who had the main need, not teachers.

A survey of early literacy assessment in schools was carried out to investigate how the points raised in previous chapters related to the work of teachers, and whether the gap between teaching and assessment procedures identified earlier exists in practice. This chapter gives details of the methodology and discusses issues which arose from the survey.

B. Details of the Survey

1. Selection of schools in the sample

30 schools (25%) from an LEA in the North of England were chosen to participate in the survey carried out during the period from September 1991 to February 1992. Two criteria were applied:

   i. children age five and under attended the schools

   ii. a range of socio-economic areas were represented in the sample.

Sampling was designed so that three distinct groups of schools were targeted to cover the following bands of age range (Table 5.1).
Chapter 5
Survey of Practice in Early Literacy Assessment in Schools

Table 5.1 Three age bands and numbers of schools in each

<table>
<thead>
<tr>
<th>band</th>
<th>age range</th>
<th>number of schools</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>'under fives' only</td>
<td>5</td>
</tr>
<tr>
<td>B</td>
<td>'fives and over'</td>
<td>5</td>
</tr>
<tr>
<td>C</td>
<td>'under fives' and 'fives and over'</td>
<td>20</td>
</tr>
</tbody>
</table>

This division of types of school and their age ranges represented (see table 5.2) reflected the proportion of these types of schools in the LEA where the survey took place.

Table 5.2 Age ranges of children and proportion of each 'type' in the sample selected for the School Early Literacy Assessment Survey

<table>
<thead>
<tr>
<th>school type</th>
<th>age range (in years) of pupils attending</th>
<th>number and proportion of schools in survey</th>
<th>number and proportion of each type of school in the LEA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nursery</td>
<td>3 - 5</td>
<td>5 (16.5%)</td>
<td>6 (5%)</td>
</tr>
<tr>
<td>Nursery Infant (First)</td>
<td>3 - 7 (8)</td>
<td>11 (36.5%)</td>
<td>34 (29%)</td>
</tr>
<tr>
<td>Nursery F(I) and M (J)</td>
<td>3 - 11 (12)</td>
<td>9 (30%)</td>
<td>25 (21%)</td>
</tr>
<tr>
<td>Infant (First)</td>
<td>4(5) - 7 (8)</td>
<td>2 (7%)</td>
<td>22 (19%)</td>
</tr>
<tr>
<td>Infant (F) and Junior (M)</td>
<td>4 (5) - 11 (12)</td>
<td>3 (10%)</td>
<td>31 (26%)</td>
</tr>
</tbody>
</table>

| Total number of schools in survey | 30 (100%)                             |
| Total number of schools from which the sample is drawn | 118 (100%)                             |

2. The Interviewees

At each school the headteacher, or the teacher responsible for language, assessment or the nursery was interviewed. In seven cases two people offered to be interviewed. All interviews were held with a person with some responsibility for decision making in relation to assessment of literacy. Table 5.3 gives details of the persons interviewed.
Table 5.3 Persons interviewed in the School Early Literacy Assessment Survey

<table>
<thead>
<tr>
<th>Persons interviewed</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>headteachers</td>
<td>18</td>
</tr>
<tr>
<td>nursery teachers</td>
<td>14</td>
</tr>
<tr>
<td>language co-ordinators</td>
<td>2</td>
</tr>
<tr>
<td>deputy head teachers</td>
<td>2</td>
</tr>
<tr>
<td>infant co-ordinators</td>
<td>1</td>
</tr>
<tr>
<td>total interviewed</td>
<td>37</td>
</tr>
</tbody>
</table>

3. The Interviews

Interviews were arranged with the agreement of the headteacher and the assessment co-ordinator for the LEA. Each interview followed a similar pattern. I had a set of prepared questions, (Figure 5.1). These were either considered in order or used as an aide memoir during the interview.

Figure 5.1 Interview questions for the Schools Early Literacy Assessment Survey

<table>
<thead>
<tr>
<th>Question</th>
<th>Question</th>
</tr>
</thead>
<tbody>
<tr>
<td>Question 1</td>
<td>Do you have any records for early literacy development or bits of reading and writing development? If so, can I see them, take copies? If not, how do you keep a record of children's early literacy development - e.g. saving work, tests, teachers notes. Look at records together if possible and note how the record works and who contributes and when (how often) it is done. Do you feel this record serves your purposes?</td>
</tr>
<tr>
<td>Question 2</td>
<td>Do parents contribute to record keeping of early literacy?</td>
</tr>
<tr>
<td>Question 3</td>
<td>Do children play any part in their own assessment? For example, do they make comments about what they like or can do?</td>
</tr>
<tr>
<td>Question 4</td>
<td>Is literacy the only subject based record you have or are there similar records for other subjects (for this age group). If so why...what?</td>
</tr>
<tr>
<td>Question 5</td>
<td>How do your literacy records fit with National Curriculum and Assessment? Have you developed your current records for literacy since the National Curriculum Assessment?</td>
</tr>
<tr>
<td>Question 6</td>
<td>What would you say are the main purposes of literacy record keeping and assessment at this time of children's development?</td>
</tr>
<tr>
<td>Question 7</td>
<td>What would you really like to help you with recording literacy and its assessment? What would really help?</td>
</tr>
<tr>
<td>Question 8</td>
<td>Is there anything else about literacy, assessment and record keeping which you think is important?</td>
</tr>
</tbody>
</table>
The questions in figure 5.1 were used on a trial basis with three schools, one nursery school, one infant school and one nursery, first and middle school. These schools represented 10% of the planned sample, and each of the three categories of schools as described in Table 5.1. Teachers in these pilot schools were willing to comment on questions as well as answer them.

Slight modifications were made, not to the content of the questions, but to the way in which they were presented. For example, the trialling showed that it was better to begin with question 1 and continue by talking about responses to that initial question, allowing the interviewee to continue. The subsequent questions were used by the interviewer to ensure that all the points to be covered were raised during the interview. This semi-structured approach reduced the need to interrupt the interviewees to ask another question but ensured that all the points were raised at some point during the interview.

In all three of the trial schools interviewees commented that question 7 was difficult to answer. This was different in character to the other questions which asked for details of current practice. Question 7 asked what teachers would like to help them with assessment. Despite the feedback from trial schools, the question was retained in the interviews, and yielded some interesting replies. Most interviews lasted between 30-40 minutes.

4. The data

I offered the interviewees the choice between me taking notes or tape recording the interviews. Depending on the interviewees' preference some interviews were taped and for others detailed notes were made and a full record made soon afterwards. This resulted in 83% of interviews being taped and fully transcribed. Two sample transcripts are included in Appendix 5A. In 20 schools examples of record-keeping documentation was also collected and samples of these are included in Appendix 5B.
5. Analysis
   a. interviews

In analysing, as in collecting, the interview data, I adopted methods which would enable me to understand teachers' perspective. Methods were selected in order to identify key issues which were pertinent to schools and teachers at the time of the survey.

All interviews were transcribed by me or written up in full, with codes on each response which enabled me to identify the question, school and teacher to which to which the response related. Having read, reflected and re-read the interview data many times, (at least 8 times and in many cases more than this), I proceeded to do two things:

- physically cut up and sort the responses - grouping and regrouping them as themes and issues emerged.
- highlight frequently used words and phrases to make it possible to identify connecting as well as conflicting ideas.

During these process I kept notes of emerging themes on another set of transcripts, and continued to regroup the responses until a clear set of issues and some main themes emerged. This form of analytical memoing (Glaser 1978 and Walker 1985) enabled me to note issues as they arose and eventually define key themes arising from the data. The facility to identify which school and teacher gave me each response meant that each full interview transcript could be consulted to make notes of emerging themes or groups and to ensure that the context and meanings of responses were not misinterpreted or misrepresented.

This approach enabled me to extract themes from the data through a series of processes (Miles and Huberman 1984). The process of working through the data by repeatedly reading, grouping, checking transcripts, making notes, re-reading and
regrouping, resulted in a set of themes and issues which arise out of the stated practices, concerns and interests of teachers.

The final stage of interview analysis involved a form of cluster analysis (Everitt, 1974). I took the emerging themes and issues, wrote each one on a separate card and grouped them into broader key themes. I hoped by this process to illuminate the key issues and the connections between them (Miles and Huberman 1984).

b. record keeping and assessment documentation

Twenty of the thirty schools in the sample offered copies of their record keeping and assessment documentation. Simple quantitative analysis was used to ascertain two things:

- how many schools included writing in their early literacy assessment documentation
- whether schools used observation, checklists or tests in their literacy assessment documentation

This analysis was carried out by the development of an analysis format printed in table 5.6 (page 115). Each record was read and checked for the features identified above.

C. Main Findings from Survey

The main findings from the survey can be discussed under three broad areas: Teaching; Research and Policy.

1. Teaching

A number of points that related to assessment as part of the practice of teaching were raised. These are discussed here in terms of four broad areas: continuity and progression, parental involvement, record keeping and assessment, and teachers' purposes for assessing and recording.
a. Continuity and progression

The five nursery schools and the twenty nursery classes which participated in the study all had record keeping systems specific to the age group of the children they taught. All the nursery classes had record keeping systems which were on the whole separate from those used in the school to which they were attached.

Ten nursery teachers saw records as a way of ensuring continuity of learning experiences between nursery and reception classes.

_I hesitate to say passing it on, but it is important. Passing on to other adults working with children so they are aware of what they can do - continuity of learning and experience._

Nursery Teacher

_...for passing on to other teachers - they're not starting with a blank slate. Not all these 4 year olds will need to learn initial sounds, some know them, learned them at home! So I can tell the reception teacher that._

Nursery Teacher

_Our new records fit well with programmes of study so they are really useful for transition into school. Teachers in school like to know what they can do._

Nursery Teacher

_The literacy record goes from reception to 8 years. This next year we will start it in the nursery, but one or two details will need to be added to take account of the literacy development of very young children._

Headteacher 3 - 8

_We have seen children who are really into writing now - I think it will be important to send examples of this through into school so that their teachers can see what they've done so far._

Nursery Teacher

There was one case where the separation between nursery and school meant that there was little communication about records:

_I've never seen the school records. I've no idea what records other than Records of Achievement and Attainment targets they have._

Nursery Teacher
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Survey of Practice in Early Literacy Assessment in Schools

The use of Records of Achievement and Experience which involved saving examples of children's work, teachers' observations, and comments from teachers, children and parents was a way of providing some continuity from nursery to school and eight of the 20 nursery classes had some form of Records of Achievement and Experience (RAE) established. This was not surprising as the LEA had focused on RAE as a major initiative and 90% of schools in the LEA had begun to implement the system.

*We keep track of writing development through work saving as part of RAE (Records of Achievement and Experience)*  
Headteacher 5 - 7

*RAE begins in nursery and continues through school*  
Nursery Teacher

*Work saving including quite an amount of written work is part of RAE.*  
Headteacher 5 - 11

*Nursery has taken the lead in Records of Achievement, started it off and sustained involvement throughout the school*  
Nursery Teacher

In a small number of cases where RAE was a 'whole school' initiative the nursery had not been involved.

*I don't know why we don't start with Records of Achievement in the nursery (it runs through the rest of the school)*  
Deputy Headteacher 3 - 11

b. Parental involvement

Nine schools said that they involved parents in recording children's literacy development. In six schools parents of children aged five and over made written comments in children's personal reading note books after listening to them read at home. Teachers also commented in these books, recording their observations of children's reading in school.

*They are useful for informing parents*  
Nursery Teacher
For parents to contribute to children's learning and development

Nursery Teacher

It's for parents - so you can say 'look how she's getting on with this'

Nursery Teacher

There is a space for parents to comment on the record. They can see it termly, or perhaps just once - it depends

Nursery Teacher

In one case there was a strong feeling that professional trust of the teacher by parents meant that sharing records was neither appropriate nor necessary.

Parents trust us - they trust the teachers to teach them - it's like me trusting a surgeon if I need an operation. They don't need us to account to them, they see us as the people who have the skills to teach their children and let us do it, it's about trust.

Headteacher 3 - 8

A further three schools involved parents of children aged three to five years in commenting on and recording aspects of their children's literary development, saying things like:

The jigsaw is something staff could use with parents

Nursery Teacher

I'd like to be able to draw more on what parents say

Nursery Teacher

We give it to parents and explain how different bits fit together. We ask parents to fill this in and return to us. Then nursery staff fill in things they've noticed too, then it goes home again - it goes backwards and forwards during their time in nursery.

Nursery Teacher

c. Record keeping and assessment tools

The survey found no examples of teachers of three to five year old children, carrying out formal assessment or measurement procedures related to children's literacy. All the work carried out focused on observations, saving examples of children's drawing and
early writing, and making written records based on this type of evidence. Teachers seemed content that this was adequate for the age of children they worked with, and some had actively developed different ways of recording development.

i Procedures and processes

Some comments suggested that teachers saw the importance of observing and recording in some detail aspects of children's literacy development.

Two language support teachers developed a record for bi-lingualism... Bilingual records for reading, speaking, listening and writing were developed since the National Curriculum. They are all into observation, record keeping and emergent literacy, but it is having time to share all that adequately.

Nursery Teacher

We record separately in reception year because there are so many little steps of development. In the rest of school we record language and literacy on a sequential development ladder using teachers observations.

Headteacher 5-7

For literacy there's too much - it's too broad - so saving work gives a more whole approach

Infant co-ordinator 3 - 11

In one case the school felt that literacy was important, but other pressures had meant that they could only acknowledge that it was important to develop and assess it in the early years.

It is awful to say but I can only say we're thinking about it. I know that the National Curriculum Attainment targets are inadequate for recording children's literacy development but at the moment we have nothing else.

Deputy Headteacher 3 - 11
ii. Philosophy - the need to record literacy

There were varying responses which related to thinking about the importance of recording early literacy development. Some teachers felt it was not necessary to record it.

*For the moment we don't record it (literacy development), it's obvious, so we don't really need to write it down.*

Nursery Teacher

Other teachers felt that it was important to record literacy development in detail, particularly because of their teaching and learning methods and strategies.

*We have quite a detailed literacy record because if you have reading with story books then you have to keep track of where children are and to inform teaching and learning.*

Headteacher 5 - 7

Teaching children for whom English was a second language was a crucial issue for two schools.

*80% of the children speak English as a second language. So it is important to record little bits of reading behaviour.*

Nursery teacher

*It is also (the record) a good way to do justice to children's literacy development when English is their second language.*

Nursery teacher

Keeping a child centred philosophy in teaching, learning and assessing was mentioned by three schools.

*We wanted to develop a system which kept children at the centre of assessment and kept process as well as subjects in view.*

Headteacher 5 - 7

*You have to see what children are learning, then assessment and record keeping is part of that.*

Language co-ordinator 3 - 8
You need to build on what children can do - work from inside out not outside in.

Headteacher 3 - 7

The importance of ensuring that philosophy was 'in tune' with assessment was alluded to by several schools and mentioned specifically by one headteacher.

Records should match the philosophy. Many things - like tick boxes don't do that

Headteacher 3 - 7

Another headteacher felt that the assessment of literacy was a fundamental role of education.

I think literacy is fundamental, in our school we would be better thinking about good literacy assessments rather than being burdened with hundreds of Attainment Targets. You can tell from looking at a child's literacy how well they are doing generally.

Headteacher 3 - 11

d. Teachers' purposes for assessing and recording literacy

Interviewees were asked what they felt to be the main purposes of assessing and recording children's literacy development. 18 different purposes for assessing and recording literacy were given by interviewees, some mentioned several. These fall into two categories Teaching and Policy with six areas within those that were the main focus of comments (see table 5.4). Specific comments and reasons for mentioning the purposes are presented in the table and discussed more fully in this chapter.
The responses show that there are common concerns relating to teaching and other policy issues. These will be discussed in the relevant section.

Three teachers responded by saying that for children under five literacy was not relevant. One said that she did not think about purposes of assessment in this area, the other specified what she felt it was inappropriate to assess. Such views reflect the traditional view of literacy held by nursery teachers and reflected in studies by Taylor et al. (1972) and Hannon and James (1990).

*It's a bit early to look at literacy in detail, but early skills like matching, one to one, sorting and recognising shapes can be acquired and recorded.*

Nursery teacher
Not to pressure them into learning something that is better left until later. We do a lot of emergent literacy—good quality books and lots of writing in play. I have a worry thought that we might be doing too much—if we do all this in nursery—what will happen in school? This downward pressure is on us all the time, so we do it in planning and play but it shouldn't be assessed in nursery, it's too much.

Nursery teacher

It's not literacy as such, but the early skills which children develop. We don't have a literacy record, they are too young for that, some of them can't hold a pencil when they begin nursery. So it's a bit early for a literacy record. It would be full of blanks. In nursery it isn't relevant really, so it's not something I would think about.

Nursery teacher

These opinions are in accordance with the views of nursery teachers in a study of nursery education carried out in the early 1970's (Taylor et al. 1972). This study found that nursery teachers saw the development of oral language skills as of high importance (p.42) but whilst some nursery teachers saw the development of early mathematical concepts as part of their role (p.88) there was no suggestion that they should play a similar role in terms of early literacy development.

In the present study several nursery teachers held different views of literacy which were in tune with current research.

I'm interested in emergent literacy, we have a lot of children in the early stages of writing...

Nursery teacher

With young children it is part of everything, early drawing, talking-so literacy and language is a main focus in nursery education

Nursery headteacher

It's really important to record children's literacy development in the early stages

Deputy headteacher 3 - 11

I think it (early literacy development) is becoming more and more important

Nursery teacher
We're really into literacy here!

Emergent literacy and early development is so important - we need to do something about it here in the nursery

Nursery headteacher

Deputy Head 3 - 12

Teachers saw three main teaching and learning purposes for assessing literacy:

1. to track, map or plot development
2. as a diagnostic process which aided curriculum planning and teaching interventions
3. for National Curriculum Assessment

Details of these three purposes will be discussed next.

i. Tracking, mapping and plotting development

The notion of tracking development as it happened seemed popular with nursery teachers. This conveyed a child centred approach to assessment and record-keeping, recording what happened, when it happens, rather than actively investigating to see if a child has certain knowledge, skills or understanding.

so that you know where each child is...

Nursery teacher

Keeping track of where the child is and relate to National Curriculum

Headteacher 3 - 8

We keep a check and then can help them along

Nursery teacher

On a single sheet we record skills: pre-reading, pre-maths, like sorting, matching, colours and so on

Nursery teacher
To have a basis of where they are - their reading - with younger children you can see it in their work

Infant co-ordinator 5 - 11

These comments convey the feeling of following the child with some interest, but do not suggest a further role for the teacher in extending children's present knowledge.

**ii to aid teaching and learning**

Some teachers felt that assessment and record keeping was important to the teaching and learning process and should be carried out in order to ensure that the curriculum was matched to children's developmental needs.

Some felt that the purpose was diagnostic

*In nursery it is to build up a profile of their development and spot any difficulties early*

Nursery teacher

*To plot development and to plan for the next bit of teaching and experiences the child needs to progress*

Nursery headteacher

_Literacy is the only subject based record, developed because of a change in reading methods. So that the record is an aid to teaching and learning*

Headteacher 5 - 7

_To monitor and support and extend children's literacy development*

Headteacher 3 - 7

Not all believed that assessment and record keeping would aid teaching and learning, but felt that they should summarise development in retrospect, as a set of complex behaviours:
Chapter 5  Survey of Practice in Early Literacy Assessment in Schools

We have done a lot of work on early literacy, emergent writing and all that in curriculum, and we do a lot of talking with parents about literacy but we don't have a separate record. I don't feel at this age that we need it. I feel that records should be a summary really - and very brief.

Nursery headteacher

iii  National Curriculum Assessment

Teachers made a number of comments about reasons for assessing imposed by the National Curriculum. All schools with children aged five and over recorded Attainment targets on some form of checklist.

In school it's all about Targets now, and making sure everyone is at level 2!

Nursery Teacher

National Curriculum Attainment Targets are too broad to inform teaching and learning.

Headteacher 5 - 7

I don't think the National Curriculum Attainment targets are good enough. There is much more to becoming literate than that - it just shows what is valued, not what steps children need to take. Those Attainment targets don't help teaching and learning, they're just a formality.

Nursery teacher

The Attainment targets for English in the National Curriculum are not helpful in teaching an learning of children's literacy because they are far too broad.

Infant language co-ordinator

We have detailed records for literacy (and maths and science), because the National Curriculum Attainment targets checklists are not enough. We were thinking and working on literacy before the National Curriculum. It is development which is important, so we have fitted the National Curriculum in around how children learn.

Headteacher 3 - 8

One school had felt a serious effect of the National Curriculum Assessment:

We've changed our minds 6 times in the last 3 years. Whatever we do doesn't seem to work for us. We can't decide on a system which is workable, legal and realistic in terms of what to record and the time it takes to do it. All we can manage, having tried so many times, we've now gone for recording just National Curriculum requirements. Sad really, but what can we do? There is so much to record, we decided to do what is legally needed.

Headteacher 3 - 11
Some nursery teachers were clear to point out that they did not need to teach or to assess in terms of the National Curriculum.

_We are not bound by the National Curriculum - it's about development in nursery - not targets._

Nursery headteacher

_The National Curriculum does not apply to nursery children- we have not yet bowed to the pressures to assess in terms of National Curriculum_

Nursery teacher

Other nursery teachers felt that the National Curriculum had an effect on teaching and assessing in the nursery:

_The National Curriculum has had an influence. I suppose really (on nursery literacy assessment). We've had to develop a record which is useful throughout the school. Attainment targets don't help especially where children speak English as a second language_

Nursery Teacher

Bi-lingualism was again an assessment issue:

_The National Curriculum does not really take account of the fact that children can be very able and literate in their home language, yet at a different stage in English._

Headteacher 3 - 7

The comments reveal a sense of concern that the National Curriculum for 5-16 year olds would eventually filter down and pressure in terms of a nursery curriculum designed to prepare children for the National Curriculum at 5 years was feared but resisted. These concerns were realised in September 1995 when the School Curriculum and Assessment Council published draft proposals that became the basis for funding nursery education in January 1996 (DFEE/SCAA 1996). Further confirmation of downward and political pressure came in September 1996 with the publication of Government proposals for national baseline assessment at five years with literacy at the core, (SCAA 1996). Such political moves clearly were to influence nursery education,
with emphasis on particular elements of literacy and numeracy. Chapter 1 has already discussed the implications of this move for early literacy assessment.

2. Research

The Survey took place about a year after a research project had been widely disseminated throughout the LEA in which the survey was conducted. The comments of a number of teachers suggested that they found the outcomes of this research useful in developing their practice.

I've been thinking about the Jigsaw from the Early Literacy Development Project. I wondered if we could use it with parents. That booklet (Weinberger et al. 1990) has really made me think about literacy.

Nursery teacher

I was wondering if you could come in and do some sessions with parents. That jigsaw and the video from TV on the Early Literacy Development project was really good. We might get a literacy record - something like the jigsaw (Weinberger et al. 1990) would be good.

Nursery headteacher

The (ELD)Project influenced the development of a record of literacy which involved parents....Literacy is the only subject based record we have...because of the course MM went on and also the (ELD)Project. Your project was very influential here.

Nursery teacher

Literacy record is based on the jigsaw. I wanted to develop a way of using things from your project here

Nursery teacher

The literacy record you did at the University - some parents might like that.

Nursery teacher

That work (ELD Project) has really got me going. I'm having meetings with parents, to talk and hear what they do at home, because assessment really starts with learning doesn't it?

Language Co-ordinator 3 - 7

It's brilliant to have details of research to back up our practice. We used the (ELD) Project to develop our literacy, and stuff from Nigel Hall.

Headteacher 3 - 7
That jigsaw was helpful in deciding what our guidelines for recording literacy should include

Nursery headteacher

Two nursery teachers made a more general comment about the usefulness of research:

I think observing children is important for recording and assessing. Observations are also useful in terms of research - there is a place for more research into literacy in the nursery.

Nursery teacher

It's good to hear about research backing up what we believe.

Nursery teacher

3. Policy

a. Reaction to Government policies

15 responses were directly concerned with Government policy on assessment. These covered 5 main issues:

i. restriction of developments
ii. effects of school inspections
iii. parents' opinions
iv. overwhelming paper work and administration
v. anger.

i. Restriction of developments

The Education Reform Act (1988) has restricted work with parents because policy documents needed to be drawn up and agreed throughout the school. That took time. Also we lost a nursery teacher under LMS so all our flexibility has gone.

Nursery teacher

ii. Effects of school inspections

HMI said that this record is too much - too detailed, so we are thinking again about what to do

Nursery teacher

We think this (way of assessing) does what we want it to do - we're just a bit unsure about whether what we want it to do is "right" in terms of Government policy and HMI say

Language Co-ordinator 5 - 11
iii. Parents' Opinions

The parents think that the testing was wrong - they felt that the children were too young (7 years and SATS)

Headteacher 3 - 8

So far as SATS are concerned we had a meeting for parents, they felt that the SATs were too time consuming and too much work for teachers to do - unnecessary work load. Parents felt pressure on teachers was unnecessary.

Headteacher 3 - 11

iv. Overwhelming Paper work and administration

(We want) less paper coming at us

Headteacher 3 - 8

I think it will settle down eventually. There are still so many changes going on. We're being asked to implement things whilst they are still being developed

Headteacher 3 - 8

A reduction in the pressure, a little is good but a lot is counter productive

Headteacher 3 - 12

Teachers have assessed children for years, but not according to agreed criteria, that is where we undersold ourselves, now we have this imposed and unworkable structure.

Headteacher 3 - 12

I would like to see the removal of restrictive impositions of assessment, like Attainment targets which are meaningless. The removal of SATs would help

Headteacher 5 - 7

v. Anger at policies that create pressure

An end to SATs and a return to proper teaching and learning. Assessment and record keeping is now so overrated, every other word is assessment.

Headteacher 3 - 8

We were always good record keepers and had good records of children's development in different areas. But since the National Curriculum, we've decided that we will record what the Attainment targets - that is what they (the powers that be) are interested in. They seem to think that is what is important so that's what we're doing. We don't use our records now, since the National Curriculum

Headteacher 3 - 8
Some of the assessment reforms are fine, but the Government seems to be behaving like they invented assessment

Headteacher 3 - 12

We feel so angry that they way the National Curriculum was imposed, deskilled teachers, we're all going back to our skills now, now we've tried what was imposed to prove that it doesn't work.

Headteacher 5 - 7

b Assessment as a means of accountability

A clear message from the survey was that schools and teachers saw newly imposed Government requirements for assessment as a means of holding them accountable for the progress of children. There was also a feeling that National Curriculum Assessment was a way of appraising teachers' effectiveness.

In school now it (assessment and recording) is about levels, how many children have got to which point. It's not really now about children, it's more what teachers are doing.

Headteacher 3 - 7

In school there is more pressure, more towards accountability for teachers - teachers feel that unless children have got to level 2, they haven't done their job.

Headteacher 3 - 12

In school - now - it is about accounting for progress in terms of National Curriculum. It wasn't, and that wasn't how we felt about it - but now - with things being imposed - we account for children's progress through the National Curriculum

Headteacher 3 - 11
The external purposes of assessment are really about the performance of teachers in the school - not the children. The Attainment targets and SATs are the imposed assessments which are about accountability, not about teaching or children's learning - not really.

Infant Language Co-ordinator

For staff in school it is more about accountability now. They worry if children are not reaching level 2 before they do the SAT. Even though they have made really good progress in the 2 years.

Nursery teacher

On the one hand it is to account for what has been learned - to satisfy the law

Headteacher 3 - 8

Most people keep records now because of the legislation and they need to know where the child is in relation to the National Curriculum.

Headteacher 3 - 8

4. Teachers assessment needs

Teachers identified three needs in relation to assessment

a. time
b. In service education and training
c. LEA support

From the sample of 30 schools, 26 said that they would like more time. They expanded upon their statement, giving 12 different reasons for needing more time to work on assessment. These are shown in table 5.5.

Table 5.5 Teachers reasons for needing more time for assessment

<table>
<thead>
<tr>
<th>Reason for needing more time</th>
<th>no. of schools</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time to develop ideas</td>
<td>6</td>
</tr>
<tr>
<td>Time to look through children's work</td>
<td>1</td>
</tr>
<tr>
<td>More time - generally to do record keeping</td>
<td>14</td>
</tr>
<tr>
<td>More time to write comments on children's work</td>
<td>1</td>
</tr>
<tr>
<td>Time for teachers to discuss children's assessments</td>
<td>4</td>
</tr>
<tr>
<td>Time for professional dialogue about assessment</td>
<td>5</td>
</tr>
<tr>
<td>Time and more help in the classroom</td>
<td>1</td>
</tr>
<tr>
<td>Time to think about children</td>
<td>1</td>
</tr>
<tr>
<td>Time to read about assessment and record keeping</td>
<td>3</td>
</tr>
<tr>
<td>Time to work on our ideas about record keeping with parents</td>
<td>5</td>
</tr>
<tr>
<td>Time to observe children - meaningful observation</td>
<td>5</td>
</tr>
<tr>
<td>Time to liaise with the next school</td>
<td>1</td>
</tr>
</tbody>
</table>
The following comments indicate how teachers felt they might use extra time.

*Just lots of time to really observe children and add details to records about what they can do - watching them write, or use a book, you can find out so much, so time to make really useful and meaningful observations.*

Nursery teacher

*Time... for professional dialogue... to talk with me as the head, somebody one step removed from the classroom - "What do you mean by this?", "What can I do about that?", "How can I check this?" - real professional dialogue.*

Headteacher 5 - 7

*Time... to really think about what children are doing, where we are going - what this piece of writing shows she has achieved, why I think that piece of writing is good.*

Headteacher 3 - 8

One teacher felt that a lack of time limited her assessments of the children with whom she worked.

*This record is not satisfactory to us - but it is what we can do under time constraints.*

Nursery teacher

b. In Service Education and Training (INSET)

In addition to their comments about time, a number expressed the need for and usefulness of in-service education and training on assessment and related issues.

*i. the need for INSET*

Nursery teachers identified their own need for specific INSET in the literacy development of 3 - 5 year old children.

*I wish we had more courses for nursery teachers - they were so good*

Nursery teacher

*We need someone ... to lead a day on assessment - to steer it along - a whole day to set us off*

Nursery teacher
I just wish we could have some more courses on this sort of thing, (literacy development). We could do more on records of literacy too - more detail.

Nursery teacher

ii. The effect of INSET

Where there had been opportunities for INSET, there was some evidence of its usefulness in developing practice.

We've really got going with it - you can see them filling in forms, writing little orders - it looks like writing too - it's just like...on that course.

Nursery teacher

One of the nursery nurses devised a record after attending an in service post qualification course

Nursery teacher

Once on a course about assessment you said to me - "before you do it - think about what it is for - what it should do". I often think about that - I think we know what our records are for and what they should do. I often think about what you said. At the time I wanted you to tell me what to do, but it was better really telling me to decide what I wanted.

Nursery teacher

The impact of higher degree courses is evident in the following comment. However, the withdrawal of funding and secondment opportunities for teachers to further their professional development has severely restricted this way of developing and influencing practice.

I did all of this record in my own time as part of my M.Ed. study. Then we used staff meetings to discuss it.

Nursery teacher

c. LEA support

In addition to the need for INSET, the role of the LEA in providing support and implementing initiatives drew comment from fifteen teachers
We use the LEA draft record on literacy development... I'll look at the new LEA records too... I've got ideas now, with the new LEA under fives record.

Nursery teacher

We are about to start using the LEA record pack which had just been issued to schools. I shall find that very helpful in implementing a new recording system.

Nursery teachers

LEA record is so detailed - I've no time to do that

Nursery teacher

The Literacy Association has been good for developing ideas on literacy

Nursery teacher

The new LEA pack is unwieldy - there is too much blank space to write in

Nursery teacher

We're really into literacy and it's you doing all those courses and talking about it. We used parts of the LEA pack too. It's quite a new area in the nursery, the idea of early reading and writing. I'm quite new to it all but enthusiasm of other people is infectious especially when you are always talking about it!

Nursery teacher

In my school I need LEA support, publications and discussion

Nursery headteacher

D. Main findings from Record Keeping and Assessment Documentation

Another source of data gathered during the survey was samples of the schools record keeping documentation. 20 of the 30 schools gave me copies of their current documentation. Table 5.6 shows range of data on record keeping and assessment obtained in the survey; the 'type' of school and 'how' literacy was assessed.

Table 5.6 shows that of the 20 sets of documentation collected from the 30 schools in the sample, 16 had record keeping documentation with a clear literacy focus, 18 favoured a checklist format, 10 used forms of observation and none used testing as a means of assessing children's early literacy development.
Table 5.6 Data collection on recording keeping and assessment showing main types used and those with a literacy focus

<table>
<thead>
<tr>
<th>School number</th>
<th>Type*</th>
<th>Documentation collected</th>
<th>Observation</th>
<th>Tests</th>
<th>Checklists</th>
<th>Literacy focus</th>
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</tr>
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</table>

* Type of schools refers to the three age bands shown in Table 5.1
  A = 'under fives' only, B = 'fives and over', C = 'under fives' and 'fives and over'

E. Discussion and Conclusion

As noted, I conducted this survey because literature and theoretical considerations suggested that existing measures may be adequate for teachers but not for researchers. I wanted to check the hypothesis that instruments existed for teachers to carry out
holistic assessments of early literacy development over a period of time using mainly observation and reflection, but that researchers needed better ways of measuring the different strands of early literacy development than currently existed. This research question needed to be checked against existing practice to see whether I was right in my supposition that it was researchers who had the main need, not teachers.

The survey indicates that there is, amongst teachers, strong agreement on the need to assess early literacy development. The impact of research seems to be high and this points to the need for effective measures with which to challenge adverse and unrepresentative media and Government reports on children’s abilities in this field.

Also clear is that teachers have a range of assessment practice and procedures available to them. This is evident from the data and analysis presented in section D above and from the review of the literature in chapter 2.

The survey points to important implications for this study. Putting together the evidence and argument in chapters 2 and 3 with that presented in this chapter it is clear that there is a gap between current research in early literacy development and measurement instruments.

The gap is apparent when research, policy and practice are scrutinised. The search for ways of measuring children’s reading and writing abilities at seven years, as required in the National Curriculum, has resulted in numerous changes where no-one is satisfied. Teachers feel dissatisfied with the tests, administration and criteria and politicians do not have the benchmarks they hoped the introduction of the National Curriculum and assessment arrangements would give them. After hurried trials and development phases an imposed compromise was the result in 1992.
The survey of current practice presented in this chapter showed that an overwhelming need of teachers was time, although this is something which I am unable to affect. However, it is clear that teachers and current practice are catered for in terms of assessment procedures and record keeping processes. The survey therefore confirmed my argument that researchers, not teachers, are behind in the field as far as measurement of early literacy is concerned. If the problem was imagined in terms of a marathon race, teachers' knowledge and assessment practice would be three quarters of the way through the course whilst researchers would be still completing their entry form (or deciding whether to run or not!).

The path for this thesis is clear. There is a need to develop an instrument to assess early literacy development that will enable researchers to measure children's emergent and developmental literacy. Such an instrument would make a contribution to research as a means of plugging the gap between research and practice. Successfully developed, such a measure could be an effective tool for researchers and may also be of use to teachers too.

Chapter 6 begins the process of developing an Early Literacy Development Profile, its rationale, design and description.
Chapter 6

Early Literacy Development Profile Version 1 - Rationale, Design and Description

This chapter begins the development of an early literacy development profile and sets out decisions about content and approach.

A. Rationale

New views of early literacy development and the establishment of principles for the development of new measures (chapter 1), a review of approaches to measuring and assessing early literacy development (chapter 2), a consideration of the purposes of such assessment (chapter 3) and a survey of early literacy assessment practice (chapter 5) have led to the decision to focus on the development of an assessment instrument, primarily for specific research purposes. In developing this measure it was important to remember the perspectives discussed in earlier chapters. I will highlight briefly the most influential again.

Teale (1990) stated that

Formal tests impose the greatest restrictions on performance since their items tend to be specific and the range of acceptable answers, narrow.

(Teale 1990, p.46)

Teale suggests that selected performance sampling might strike a balance between formal testing and informal observation. He argues that tests do not measure 'all the right things' (Teale 1990 p.48), and that the 'focus on parts does not measure what emergent literacy emphasises' (p.49). This reinforces the argument that what is measured should be determined by what we know about early literacy. Context is crucial and therefore any valid test must set the context, purpose and audience.

The informal assessment advocated by Teale is probably the best type of balanced assessment and it can be carried out by teachers. Researchers can sometimes carry out
such assessments during longitudinal studies, but also need a quick, reliable and valid measure against which their interventions can be viewed.

There are many factors to bear in mind when developing a measure of early literacy development that matches the findings of recent research. Sulzby (1990) discusses the following in relation to early writing: 'closeness' to conventional writing, context, writing is variable across contexts, wording, motivational aspects (is the child trying and does the teacher encourage or discourage?), open-ended nature of writing task, need for multiple assessments, one child, time of 'onset', scribble, drawing, non-phonetic letter strings, copying of conventional print, invented spelling, producing conventional print, rebus, aberration, pseudoletters, idiosyncratic forms. The list continues with Armstrong's concerns about assessing writing (Armstrong 1990), assessing the "whole" rather than the constituent parts, narrative and illustration, patterns of intention, interests, motifs, orientations, interplay between form and content, technique and expression, relationship of word to picture, and meaning.

The above list can be supplemented if we consider aspects of assessing reading and environmental print. Heibert (1983) suggests that factors include: identifying an activity as reading, and identifying that print is necessary for reading. Goodall (1984) adds, ability to identify environmental print, context of print, letter knowledge. Goodman and Altwerger (1981) considered that important factors included: identification of logos, attitudes to reading and writing, knowledge of books, familiarity with books. Teale (1990) considered that a child's concept of the function of literacy was crucial.

Clearly the factors identified by the six researchers mentioned above generate a considerable list of issues to take account of when developing a tool to measure early literacy development. This list illustrates that effective measurement is complex. No test can embrace the entire range of issues. However, I will attempt to include many
of these in the instrument to be developed and must recognise that some (such as those suggested by Armstrong) cannot, and perhaps should not be included in a measure of literacy that attempts to quantify children's literacy behaviour and give it a score.

I have chosen to call this measurement instrument a 'profile' rather than 'assessment', or 'test' because the term best describes the sampling of literacy behaviour that it will measure. The term 'profile' also suggests a more 'rounded' approach rather than a narrowly focused view.

The Early Literacy Development Profile Version 1 was developed with an appreciation of the complexity of the task, its design and description is now presented and discussed.

B. Design
The basis for the development of the Early Literacy Development Profile was discussed in chapter 1.

One issue which deserved further consideration is the possible tension between criterion and norm referenced assessment. Glaser (1963) defined criterion referenced testing as follows:

What I shall call criterion-referenced measures depend upon an absolute standard of quality, while what I term norm-referenced measures depend upon a relative standard.

(Glaser 1963, p.519)

Glaser's definition emphasises individual achievement rather than relative achievement. Measures which assess student achievement in terms of a criterion standard thus provide information as to the degree of competence attained by a particular student which is independent of reference to the performance of others.

(Glaser 1963, p.520)
Glaser's distinction of 'educational assessment' as separate from 'psychometric' or 'psychological' measurement can be helpful in making decisions about the development of a measure. There are choices to be made between development of a measure which is standardised and can be used as a norm-referenced measure or one which measured individual ability according to performance on a number of items, criterion referencing. The basis for development of the new measure in chapter 1 (pxxx) locates it within the sphere of 'educational assessment'. The new measure will be concerned with achievement, comparisons of changes in achievement and with, 'current levels of performance not prediction' (Gipps 1994 p 79).

There is no question here of developing a norm-referenced test. Such an outcome is unnecessary in terms of the basis for development and characteristics already put forward in this thesis for the development of a new measure. There remains the potential that the instrument, once developed could be standardised at a later date, though this remains outside the scope of the thesis. Gipps' perspective provides a further reason for avoiding norm-referenced assessment:

Norm-referenced tests are designed to produce familiar proportions of high, medium and low scorers. Since students cannot control the performance of other students they cannot control their own grades; this is now widely considered to be an unfair approach for looking at pupils' educational performance.

(Gipps 1994, p.5)

This is not a norm referenced test. There will be no attempt at any point in this study to establish norms, because the objective of this thesis is to develop a new measure which is acceptable in terms of three strands of early literacy research and in terms of the previously stated principled basis and characteristics. Gipps (1994) provides clarification of the technical issues which differentiate norm-referenced and criterion referenced testing:

The differing concepts underlying norm-referenced testing and criterion referenced testing have implications for test design. Items for norm-referenced testing must discriminate among those tested in order to spread scores along the normal distribution. Thus, items which do not have a high discrimination index are dropped. Criterion-referenced tests are not built to discriminate in the
same way; what matters is to identify the tasks which pupils can and cannot perform. Thus items which do not discriminate between candidates because they are particularly easy or difficult would be included if they are important elements of the area of study; the important factor in criterion-referenced tests is not high discrimination, but to represent a continuum of relevant tasks. 

(Gipps 1994, p. 83)

Gipps' consideration of the technical aspects of criterion-referenced test development links directly with the basis for development of the new measure (page 27), in terms of its aim for a range of outcomes and breadth of content. In order to fulfil this characteristic, later analysis and development will seek to obtain a span of scores across the age range of the profile, or in Gipps' words 'a continuum of relevant tasks'. All statistical procedures to be reported later will be undertaken to refine the instrument as a criterion referenced Profile, not as a norm referenced instrument.

Criterion-referenced assessment is not without its problems. Detail of tasks is important but this could lead to over-simplification and a narrowing down of items assessed. Popham, (1993) argues for a small number of broad objectives. In terms of the new measure the broad objectives are to assess aspects of three strands of literacy arising from research: environmental print, book knowledge and early writing. Finer detail will be achieved within those three broad areas with a range of tasks designed and refined throughout the study to provide the 'continuum of relevant tasks' (Gipps 1994, p.83).

This is a difficult path to tread. Writing about the development of national curriculum assessments, Shorrock noted:

A careful path needs to be found between the extremes of vague and nebulous criteria on the one hand, and a proliferation of detailed and trivial objectives on the other. The essence seems to lie in formulating measurable criteria which have educational aims and specifications.

(Shorrock et al. 1992, p.109)
The task is not easy, but it is hoped that reference to the characteristics which form the basis for development will enable the each step in the process of development to be carefully evaluated before moving on to the next.

The Early Literacy Development Profile - Version 1

Purpose

To indicate performance in aspects of early literacy development of children aged three to five years. To compare test results between individuals and groups and over time.

For use by researchers

The profile was devised mainly for specific research purposes involving comparisons and needing statistical outcomes, though it may well also prove useful to teachers. It samples performance in contexts of literacy which arise from three strands of early literacy research: environmental print, books and writing. It therefore provides an indicator of children's performance as a sample of early literacy development. Sample behaviours relate to research in those areas of early literacy development identified earlier: environmental print, books and writing. The profile is not necessarily diagnostic because it samples literacy behaviour in key areas. It is not sufficiently comprehensive to be used as a way of identifying further teaching needs but would be useful in indicating where further, more detailed observation and assessment might be needed.

Features of the Profile

- Possible to administer two or three times over a two year period with little likelihood of a practice effect
- Scoring allows for a range of abilities
- Will indicate changes in performance if administered at intervals over two years
- Useful for comparison of a child's performance at different ages or stages, for example before and after an intervention. The profile could also be used in
comparing cohorts of children against each other, for example a group having some intervention with a comparison group.

- The profile covers three main areas of literacy: environmental print, book knowledge, writing.

- All three parts of the profile are of equal importance - there is no weighting which suggests that some literacy behaviours are more important in early literacy than others and the three sub-tests can be used independently.

- All three parts of the profile can be used, in which case the profile would have three parts. Alternatively, researchers focusing on one strand of literacy, for example book knowledge, could use the appropriate part of the Profile alone.

- The profile can be carried out by a researcher and scored on the profile score sheet. In addition, teachers (or parents) might complete a separate assessment of the child's performance of the same areas, outside the 'test situation', such as the child's writing during play situations, or at home; their use of environmental print at the shops and so on. Scores in this case would be of less importance than the qualitative data the broader assessment provided.

- The profile is not necessarily diagnostic. At this stage of early literacy all literacy behaviours of young children can be seen as positive behaviour and learning. There is no suggestion here that children who score low on the profile have any difficulty or need extra help. At this stage the profile would indicate which elements of literacy featured in the profile the child could or could not do. Though a low score may indicate some areas where a child might benefit from more experiences, further observational assessments would be needed to plan any useful teaching.

Administration

The profile is administered on a one to one basis with the tester and child in whatever setting the child is comfortable. This can be a quiet room or a corner of a busy nursery, but it is important that there are no distractions. The profile can be used in a group setting (nursery, playgroup) or at home. All profiles should be administered on a one to
one basis. Scoring and administration does not allow for group testing. A low table and two chairs are needed.

Scoring

Why is a scoring system necessary? The Early Literacy Development Profile is being developed to satisfy particular research purposes. It has already been stated (page 28) that scoring systems in measures are not needed for purposes of teaching and learning, but are helpful for research involving comparisons which incorporate a quantitative analysis element in the research design. The measure under development is designed for those particular research purposes. However, if teachers were to find the assessment ideas in the instrument useful, they would not necessarily need to use the scoring element. They could work through the items with children, making notes of how they respond and highlighting aspects where a more detailed, further assessment may be useful in order to inform teaching and learning. The scoring system is incorporated into the Early Literacy Development Profile because it is an important characteristic if the measure is to be fit for the research purposes for which it is designed.

- Scoring is simple. The score sheet indicates potential scores and gives a box in which to write the child's score. Each of the three parts of the profile carries a maximum score of 10 points.

- Maximum score 30 minimum score 0

- High or maximum score indicates a balanced, all round development of early literacy. Scoring can be completed on the score sheet. It provides a "see at a glance" scoring system.

Time

There is no time limit but the profile and score sheets take about 30 minutes to complete. The whole profile is completed for each child regardless of the time they take.
C. Description

This section describes each task in the Early Literacy Development Profile - Version 1 with reasons for inclusion. Scoring is not included here but details are given in the Profile administration booklet and score sheet at the end of this chapter.

The Profile is in three parts, Part One - Environmental Print; Part Two - Book Knowledge; Part Three - Early Writing. Tasks in each part of the Profile with their objectives, will now be discussed in turn.

PART ONE: ENVIRONMENTAL PRINT

There are two tasks in this part of the Profile. The first, Task 1, is designed to find out if children can recognise forms of environmental print and say they are for.

**TASK 1 Identifying print in the outdoor environment**

**Materials needed**
Colour photographs of street scenes including several examples of environmental print. (PHOTO A) (Appendix 6.A)

**Instructions**
Show the child the A4 sheet of colour photographs of the street scenes.
Ask the following questions in this order:
1. *What can you see in the picture?*
2. *Can you point to some signs, some words in this picture?*
3. *What are signs for?*
4. *Do you know what any of these signs say?*

Task 2 is designed to find out three things: whether children can recognise products from their packaging, whether they can identify words (from pictures) and whether they know any of the words in the text on the packaging. Ten logos were chosen to given children a fair chance of scoring some points on this section. The logos used were top selling household items according to a consumers survey published in the 'Today' newspaper at the time this Version was being developed. The advantage of
using 'best selling' products was that, even if children did not have these products in their own homes, there were likely to see advertisements on television which would increase their familiarity with the logos associated with them.

**TASK 2 Identifying words and logos**

**Materials needed**

Small booklet containing a selection of photographs of the 'top ten' logos chosen from the following categories:

- cereals
- tinned foods
- sweets
- household items
- groceries

These may be chosen according to the top ten best selling products. For this measure the following items were selected in this way:

- Weetabix
- Walkers crisps
- Mars bar
- Heinz Beans
- Fairy liquid
- Coca Cola
- Kellogg's cornflakes
- Kit Kat
- Persil washing powder
- Whiskas cat food

The photographs of logos should be arranged in a small booklet, one on each right hand page. (ALBUM B) (Appendix 6 B)

**Instructions**

Show the book of photos to the child. Look at each picture in turn.

Ask the following questions for each photograph:

1. *Do you know what this is?*
2. *Can you show me the word(s) here?*
3. *Do you know what the words say?*

**PART TWO: BOOK KNOWLEDGE**

Part Two of the Profile is concerned with book knowledge. There are two tasks in this part. Task 1 focuses on children's ability to identify first the book itself and then, certain features within it. Some items in this task draw on Clay's 'Concepts about Print' test (Clay 1972a) but it also includes easier items because this Profile is designed for a younger age range than the target group for Clay's test. It uses a recently published children's story book with a clear story line and words and pictures on each page.
**TASK 1 Knowing about books**

**Materials needed**
Three objects of which one is a book: (e.g. cuddly toy, book, jigsaw).

**Instructions**
Arrange the objects on the table
Ask the following
1. Will you pass me the book please?
2. Take the book from the child (or from the table if the child does not succeed with question 1) Ask - Do you know what this is for? - what do we do with a book?
3. Can you show me the front of the book?
4. Can you show me a page in the book?
5. Can you show me a picture?
6. Can you show me the words?
7. Can you show me just one word?

Task Two is designed to measure children's ability to retell a story after looking through a book.

**TASK TWO Using books - retelling stories**

**Materials**
A picture book selected according to specified criteria. (Appendix 6 C)

**Instructions**
Give the book to the child and say
I just need to tidy up a bit, would you like to look at this book while I do that, then you can tell be about the story.
Give the child time to look at the book then ask:
Can you tell me about that book?
1. Who is in the story?
2. What is it about? What happens?
3. How does it end?
PART THREE: EARLY WRITING

The third and final part of the Profile concerns early writing. Task 1 measures the
extent to which children know what writing is and what it is for.

<table>
<thead>
<tr>
<th>TASK ONE</th>
<th>Identifying and knowing about writing</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Materials</strong></td>
<td>writing paper</td>
</tr>
<tr>
<td></td>
<td>pen</td>
</tr>
<tr>
<td></td>
<td>Three pictures: animal, child's drawing, adult writing</td>
</tr>
<tr>
<td></td>
<td>(PICTURES C - Appendix 6 C)</td>
</tr>
<tr>
<td><strong>Instructions</strong></td>
<td>Write a few lines in front of the child.</td>
</tr>
<tr>
<td></td>
<td>Ask the following</td>
</tr>
<tr>
<td></td>
<td>1. <strong>Do you know what I am doing?</strong></td>
</tr>
<tr>
<td></td>
<td>2. <strong>Do you know what writing is for?</strong></td>
</tr>
<tr>
<td></td>
<td>Show the child three pictures:</td>
</tr>
<tr>
<td></td>
<td>• a view or an animal, (C1)</td>
</tr>
<tr>
<td></td>
<td>• a child's drawing, (C2)</td>
</tr>
<tr>
<td></td>
<td>• adults handwriting (C3)</td>
</tr>
<tr>
<td></td>
<td>Ask</td>
</tr>
<tr>
<td></td>
<td>3. <strong>Which one of these is writing?</strong></td>
</tr>
</tbody>
</table>

The second task in Part Three, the final task in the Profile, requires the child to do
some writing of their own so that their ability to write recognisable letters and use of
directionality can be assessed. They are asked to write something for the teddy bear
(who is included to encourage the child to write), and finally they are asked to write
their name.
### TASK 2  Writing

**Materials**
- Teddy bear writing paper
- Teddy bear pencil (if possible)
- Teddy bear and glasses to fit.

**Instructions**
Ask the child if s/he thinks teddies can write. Introduce a teddy bear who is wearing glasses. Say *This teddy can't write very well but he can read when he wears these magic glasses.*

Give the paper and a pencil to the child.
1. Ask the child to **write a message on the special teddy paper for Bear to read.** Let the child write, encourage this effort. If the child says that s/he can't write say that the teddy bear can read all sorts of writing so long as he wears his magic glasses. When the child has finished his/her 'independent' writing:
2. Ask **Will you write your name at the bottom so that Bear knows it is from you?**

The administration booklet and score sheet now follow so that they can be considered without the interruption of commentary.
Early Literacy Development Profile Version 1
PART ONE: ENVIRONMENTAL PRINT

TASK 1 Identifying print in the outdoor environment

Materials needed

Colour photographs of street scenes including several examples of environmental print (PHOTO A) (Appendix 6.A)

Instructions

Show the child the large colour photograph of the street scene.

Ask the following questions in this order:

1. What can you see in the picture?
2. Can you point to some signs, some words in this picture?
3. What are signs for?
4. Do you know what any of these signs say?

Scoring

1. no score - this is a 'warm up' question
2. score 1 point
3. score 2 points
4. score 2 points

Maximum score for Task E1 5 points

Record scores during the test on the score sheet in the appropriate boxes

Record the final score in the total box marked Task 1
**TASK 2**  **Identifying words and logos**

**Materials needed**

Small booklet containing a selection of photographs of the 'top ten' logos chosen from the following categories:

- cereals
- sweets
- groceries
- tinned foods
- household items

These may be chosen according to the top ten best selling products. For this measure the following items were selected in this way:

- Weetabix
- Coca Cola
- Walkers crisps
- Kelloggs cornflakes
- Mars bar
- Kit Kat
- Heinz Beans
- Persil washing powder
- Fairy liquid
- Whiskas cat food

The photographs of logos should be arranged in a small booklet, one on each right hand page. (ALBUM B) (Appendix 6 B)
Instructions

Show the book of photos to the child. Look at each picture in turn.

Ask the following questions for each photograph:

1. Do you know what this is?
2. Can you show me the word(s) here?
3. Do you know what the words say?

Scoring

For each photograph score as follows

1. score 1 point
2. score 1 point
3. score 1 point

Total possible 'raw' score for task 2 is 30.

Divide the maximum score by 6

Maximum final score for task 2 5 points

Record scores as the profile is being administered on the score sheet in the appropriate boxes

i.e. Photo a 1,2,3,

Record the final score in the total box.
PART TWO: BOOK KNOWLEDGE

TASK 1 Knowing about books

Materials needed

Three objects of which one is a book: (e.g. cuddly toy, book, jigsaw).

Instructions

Arrange the objects on the table

Ask the following

1. Will you pass me the book please?

2. Take the book from the child (or from the table if the child does not succeed with question 1) Ask - Do you know what this is for? - what do we do with a book?

3. Can you show me the front of the book?

4. Can you show me a page in the book?

5. Can you show me a picture?

6. Can you show me the words?

7. Can you show me just one word?

Scoring

1. Score 1 point

2. Score 1 point for a suitable answer e.g. 'for stories' 'to read' 'for bedtime' or other such reply that suggests that the child knows what a book is for.

3. Score 1 point if front is identified correctly

4. Score 1 point if page is identified correctly

5. Score 1 point if picture is identified correctly

6. Score 1 point if words are identified correctly

7. Score 1 point if a single word is identified correctly

Maximum score for Task 1 7 points

Record scores during the test on the score sheet in the appropriate boxes, record the final score in the total box.
**TASK TWO Using books - retelling stories**

**Materials**
A picture book selected according to specified criteria.

**Instructions**
Give the book to the child and say
*I just need to tidy up a bit, would you like to look at this book while I do that, then you can tell me about the story.*

Give the child time to look at the book then ask:
*Can you tell me about that book?*

1. *Who is in the story?*
2. *What is it about? What happens?*
3. *How does it end?*

**Scoring**
1. score 1 point for mention of characters either by name or by description
2. score 1 point for describing events.
3. score 1 point for describing the ending.
Maximum score for task 2 3 points

Record score on the administration sheet in the boxes.

Record the final score for task 2 in the total box.
PART THREE    EARLY WRITING

TASK ONE    Identifying and knowing about writing

Materials
- writing paper
- pen
- Three pictures: animal, child's drawing, adult writing (PICTURES C Appendix 6C)

Instructions

Write a few lines in front of the child.

Ask the following

1. Do you know what I am doing?
2. Do you know what writing is for?

Show the child three pictures:
- a view or an animal, (C1)
- a child's drawing, (C2)
- a page of adults handwriting (C3)

Ask

3. Which one of these is writing?
**Scoring**

1. score 1 point for correct description
2. score 1 point for suitable answer e.g. letters, cards, stories etc.
3. score 1 point for identifying the page of adults writing

Maximum score for task 1 3 points

Record scores during test on the score sheet in the appropriate boxes.

Record the final score in the total box.

**TASK 2  Writing**

**Materials**

Teddy bear writing paper
Teddy bear pencil (if possible)
12" teddy bear and glasses to fit.

**Instructions**

Ask the child if s/he thinks teddies can write. Introduce a teddy bear who is wearing glasses. Say *This teddy can't write very well but he can read when he wears these magic glasses.*

Give the paper a pencil to the child.

1. Ask the child to write a message on the special teddy paper for Bear to read.
Let the child write, encourage this effort. If the child says that s/he can't write say that the teddy bear can read all sorts of writing so long as he wears his magic glasses. When the child has finished his/her 'independent writing:

2. Ask *Will you write your name at the bottom so that Bear knows it is from you?*

**Scoring**

Assess the child's writing as follows

1. Making any line of marks  
   - Making letter like marks  
   - Writing numbers or letters  
   - Writing left to right or top to bottom
   - score 1 point

2. Name writing
   - One letter recognisable  
   - Two letters recognisable  
   - Full name written correctly  
   - score 1 point
   - score 2 points
   - score 3 points

Maximum score for task 2 7 points

Record scores on the score sheet in the appropriate boxes.

Record the final score in the total box.

**TEST CONCLUDES**

Thank the child and give him/her sticker or some other small reward. Complete the Profile score summary sheet on the final page of the score sheet.

Attach writing sample to the score sheet.
Early Literacy Development Profile

Score sheet

Version 1
Early Literacy Development Profile - Score sheet - Version 1

<table>
<thead>
<tr>
<th>Child's first name</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Date of birth</td>
<td></td>
</tr>
<tr>
<td>Date of test</td>
<td></td>
</tr>
<tr>
<td>Age at testing</td>
<td>years months</td>
</tr>
</tbody>
</table>

Note

PS refers to the Possible score

AS refers to the Actual score achieved by the child

PART 1  ENVIRONMENTAL PRINT

Task 1

Show the child the set of colour photographs of street scenes. Ask the following in this order

<table>
<thead>
<tr>
<th>No.</th>
<th>Question</th>
<th>PS</th>
<th>AS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>What can you see in the pictures?</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Can you point to some signs, some words, in the pictures?</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>What are signs for?</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Do you know what any of these signs say?</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>5</td>
<td></td>
</tr>
</tbody>
</table>
## Task 2

Do you know what this is? | Can you show me the word(s) here? | Do you know what the words say?
--- | --- | ---
Wectabix | 1 | 1 | 1
Coca Cola | 1 | 1 | 1
Walkers crisps | 1 | 1 | 1
Kelloggs corn flakes | 1 | 1 | 1
Mars Bar | 1 | 1 | 1
Kit Kat | 1 | 1 | 1
Heinz Baked Beans | 1 | 1 | 1
Persil Washing Powder | 1 | 1 | 1
Fairy Liquid | 1 | 1 | 1
Whiskas Cat Food | 1 | 1 | 1

<table>
<thead>
<tr>
<th>Picture</th>
<th>PS</th>
<th>AS</th>
<th>PS</th>
<th>AS</th>
<th>PS</th>
<th>AS</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wectabix</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Coca Cola</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Walkers crisps</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kelloggs corn flakes</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mars Bar</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kit Kat</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Heinz Baked Beans</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Persil Washing Powder</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fairy Liquid</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Whiskas Cat Food</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Environmental Print Possible Score 10 Child's Score
## PART 2  BOOK KNOWLEDGE

### Task 1  Knowing about books

<table>
<thead>
<tr>
<th>No</th>
<th>Question</th>
<th>PS</th>
<th>AS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Will you pass me the book please?</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Do you know what this is for? What do we do with a book?</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Can you show me the front of the book?</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Can you show me a page in the book?</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Can you show a picture?</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Can you show me the words?</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Can you show me just one word?</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

| score |    |

### Task 2  Using books, retelling stories

<table>
<thead>
<tr>
<th>No</th>
<th>Question</th>
<th>PS</th>
<th>AS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Who is in the story?</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>What is it about? What happens?</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>How does it end?</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

| score |    |

Part 2 Book Knowledge  Possible score 10  Child's score
PART 3 EARLY WRITING

Task 1 Identifying and knowing about writing

<table>
<thead>
<tr>
<th>No</th>
<th>Question</th>
<th>PS</th>
<th>AS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Tester writes in front of the child</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td></td>
<td><em>Do you know what I am doing?</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td><em>Do you know what writing is for?</em></td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Show the child the three cards: view or animal, child’s drawing,</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>adult’s handwriting. <em>Which one of these is writing?</em></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Task 2 Writing

Child does a sample of writing, score as follows

<table>
<thead>
<tr>
<th></th>
<th>PS</th>
<th>AS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Making any line of marks</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Making letter like marks</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Writing numbers or letters</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Writing left to right or top to bottom</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

Ask the child to write his or her name, score as follows

<table>
<thead>
<tr>
<th></th>
<th>PS</th>
<th>AS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 letter recognisable</td>
<td>OR</td>
<td>1</td>
</tr>
<tr>
<td>2 letters recognisable</td>
<td>OR</td>
<td>2</td>
</tr>
<tr>
<td>full name written recognisable and correct</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

Part 3 Early Writing Possible score 10 Child’s score 144
## EARLY LITERACY DEVELOPMENT PROFILE SCORE SHEET

### SUMMARY

<table>
<thead>
<tr>
<th>Part</th>
<th>Focus</th>
<th>PS</th>
<th>AS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Environmental Print</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Book Knowledge</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Early Writing</td>
<td>10</td>
<td></td>
</tr>
</tbody>
</table>

*Total score for profile*

Comments

*Attach writing sample to this sheet*
This chapter has discussed the rationale, design and description of Version 1 of the Early Literacy Development Profile. Chapter 7 discusses the evaluation study of Version 1.
Chapter 7

Evaluation study of version 1

This chapter gives details of the first pilot of the Early Literacy Development Profile and the need for adaptations.

A. Aims of the first pilot

The first pilot had four aims:
1. to try out the materials and assess practicality
2. to examine the role of the tester
3. to learn about the children's responses to the material
4. to use data from the pilot to make modifications to the profile.

B. Arrangements for the first pilot

The Early Literacy Development Profile (Version 1) was piloted in one inner city school which catered for children aged 3+ to 6+. I already had a good rapport and working relationship with the headteacher and staff in the school. I visited the headteacher by appointment to explain the test materials and seek her permission to use the school as a location for the trial. I stressed that it was the materials that were being tested, and that gaining information about individual children's abilities or scores was not the purpose of the work. The headteacher agreed to identify 10 children (and 3 reserves) to participate in the test. The children were to be aged three to five years. The head undertook to see parents of the children to explain what was happening and to ask their permission for their child to participate. It was stressed to the parents that the children's first names and date of birth would be the only information given to the tester.
The nursery and reception staff identified 12 children - the age and gender of the children were the main criteria for selection in the sample and also that none of the children was receiving support for identified special needs. They chose five girls and seven boys aged from 3 years and 5 months to five years. All children lived near the school, mostly in terraced council housing. The children in this sample were somewhat disadvantaged, living in a defined area of poverty with high incidence of unemployment, ill health and crime. However, for the purposes of the evaluation of Version 1 this was not a problem, indeed it was somewhat of an advantage. I took the view that if these children responded positively to the activities in the Profile, and could cope with the 'test' situation, it was likely to work in other settings with children who, perhaps, had more early literacy opportunities.

The nursery staff made their office available for the day so that each child taking part in the pilot could be seen individually and without distractions.

C. Timing

Version 1 of the Profile was developed with the intention that it should take no more than 30 minutes to administer. It is important that any test is manageable in terms of administration time. During the first pilot the length of time it took to administer each test was recorded. The average length of time needed was just under fifteen minutes. The range was 25 minutes to 20 minutes. The time taken did not appear to have any link with the scores achieved. Table 7.1 gives details of children's ages, scores, and time taken. A number (1-12) has been allocated to each child, based on their score. The child scoring the lowest number of points was allocated number 1 and the highest scoring child was allocated number 12. The test was abandoned part way through for child 2 when he refused to respond to questions and tasks. These numbers remain the
same for each child throughout this chapter and in all subsequent tables referring to
this data set.

Table 7.1   Early Literacy Development Profile  First Pilot Study  Details of timing,
scores and ages of children

<table>
<thead>
<tr>
<th>Child id no.</th>
<th>Sex</th>
<th>Age</th>
<th>Time</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>M</td>
<td>3:5</td>
<td>15</td>
<td>12.0</td>
</tr>
<tr>
<td>2*</td>
<td>M</td>
<td>4:6</td>
<td>15</td>
<td>12.2</td>
</tr>
<tr>
<td>3</td>
<td>F</td>
<td>3:10</td>
<td>15</td>
<td>17.7</td>
</tr>
<tr>
<td>4</td>
<td>M</td>
<td>4:9</td>
<td>15</td>
<td>18.2</td>
</tr>
<tr>
<td>5</td>
<td>F</td>
<td>4:4</td>
<td>15</td>
<td>18.3</td>
</tr>
<tr>
<td>6</td>
<td>M</td>
<td>4:2</td>
<td>20</td>
<td>18.3</td>
</tr>
<tr>
<td>7</td>
<td>F</td>
<td>4:7</td>
<td>15</td>
<td>23.8</td>
</tr>
<tr>
<td>8</td>
<td>M</td>
<td>4:9</td>
<td>20</td>
<td>24.7</td>
</tr>
<tr>
<td>9</td>
<td>M</td>
<td>5:0</td>
<td>15</td>
<td>25.3</td>
</tr>
<tr>
<td>10</td>
<td>F</td>
<td>5:0</td>
<td>15</td>
<td>25.7</td>
</tr>
<tr>
<td>11</td>
<td>F</td>
<td>4:5</td>
<td>15</td>
<td>28.2</td>
</tr>
<tr>
<td>12</td>
<td>M</td>
<td>4:10</td>
<td>16</td>
<td>28.7</td>
</tr>
<tr>
<td>MEAN</td>
<td></td>
<td>15.9</td>
<td></td>
<td>21.1</td>
</tr>
</tbody>
</table>

* abandoned

D.  Children's scores

Figure 7.1 gives details of the children's overall scores and children's ages. Table 7.2
presents these data in age order. This examination suggests that there is a trend
towards older children scoring higher than younger children. Data for child 2 has not
been included in this analysis.
Table 7.2 Details of children's ages and relative scores

<table>
<thead>
<tr>
<th>Age y:m</th>
<th>Sex</th>
<th>Score</th>
<th>Child id no.</th>
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<tr>
<td>3:5</td>
<td>M</td>
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<tr>
<td>3:10</td>
<td>F</td>
<td>17.7</td>
<td>3</td>
</tr>
<tr>
<td>4:2</td>
<td>M</td>
<td>18.3</td>
<td>6</td>
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<tr>
<td>4:4</td>
<td>F</td>
<td>18.3</td>
<td>5</td>
</tr>
<tr>
<td>4:5</td>
<td>F</td>
<td>28.2</td>
<td>11</td>
</tr>
<tr>
<td>4:6</td>
<td>M</td>
<td>12.2</td>
<td>2*</td>
</tr>
<tr>
<td>4:7</td>
<td>F</td>
<td>23.8</td>
<td>7</td>
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<td>4:9</td>
<td>M</td>
<td>18.2</td>
<td>4</td>
</tr>
<tr>
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<td>M</td>
<td>24.7</td>
<td>8</td>
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<tr>
<td>4:10</td>
<td>M</td>
<td>28.7</td>
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<td>M</td>
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<tr>
<td>5:0</td>
<td>F</td>
<td>25.7</td>
<td>10</td>
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</table>

* abandoned

Figure 7.1 shows the relationship between age and score, \( R = 0.72 \ p < 0.012 \), data for child 2 has not been included in this analysis.

Figure 7.1 Relationship between age and total score, \( n=11 \)
E. Item analysis

The elements of the Profile were administered according to the Profile booklet (see chapter 6) and scored on the Profile score sheet. 12 children were tested in all.

Table 7.3 shows an item analysis of the complete profile. It indicates where children obtained high or low scores on each element of the profile. Details are given in order of the children's total score. For example, child 1 scored the lowest and child 12 the highest score.

The Item Analysis provides a way of identifying items which need to be changed or adapted in the next phase of test development. For example, the following items will need some changes in Version 2 of the Early Literacy Development Profile:

1. Identification of logos in Part 1 - Environmental Print
2. The book used in Part 2 - Book Knowledge
3. Examples used to identify writing in Part 3 - Task 1

These modifications and the reasons for them will be discussed in section G later in this chapter.
## Table 7.3 Item Analysis of Early Literacy Development Profile - Version 1

<table>
<thead>
<tr>
<th>Item</th>
<th>Children's score (in order of total score)</th>
<th>Lowest score</th>
<th>Highest Score</th>
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<td><strong>Part 1 Environmental Print</strong></td>
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<tr>
<td>E1 Environmental Print 1</td>
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<td>E2 Logos</td>
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<td>Weetabix 3</td>
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<td>Kelloggs Cornflakes 1</td>
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### Table 7.3 continued....

**Item Analysis of Early Literacy Development Profile - Version 1**

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**Writing Sample (Score 1,2 or 3)**

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<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
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<tbody>
<tr>
<td>Highest Score</td>
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<td>10</td>
<td>11</td>
<td>12</td>
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<td></td>
</tr>
</tbody>
</table>

**F. Role of the tester**

Three of the twelve tests were tape recorded. After the first 5 children the tape recorder was used to record the Profile being administered to the 6th child. This was to give me time to become 'practised' in the administration of the profile. The transcripts were to prove useful in reflecting on my part in the administration of the Profile and ways in which I may have influenced children's responses. After the 6th child (a boy) was taped, I taped the next girl to be tested (this was the tenth child). I later taped the last child to work through the Profile during this first Pilot. This gave me tape recordings, which I later transcribed, of three of the 12 children, 2 girls and a boy, a sample transcript appears in appendix 7A and excerpts are used in this section.

The first names of children only are used. It is not possible to change the names of children for greater anonymity as part of the Profile requires each child to write their...
name. However, I am satisfied that the children cannot be identified from the data included here.

I took an enabling stance, giving constant praise and positive feedback to the children. I frequently said 'good boy' and 'that's right' I also said things like:

- 'I bet you know some of these as well'
- 'Do you know the next one as well?'
- 'Mars bar, you know that, you read the word, and what does it say?'
- 'Brilliant!'
- 'See if you can get the next bit'
- 'That's a page, you're right. That's the picture is it? Right!'

Other strategies were:
- to repeat what the child had said
- to ask a clarifying question
- to ask a further leading question.

The following extract from the book knowledge section illustrates these strategies:

Child: They went in't woods
Tester: They went in the woods (tester repeats)
Child: They walked, they walked to see and they went, they dropped
Tester: Who dropped? (tester asks clarifying question)
Child: The bear
Tester: The bear dropped and what happened then? (tester asks leading question)

I wanted to give the children every chance to demonstrate what they knew or could do under test circumstances. I realised that if this profile is to be widely used there need to be clear instructions to testers on the kind and frequency of praise, encouragement and feedback which is given.

G. Changes to be made for Version 2

There seemed to be five main areas where changes could be made:

1. Identification of logos
2. Book
3. Writing
   i. Examples used to identify handwriting
   ii. Writing materials
4. Scoring sheets
5. Role of the tester
1. **Identification of logos**

**Reflection**

In the section on identification of logos there were some elements where most children scored maximum points. This suggests that the items are well within the knowledge of the children. Some children reached maximum (or near maximum) scores on all items in the section on identifying print.

**Modification**

Easy elements of the Profile as identified in the item analysis in section 4 should be kept as part of the profile. In this pilot the youngest child was 3 years and 5 months old. The second pilot needs to ascertain whether children aged three years are also able to succeed in these items of the profile. This will be a useful feature for low scoring and or younger children. Items with a greater degree of difficulty need to be added to increase the range of knowledge and competence measured through the Profile. The environmental print items in the Profile do not currently demonstrate the 'continuum of relevant tasks' advocated by Gipps (1994 p.83).

2. **Book**

**Reflection**

Whilst the book used for version 1 pilot study enabled all the items in the section of the profile to be covered, there could be problems and criticisms around the use of a single book, such as:

- the book may go out of print or be difficult to obtain
- the book may be well known to a particular child/group of children
- the items presently, are known to work only with this single book.

A further issue concerns the span of the book knowledge section. The number of questions could be increased, extending the degree of difficulty and thereby offering a broader continuum of tasks where children are able to attain a higher score if they can respond to more difficult items.
Modification

The book used in the Profile should be changed, and the possibility of a choice of several books could be introduced when trialling version 2. This would eliminate the argument that the test only works with one particular book, and show the effect of different books. This problem was solved by Clay when in her 'Concepts about print' test (1972) she devised two test books Sand (1972b) and Stones (1979a). The possibility of a test book - produced and published alongside the test is not realistic now, given the quality of children's publishing and the need for test and re-test potential. Unless books like those children might normally encounter in nurseries are used in the Profile, the measure of book knowledge cannot be considered the best picture possible of children's ability achievable in a formally devised assessment situation. Instead of prescribing a particular book or publishing a 'test book', the following criteria for book selection could be used in version 2. These criteria have been developed from an analysis of the qualities of the book used in version 1.

Criteria for book selection:

- pictures and print should be clearly differentiated and should appear together on the majority of pages
- the book should be 'unfamiliar', possibly newly published or at least not available in the nursery/group book stock
- there should be a clear storyline which is also discernible from the illustrations.

Questions

Additional questions about words, letters, specific letters will be added to the questions in the section on book knowledge further examining children's knowledge about language of literacy, and increasing the range of the Profile.
3. **Writing**

i **Examples used to identify handwriting**

*Reflection*

Children were asked to select from a choice of three cards (writing, picture, and drawing) the card which contained an adults' handwriting. The majority of children were able to do this, though some children chose other cards. It would be possible to increase this degree of difficulty on this item, thereby reducing the possibility of guessing correctly from 1 in 3 to 1 in 5 (or more) and in so doing extending the range of the Profile.

*Modification*

In version 2 more cards will be added to this choice. The present three will remain and a piece of lined coloured card and a picture of a teddy will be added. This will give a choice of five from which children must select the sample of handwriting in order to score.

ii **Writing materials**

*Reflection*

A drawing of a teddy bear was printed on the writing paper. Some examples of children's writing and my observations suggest that, rather than being an inducement to write, this provided a distraction.

*Modification*

In Version 2 plain A4 paper will be used, and a black felt tip pen. The teddy bear alone, is sufficient encouragement to write if any is needed.
4. Scoring sheets

Reflection

In version 1 a separate score sheet and test booklet was used. This meant that the tester had 1 book and 1 score sheet for each child and was therefore referring to 2 documents.

Modification

The two documents will be retained but I will seek the views of testers as to the ease of this for administration. If the score sheets are incorporated into the test administration booklet there will be a lengthy document for each child.

5. Role of the tester

Reflection

Decisions about the role of the tester are made in the light of reflection discussed in section 6 of this chapter. The tester must take an enabling stance, offering each child the best opportunity to perform well (in a way that reflects his/her ability), but consistency is needed both between testers and for the same tester re-testing the same children at a later date. During the pilot of Version 1, I discontinued the administration of the Profile with one child because he refused to answer questions of participate in the tasks presented.

Modification

Version 2 of the Profile needs to include:

- clear instructions to the tester on type and frequency of praise, encouragement and feedback to the children
- notes of when not to proceed with further items.
H. Conclusion

Taking the above amendments into account Version 2 of the Early Literacy Development Profile was developed. The development continued to aim for the 'continuum of relevant tasks' advocated by Gipps (1994) and include in that range, items that would reflect as much as possible children's achievements from the earliest steps such as making a mark on paper, to more advanced, such as writing one's name.

The rationale, design and description of the Early Literacy Development Profile - Version 2 follow in chapter 8
Chapter 8

Early Literacy Development Profile Version 2- Rationale, Design and Description

This chapter begins with a rationale for changes in Version 2. There follows a discussion of the design changes. The chapter concludes with a description in the form of the full script of Version 2 and the score sheet.

A. Rationale

Decisions about changes were based upon and discussed in the Evaluation of Version 1 (chapter 7) which pointed to the need for adaptation in five areas:

1. Identification of logos (Part 1 Environmental Print Task 2)
2. Book used (Part 2 Book Knowledge Task 1 and 2)
3. Writing
   i. Examples use in the task to identify writing (Part 3 Early Writing Task 1)
   ii. Writing materials (Part 3 Early Writing Task 2)
4. Scoring sheets
5. Role of the tester

B. Design

I will now discuss the Profile task by task and demonstrate where changes relating to the five areas above were made from Version 1 to Version 2, using extracts from each Version where appropriate to illustrate those changes.

PART 1     ENVIRONMENTAL PRINT

Task 1     Identifying print in the outdoor environment

This task remains unchanged.
PART 1  ENVIRONMENTAL PRINT

Task 2  Identifying words and logos

There was a need to achieve a span of scores. This meant retaining the easier elements so that the Profile could be used with children as young as three (who would have some chance of achieving a score) but also having additional items to register the achievement of older children. Version 1 looked like this:

<table>
<thead>
<tr>
<th>Version 1</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Instructions</strong></td>
</tr>
<tr>
<td>Show the book of photos to the child. Look at each picture in turn.</td>
</tr>
<tr>
<td><strong>Ask</strong> the following questions for each photograph:</td>
</tr>
<tr>
<td>1. <em>Do you know what this is?</em></td>
</tr>
<tr>
<td>2. <em>Can you show me the word(s) here?</em></td>
</tr>
<tr>
<td>3. <em>Do you know what the words say?</em></td>
</tr>
<tr>
<td><strong>Scoring</strong></td>
</tr>
<tr>
<td>For each photograph score as follows</td>
</tr>
<tr>
<td>1. score 1 point</td>
</tr>
<tr>
<td>2. score 1 point</td>
</tr>
<tr>
<td>3. score 1 point</td>
</tr>
<tr>
<td>Total possible 'raw' score for task 2 is 30.</td>
</tr>
<tr>
<td>Divide the maximum score by 6</td>
</tr>
<tr>
<td>Maximum final score for task 2 5 points</td>
</tr>
</tbody>
</table>

Version 1 included three questions for each of the 10 logos and the possibility of scoring 1 point for each correct answer. So as not to have unwieldy scores and keep a balance with the rest of the Profile these scores were weighted. Each point was effectively $\frac{1}{3}$ of a point, the final score being divided by 6 to achieve a maximum score of 5 points.
In Version 2 there are four questions, and all are more direct than those in Version 1. For example, *Can you show me the word(s) here?* becomes *Show me the word(s) here.* This is intended to reduce the likelihood of children answering 'yes' or 'no' when asked a question.

High scores in the evaluation of Version 1 suggested that children could do more than the Profile enabled them to demonstrate. There was therefore a need to raise the ceiling. To accomplish this, Version 2 contains the same 10 logos with an additional question which asks children to point to a particular word. This final question requires a more precise answer, therefore posing a more difficult challenge. This was likely to increase the span of scores.

Scoring changes in accordance to the amended tasks, but the maximum score of 5 remains. The maximum score is more difficult to achieve as more items must be correct to reach a maximum score. In order to maintain the weighting on this part of the Profile with the other two parts, the raw score must now be divided by 8 to reach a maximum score of 5. Version 1 required division of the raw score of a possible 30 by 6 to reach a possible maximum of 5. Version 2 now appears as over.
Version 2

*Show* the book of photos to the child. Look at each picture in turn.

*Ask* the following questions for each photograph:

1. *What this is?*
2. *Show me the word(s) here?*
3. *What do the words say?*
4. *Show me the word that says.......* Weetabix, Coca Cola, Walkers, Mars, Kit, Heinz Persil, Fairy, Whiskas

**Scoring**

For each photograph score as follows.

<table>
<thead>
<tr>
<th>Question</th>
<th>PS</th>
<th>Point</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Question 1</td>
<td>PS</td>
<td>1</td>
<td>Description of use or purpose is acceptable for example 'breakfast' is acceptable for Weetabix</td>
</tr>
<tr>
<td>Question 2</td>
<td>PS</td>
<td>1</td>
<td>Pointing at any words on the picture is acceptable - but not pictures</td>
</tr>
<tr>
<td>Question 3</td>
<td>PS</td>
<td>1</td>
<td>Approximation of the words on the package is acceptable for example 'Beanz Meanz Heinz' is acceptable for Heinz Beans</td>
</tr>
<tr>
<td>Question 4</td>
<td>PS</td>
<td>1</td>
<td>The exact word listed must be pointed to</td>
</tr>
</tbody>
</table>

Total possible 'raw' score for task 2 is 40. Divide the maximum score by 8

Maximum final score for task 2 5 points

**PART TWO BOOK KNOWLEDGE**

**Task 1 Knowing about books**

It was important that this Profile used books available generally in children's publishing. The idea of a writing a 'Test' book as Clay did (1972b) or of prescribing a particular book was eliminated for reasons discussed in Chapter 7. It is important that the Profile has some uniformity and that whenever or wherever it is administered the results can be relied upon. For this reason some criteria for selection of the book to be used in this part of the test were developed, following an analysis of the qualities of the book used in Version 1. These criteria are included in Version 2.
Chapter 8  Early Literacy Development Profile Version 2- Rationale, Design and Description

Version 2  Criteria for book selection
1. Pictures and print should be clearly differentiated and should appear together on the majority of pages.

2. The book should be 'unfamiliar', possibly newly published or at least not available in the nursery/group book stock.

3. There should be a clear story line which is also discernible from the illustrations.

A series of questions, increasing in difficulty, were developed about the book. Following the Evaluation study of Version 1, three further questions were devised and included in Version 2. This would add to the degree of difficulty and offer the opportunity to find out more about children's knowledge and understanding of the language of literacy.

Version 1
Instructions
Arrange the objects on the table
Ask the following
1. Will you pass me the book please?

2. Take the book from the child (or from the table if the child does not succeed with question 1) Ask - Do you know what this is for? - what do we do with a book?

3. Can you show me the front of the book?

4. Can you show me a page in the book?

5. Can you show me a picture?

6. Can you show me the words?

7. Can you show me just one word?

As well as three additional questions, the questions have been rephrased to reduce the possibility of children answering simply 'yes' or 'no' to the question 'Can you.....?' The
questions in Version 2 are designed to encourage a child to point to the appropriate part of the book or give a verbal response.

**Version 2**

**Instructions**

Arrange the three objects, one of which is the book, on the table. Ask the following:

1. *Pass me the book please?*
2. Take the book from the child (or from the table if the child does not succeed with question 1)
   
   *Do you know what this is for? What do we do with a book?*
3. *Show me the front of the book.*
5. *Show me a picture.*
6. *Show me the words.*
7. *Show me just one word.*
8. *Show me just one letter.*
9. *Show me the letter 'c'*(tester say the letter name not sound).*
10. *What letter is this*(point to a 'b')*

Scoring changed accordingly. With a maximum score of 7 in version 1 and 10 in version 2.
**Version 1**

**Scoring**

1. Score 1 point
2. Score 1 point for a suitable answer e.g. 'for stories' 'to read' 'for bedtime' or other such reply that suggests that the child knows what a book is for.
3. Score 1 point if front is identified correctly
4. Score 1 point if page is identified correctly
5. Score 1 point if picture is identified correctly
6. Score 1 point if words are identified correctly
7. Score 1 point if a single word is identified correctly

Maximum score for Task 1: 7 points

**Version 2**

**Scoring**

1. Score 1 point for picking the book
2. Score 1 point for a suitable answer, e.g. 'for stories', 'to read', 'for bedtime', or other such reply which suggests that the child knows what a book is for
3. Score 1 point if front is identified correctly
4. Score 1 point if page is identified correctly
5. Score 1 point if picture is identified correctly
6. Score 1 point if words are identified correctly
7. Score 1 point if a single word is identified correctly
8. Score 1 point if a single letter is identified correctly
9. Score 1 point if the letter 'c' is identified correctly
10. Score 1 point if the child says 'b' (name or sound acceptable)
**TASK TWO Using books - retelling stories**

<table>
<thead>
<tr>
<th>Version 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. <em>Who is in the story?</em></td>
</tr>
<tr>
<td>2. <em>What is it about? What happens?</em></td>
</tr>
<tr>
<td>3. <em>How does it end?</em></td>
</tr>
</tbody>
</table>

Version 1 included 3 questions. In Version 2 an additional question is added to more fully examine children's understanding of the construction of the book, and adding a question about how the story begins to the group of questions about the plot and the ending.

<table>
<thead>
<tr>
<th>Version 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. <em>Who is in the story?</em></td>
</tr>
<tr>
<td>2. <em>How does the story begin?</em></td>
</tr>
<tr>
<td>3. <em>What happens in the story?</em></td>
</tr>
<tr>
<td>4. <em>How does it end?</em></td>
</tr>
</tbody>
</table>

Scoring therefore changes accordingly, and scoring possibilities in Version 2 have been graded according to the detail of the answer. More complex responses can achieve a higher score with a maximum of 8 points where Version 1 offered a maximum of 3 points. Here again, the potential of a range of scores along the continuum of relevant tasks is increased.

**Version 1**

**Scoring**

1. score 1 point for mention of characters either by name or by description
2. score 1 point for describing events.
3. score 1 point for describing the ending.

Maximum score for Task 2 3 points
Version 2

Scoring

1. Score 1 point for mention of single character either by name or by description (a teddy, a dolly, patch, mummy, baby, etc.)
   Score 2 points for mention of two or more characters

2. Score 1 point for brief description of the start of the story (e.g. there was a lady with a dog, there was a postman)
   Score 2 points for a fuller description giving more specific detail

3. Score 1 point for a brief description of events (they went to the sea side, they had a party)
   Score 2 points for a more detailed description of the plot

4. Score 1 point for brief description of the ending (they came home and went to be, they found the dog)
   Score 2 points for a fuller description of the ending.

Maximum score for Task 2 8 points

PART THREE EARLY WRITING

Task 1 Identifying and knowing about writing

Version 1 asked children to identify a piece of writing from three cards.

Version 1

- Three pictures: animal, child's drawing, adult writing (PICTURES C Appendix 6.C)

The degree of difficulty was increased in Version 2 with the use of 5 cards instead of three. Children therefore had to select from a wider range, making successful guessing less likely and increasing the likelihood of a broader span of scores.
Version 2

Five pictures:
toy, animals, child's drawing, adults handwriting, blank coloured card (Pictures C Appendix 8.A)

The process remains the same:

Version 1

Show the child three pictures:
- a view or an animal, (C1)
- a child's drawing, (C2)
- a page of adults handwriting (C3) Ask

3. Which one of these is writing?

Version 2

Lay the five pictures out on the table in front of the child:
- toy (C1)
- animals (C2)
- child's drawing (C3)
- adults handwriting (C4)
- blank coloured card (C5)

Tester take care not to 'eye' point or give other clues about the correct choice here.

Ask

3. Which one of these is writing?

One point can be scored for correct identification of writing. The difference being that it is harder to score a point by chance on this task in Version 2 because there are more options to choose from.
** TASK 2  Writing**

Some changes have been made to the materials provided for this part of the Profile. Version 1 stressed the 'teddy bear' theme as a way of making the Profile attractive to children so that they would want to write and therefore have a better chance of demonstrating what they could do.

**Version 1**

**Materials**

Teddy bear writing paper  
Teddy bear pencil (if possible)  
12" teddy bear and glasses to fit.

In Version 2 this was amended as the Evaluation of Version 1 suggested that the bear writing paper was not necessary and the bear alone was sufficient inducement to write if any was necessary. Some of the writing samples in Version 1 also suggested that the teddy and the printing on the page was a distraction. Version 2 now appears as over.
Version 2

Materials

Writing paper

Black felt tip pen

Teddy bear with glasses to fit

The process of this part of the Profile remains the same with fuller instructions to testers. This will be discussed in the following section so it is not reproduced here. The task remains unchanged in terms of presentation and what the child is asked to do.

Changes were made to the scoring of this task. Version 1 offered a maximum of 7 points.

Version 1

Scoring

Assess the child's writing as follows

1. Making any line of marks score 1 point
   Making letter like marks score 1 point
   Writing numbers or letters score 1 point
   Writing left to right or top to bottom score 1 point

2. Name writing
   One letter recognisable score 1 point
   two letters recognisable score 2 points
   full name written correctly score 3 points

Maximum score for Task 2 7 points
In Version 2 it is possible to score a maximum of 9 points because writing left to right and top to bottom score separate points rather than one point for both attributes in Version 1, and there is an additional point in Version 2 for the correct use of a capital letter at the start of the child's name.

### Version 2 Scoring

Score the child's writing as follows:

1. **Making any line of marks**
   - score 1 point
2. **Making letter like marks**
   - score 1 point
3. **Writing conventional letters**
   - score 1 point
4. **Writing left to right**
   - score 1 point
5. **Writing top to bottom**
   - score 1 point
6. **Name writing**
   - One letter recognisable
     - score 1 point
   - or
   - Two letters recognisable
     - score 1 point
   - or
   - Full name written correctly
     - score 1 point
   - plus
   - beginning name with a capital letter
     - score 1 point

**Maximum score for Task 2**: 9 points

This concludes the detail of the design of different tasks in Version 2 of the Profile so far as materials, tasks and scoring are concerned.

There was one other type of change to the Profile from Version 1 to Version 2, this was the guidance to testers. The Profile is written carefully throughout to take the tester through it step by step with explanation for different steps and details of exactly what to say.

The main change from Version 1 to Version 2 comes in Part 3 Early Writing Task 2 *Writing*. Version 2 gives a fuller explanation and reasoning because this is a part where some children may refuse to continue and testers should all follow the same procedure...
in order to encourage and then, if necessary, discontinue. Version 1 was as follows, guidance is highlighted.

### Version 1

**Instructions**

Ask the child if s/he thinks teddies can write. Introduce a teddy who is wearing glasses. Say *This teddy can't write very well but he can read when he wears these magic glasses.*

Give the paper a pencil to the child.

1. Ask the child to *write a message on the special teddy paper for Bear to read.*

Let the child write, encourage this effort. If the child says that s/he can't write say that the bear can read all sorts of writing so long as he wears his magic glasses. When the child has finished his/her 'independent' writing:

2. Ask *Will you write your name at the bottom so that Bear knows it is from you?*

It was necessary to make this clearer and more helpful. Version 2 was as follows, again guidance to testers is highlighted.
Version 2

Instructions

Ask the child if s/he thinks teddies can write. Introduce a teddy who is wearing glasses. Say *This teddy can't write very well but he can read when he wears these magic glasses.*

The use of the teddy is to make the administration of the writing part of the profile more user friendly and give the child some encouragement to write.

1. Give the paper and a pencil to the child. Ask the child to write a message on the paper for the teddy to read. Let the child write, encourage this effort. If the child says that s/he can't write say that the teddy can read all sorts of writing so long as he wears his magic glasses. Suggest that the child 'pretend' to write if he/she insists they cannot. If the child refuses at this point say *OK, let's try the last bit,* and go on to the next part of the test.

When the child has finished his/her 'independent' writing (or if they refused):

2. *Ask*

   *Will you write your name at the bottom so that teddy knows it is from you?*

   If the child has already written your name either let them repeat it if they wish or identify for you which is their name in the first piece of writing.
I have discussed modifications to each task of the Profile where appropriate and in the process identified changes from Version 1 to Version 2 in five main areas:

1. Identification of logos (Part 1 Environmental Print)
2. The book used (Part 2 Book Knowledge Task 1 and 2)
3. The examples use in the task to identify writing (Part 3 Early Writing Task 1) and writing materials (Part 3 Early Writing Task 2)
4. The scoring system
5. The role of the tester

Following the development of Version 2 of the Profile it was necessary to design a new score sheet to take account of the changes. A copy of this follows the text of Version 2. As the changes are directly related to the changes in the actual Profile which have already been discussed I do not propose to make further comment on the score sheet. The new score sheet is included following version 2 for the sake of completeness.

C. Description

Having discussed the rationale and design of version 2 a full description follows in the form of the complete text of Version 2 and the score sheet in order that it can be examined without the interruption of analytical commentary.
PART ONE ENVIRONMENTAL PRINT

TASK 1 Identifying print in the outdoor environment

Materials needed
Colour photograph montage of street scene including several examples of environmental print, (A)

Instructions
Show the child the colour photographs of the street scenes (A).
Ask the following questions in this order:
1. What can you see in the picture?
2. Can you point to some signs, some words in this picture?
3. What are signs for?
4. Do you know what any of these signs say?

Scoring
1. no score - this is a 'warm up' question
2. score 1 point
3. score 2 points
4. score 2 points

Maximum score for Task E1 5 points
Record scores during the test on the administration sheet in the appropriate boxes

Record the final score in the total column in the box marked PART 1 Task 1
**TASK 2 Identifying words and logos**

**Materials needed**

Small booklet containing a selection of photographs of the 'top ten' logos chosen from the following categories:
- cereals
- sweets
- groceries
- tinned foods
- household items.

These may be chosen according to the top ten best selling products. For this measure the following items were selected in this way:
- Weetabix
- Coca Cola
- Walkers crisps
- Kelloggs cornflakes
- Mars bar
- Kit Kat
- Heinz Beans
- Persil washing powder
- Fairy liquid
- Whiskas cat food.

The photographs of logos should be arranged in a small booklet, one on each right hand page, (B).

**Instructions**

*Show* the book of photos to the child. Look at each picture in turn.

*Ask* the following questions for each photograph:
1. *What this is?*
2. *Show me the word(s) here?*
3. *What do the words say?*
4. *Show me the word that says...*  
   - Weetabix
   - Coca Cola
   - Walkers
   - Mars
   - Kit
   - Heinz
   - Persil
   - Fairy
   - Whiskas
Scoring

For each photograph score as follows

Question 1  PS  1 Point  *Description of use or purpose is acceptable for example 'breakfast' is acceptable for Weetabix*

Question 2  PS  1 Point  *Pointing at any words on the picture is acceptable - but not pictures*

Question 3  PS  1 Point  *Approximation of the words on the package is acceptable for example 'Beanz Meanz Heinz' is acceptable for Heinz Beans*

Question 4  PS  1 Point  *The exact word listed must be pointed to*

Total possible 'raw' score for task 2 is 40. Divide the maximum score by 8

Maximum final score for task 2 5 points

Record scores during the test on the administration sheet in the appropriate boxes i.e.

Photo a 1,2,3,

Record the final score in the total column in the box marked PART 2 Task 2

PART TWO BOOK KNOWLEDGE

TASK 1  Knowing about books

Materials needed

Three objects of which one is a book selected according to the criteria below e.g. a teddy, the book another object (cup, ball, jigsaw).

Criteria for book selection

a. pictures and print should be clearly differentiated and should appear together on the majority of pages
b. the book should be 'unfamiliar', possibly newly published or at least not available in
   the nursery/group book stock

c. there should be a clear story line which is also discernible from the illustrations

Instructions

Arrange the three objects, one of which is the book, on the table.

Ask the following

1. Pass me the book please.
2. Take the book from the child (or from the table if the child does not succeed with
   question 1)
   Do you know what this is for? What do we do with a book?
3. Show me the front of the book.
4. Show me a page in the book.
5. Show a picture.
6. Show me the words.
7. Show me just one word.
8. Show me just one letter.
9. Show me the letter 'c' (tester say the letter name not sound).
10. What letter is this? (point to a 'b')

Scoring

1. Score 1 point for picking the book
2. score 1 point for a suitable answer, e.g. 'for stories', 'to read', 'for bedtime', or other
   such reply which suggests that the child knows what a book is for.
3. score 1 point if front is identified correctly
4. score 1 point if page is identified correctly
5. score 1 point if picture is identified correctly
6. score 1 point if words are identified correctly
7. score 1 point if a single word is identified correctly
8. score 1 point if a single letter is identified correctly
9. score 1 point if a letter 'c' is identified correctly
10. score 1 point if the child says 'b' (name or sound acceptable)

Maximum score for Task 1 10 points

Record scores during the test on the administration sheet in the appropriate boxes
Record the final score in the total column in the box marked PART TWO Task 1.

**TASK TWO  Using books - retelling stories**

**Materials**
The same book chosen according to specified criteria

**Instructions**
Give the book to the child and say: *I just need to tidy up a bit, would you like to look at this book while I do that? Then you can tell me about the story.* Give the child time to look at the book then ask.
Will you tell me about that book?
1. *Who is in the story?*
2. *How does the story begin?*
3. *What happens in the story?*
4. *How does it end?*

**Scoring**
1. Score 1 point for mention of single character either by name or by description (*a teddy, a dolly, patch, mummy, baby, etc.*)
score 2 points for mention of two or more characters
2. Score 1 point for brief description of the start of the story (e.g. *there was a lady with a dog, there was a postman*)
Score 2 points for a fuller description giving more specific detail

3. Score 1 point for a brief description of events *(they went to the sea side, they had a party)*

Score 2 points for a more detailed description of the plot

4. Score 1 point for brief description of the ending *(they came home and went to be, they found the dog)*

Score 2 points for a fuller description of the ending.

Maximum score for Task 2 8 points

Record score in the appropriate boxes.

Record the final score in the total box marked PART 2 Task 2

PART THREE  EARLY WRITING

TASK ONE  Identifying and knowing about writing

Materials

Five pictures: animals, a toy, child's drawing, blank piece of coloured card, adult writing (C)

Instructions

*Write* a few lines in front of the child.

*Ask* the following

1. *Do you know what I am doing?*

2. *Do you know what writing is for?*

Lay the five pictures out on the table in front of the child:

- toy (C1)
• animals (C2)
• child’s drawing (C3)
• adults handwriting (C4)
• blank coloured card (C5)

Tester take care not to ‘eye’ point or give other clues about the correct choice here.

Ask
3. *Which one of these is writing?*

**Scoring**

1. score 1 point for correct description (for example *you’re writing*)
2. score 1 point for suitable answer e.g. letters, cards, stories etc.
3. score 1 point for identifying the adults writing (C4)

Maximum score for Task 1 3 points

Record scores during test on the administration sheet in the appropriate boxes

Record the final score in the total box marked PART 3 Task 1

**TASK 2**  
**Writing**

**Materials**

Writing paper
Black felt tip pen
Teddy bear with glasses to fit

**Instructions**

Ask the child if s/he thinks teddies can write. Introduce a teddy who is wearing glasses.

Say *This teddy can’t write very well but he can read when he wears these magic glasses.*
The use of the teddy is to make the administration of the writing part of the profile more user friendly and give the child some encouragement to write.

1. Give the paper and a pencil to the child. Ask the child to write a message on the paper for the teddy to read. Let the child write, encourage this effort. If the child says that s/he can't write say that the teddy can read all sorts of writing so long as he wears his magic glasses. Suggest that the child 'pretend' to write if he/she insists they cannot. If the child refuses at this point say OK, let's try the last bit, and go on to the next part of the test.

When the child has finished his/her 'independent' writing (or if they refused):

2. Ask

Will you write your name at the bottom so that teddy knows it is from you?

If the child has already written your name either let them repeat it if they wish or identify for you which is their name in the first piece of writing.

Scoring

Score the child's writing as follows:

1. Making any line of marks score 1 point
   Making letter like marks score 1 point
   Writing conventional letters score 1 point
   Writing left to right score 1 point
   Writing top to bottom score 1 point

2. Name writing
   One letter recognisable score 1 point or
   Two letters recognisable score 1 point or
   Full name written correctly score 1 point plus
   Beginning name with a capital letter score 1 point

Maximum score for Task 2 9 points

Record scores on the score sheet in the appropriate boxes.

Record the final score in the total box marker PART 3 Task 2
TEST CONCLUDES

Thank the child and give him/her a sticker or some other small reward.

Complete the Profile score summary on the final page of the score sheet.

Attach writing sample to the score sheet.

Ensure all details on the score sheet are complete.

Add your own notes on the page headed Testers' Comments.
Early Literacy Development Profile

Score Sheet

Version 2
Early Literacy Development Profile - Score sheet - Version 2

<table>
<thead>
<tr>
<th>Child's first name</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Date of birth</td>
<td></td>
</tr>
<tr>
<td>Date of test</td>
<td></td>
</tr>
<tr>
<td>Age at testing</td>
<td>years months</td>
</tr>
</tbody>
</table>

Note

PS refers to the Possible score
AS refers to the Actual score achieved by the child

PART 1 ENVIRONMENTAL PRINT

Task 1

Show the child the set of colour photographs of street scenes. Ask the following in this order

<table>
<thead>
<tr>
<th>No.</th>
<th>Question</th>
<th>PS</th>
<th>AS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>What can you see in the pictures?</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Can you point to some signs, some words, in the pictures?</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>What are signs for?</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Do you know what any of these signs say?</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>5</td>
<td></td>
</tr>
</tbody>
</table>

187
Task 2

<table>
<thead>
<tr>
<th>Picture</th>
<th>P S</th>
<th>AS</th>
<th>PS</th>
<th>AS</th>
<th>PS</th>
<th>AS</th>
<th>PS</th>
<th>AS</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weetabix</td>
<td>1</td>
<td></td>
<td></td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Coca Cola</td>
<td>1</td>
<td></td>
<td></td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Walkers crisps</td>
<td>1</td>
<td></td>
<td></td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Kelloggs corn flakes</td>
<td>1</td>
<td></td>
<td></td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Mars Bar</td>
<td>1</td>
<td></td>
<td></td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Kit Kat</td>
<td>1</td>
<td></td>
<td></td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Heinz Baked Beans</td>
<td>1</td>
<td></td>
<td></td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Persil Washing Powder</td>
<td>1</td>
<td></td>
<td></td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Fairy Liquid</td>
<td>1</td>
<td></td>
<td></td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Whiskas Cat Food</td>
<td>1</td>
<td></td>
<td></td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
</tbody>
</table>

Add the total scores for each row. Total all the scores in the total boxes on the right hand side of the table. Insert the 'raw' score. Divide by 8. Insert the total score for Task 2.

Environmental Print Possible Score 10 Child's Score
## PART 2  BOOK KNOWLEDGE

### Task 1  Knowing about books

<table>
<thead>
<tr>
<th>No</th>
<th>Question</th>
<th>PS</th>
<th>AS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Pass me the book please?</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Do you know what this is for? What do we do with a book?</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Show me the front of the book?</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Show me a page in the book?</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Show me a picture?</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Show me the words?</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Show me just one word?</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Show me just one letter</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Show me the letter 'c' (say letter name)</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>What letter is this? (point to 'b')</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

### Task 2  Using books, retelling stories

<table>
<thead>
<tr>
<th>No</th>
<th>Question</th>
<th>PS</th>
<th>AS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Who is in the story?</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>How does the story begin?</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>What happens in the story?</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>How does the story end?</td>
<td>2</td>
<td></td>
</tr>
</tbody>
</table>

Part 2 Book Knowledge Possible score 18

Child's score 18
## PART 3 EARLY WRITING

### Task 1 Identifying and knowing about writing

<table>
<thead>
<tr>
<th>No</th>
<th>Question</th>
<th>PS</th>
<th>AS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Tester writes in front of the child</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Do you know what I am doing?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Do you know what writing is for?</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Show the 5 cards: (C1,2,3,4,5) Which one of these is writing?</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

### Task 2 Writing

Child does a sample of writing, score after the child has left the room as follows

<table>
<thead>
<tr>
<th>PS</th>
<th>AS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Making any line of marks</td>
<td>1</td>
</tr>
<tr>
<td>Making letter like marks</td>
<td>1</td>
</tr>
<tr>
<td>Writing conventional letters</td>
<td>1</td>
</tr>
<tr>
<td>Writing left to right</td>
<td>1</td>
</tr>
<tr>
<td>Writing from top to bottom</td>
<td>1</td>
</tr>
</tbody>
</table>

Ask the child to write his or her name, score as follows

<table>
<thead>
<tr>
<th>PS</th>
<th>AS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 letter recognisable or 2 letters recognisable or 3 letters (or more) recognisable</td>
<td></td>
</tr>
</tbody>
</table>

### Part 3 Early Writing

<table>
<thead>
<tr>
<th>PS</th>
<th>AS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Possible score 12

Child's score
# EARLY LITERACY DEVELOPMENT PROFILE SCORE SHEET

## SUMMARY

<table>
<thead>
<tr>
<th>Part</th>
<th>Focus</th>
<th>PS</th>
<th>AS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Environmental Print</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Task 1</td>
<td>Identifying print in the outdoor environment</td>
<td></td>
<td>5</td>
</tr>
<tr>
<td>Task 2</td>
<td>Identifying words and logos</td>
<td></td>
<td>5</td>
</tr>
<tr>
<td>2</td>
<td>Book Knowledge</td>
<td>18</td>
<td></td>
</tr>
<tr>
<td>Task 1</td>
<td>Knowing about books</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Task 2</td>
<td>Using books - retelling stories</td>
<td></td>
<td>8</td>
</tr>
<tr>
<td>3</td>
<td>Early Writing</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>Task 1</td>
<td>Identifying and knowing about writing</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Task 2</td>
<td>Writing</td>
<td></td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>Total score for test</td>
<td>40</td>
<td></td>
</tr>
</tbody>
</table>

**PLEASE REMEMBER TO ATTACH THE WRITING SAMPLE TO THE SCORE SHEET**

**Testers' Comments**

Please note briefly any points which were of particular mention in the administration on this occasion e.g. anything you did which may have influenced the outcomes, any interruptions, the child refusing to continue and subsequent abandonment of the test etc. General points which occur to you and apply to each occasion the test is used can be noted on the testers' feedback sheet.

Time taken to administer the test .......minutes. This includes completing the score sheet when the child has left.

Tester........................................

School.................................

Thank you
Chapter 9

Evaluation Study of Version 2 Implementation and teachers' views

A. Implementation of Evaluation of Version 2

B. Data

C. Analysis of Teachers' Views and experiences
   1. General comments
   2. Administration
      a. materials
      b. time
      c. refusals
      d. scoring
   3. Profile Tasks
      a. Part 1 Environmental Print
      b. Part 2 Book Knowledge
      c. Part 3 Early Writing

D. Implications for Version 3

A Implementation of evaluation of Version 2

Following the changes made to the Early Literacy Development Profile Version 1 the materials were redrafted and a trial of Version 2 was arranged. This trial was to involve new testers as well as different children and a larger sample.

A meeting was held on 12 September 1994 and attended by 18 staff from 4 nursery schools. Five nursery schools had been invited to participate but one was unable to accept due to forthcoming inspection. The children attending these nurseries were from a range of families reflecting different socio-cultural groups. The catchment areas of two of the nurseries included areas of poverty and deprivation as well as modern
private housing. The remaining two were located in areas where many children were considered to be in need and some 'at-risk' but these nurseries also provided for children whose parents worked and lived outside the immediate catchment area. There was a strong likelihood that these nurseries were able to provide a sample of children within the 3-5 age range and spanning a spectrum of literacy abilities.

A further reason for selecting these four schools was the staff. Staff were considered to have a good grounding in aspects of early literacy development and likely to appreciate the purposes of the trialling and give informative and critical comment.

The Early Literacy Development Profile Version 2 was presented and explained during a 2½ hour training session. The head teachers of the nursery schools agreed to trial Version 2 in their schools and the group agreed to cover the age range of 3 to 5 years as far as possible, and to ensure a balance of gender and ability. A Profile pack comprising: the Profile administration booklet; materials (pictures, teddy bear, pen, paper); score sheets; and testers comment sheets were given to each school.

The teachers tried the materials with children in their schools over a 2 month period and returned with score sheets and comments to a debriefing meeting on 12 November 1994.

In this trial 71 children, 36 girls and 35 boys were tested. 15 testers participated (all nursery school teachers). In addition to the Profile score sheets (discussed in chapter 10) data on teachers experience was collected. This chapter presents and discusses an analysis of the testers perspective and suggests implications to be considered for Version 3.
B. Data

The comments of the 18 teachers (including 4 head teachers, three of whom did not trial the test themselves but viewed the materials and observed them being used in their schools) who attended the debriefing meeting were recorded by an independent observer as they discussed the Profile and their experience of using it. In addition 8 of the 15 testers gave written comments on tester's comments sheets provided for this purpose. The remaining 7 said that they felt their experiences and opinions had been fully covered during the debriefing session, (Appendix 9A).

1. General Comments

General comments made by nursery teachers and their head teachers fell into four main categories:
   a. Motivation
   b. Relevance to current practice
   c. Assessment potential for teaching and learning
   d. Political influences.

These four categories are discussed below, drawing on the comments of testers and head teachers to illustrate the points raised.

   a. Motivation

Testers reported that they, and the children, were interested in and enjoyed working through the Profile:

   I found it very interesting, children enjoyed doing it and it made them feel quite 'special'.
   I very much enjoyed the experience as did the children.
   It kept their interest - they obviously liked the materials

   b. Relevance to current practice;

   It fitted in really well with our own record sheet.
   It brings together elements from ordinary practice.
Assessment potential for teaching and learning;

*We found that children were far more knowledgeable than we expected.*

*I found that they know far more than their everyday language would have indicated.*

*It made me realise what some could do - some children did far better than I expected and a few didn't do what I knew they could. One child with really good language scored less well than a child who doesn't speak much at all - that was surprising.*

*It's a good leveller - makes you look at the same things in each child.*

d. Political influences.

A nursery head teacher, reflecting on the current political climate felt that the Profile would be useful in clarifying the role of nursery education in terms of early literacy learning, she said:

*I think it is useful because it is important to have things set down like this to show what we're doing.*

and another head teacher said:

*This is the sort of thing we need to show exactly what children of this age can do. Then there is no doubt, no arguing, because we have the scores.*

2. Administration
   a. Materials
      
      i. The Profile administration booklet

There was a consensus that the layout and detail of the Profile administration booklet was accessible and workable. There were no negative or indifferent responses. They said things like:

*The booklet was easy to use*

*Easy to work with*

*Good - very clear instructions*
Testers had to spend some time learning the test before using it with children, although they reported that this took them an affordable amount of time. One said

_Familiarisation time was 30 minutes_

Another commented on the way she familiarised herself with the Profile.

_OK - after reading it through twice and sorting it out._

### Implications for Version 3

- Maintain the current format and presentation and ensure that modifications do not unduly lengthen the Profile preparation time.

#### ii. The Teddy Bear

There was some discussion about the usefulness of the teddy bear who was included in the test materials to encourage children to write and help them to show their full ability. Some nursery teachers said that they felt that the teddy bear may not be necessary

*One child got carried away with the teddy bear and didn't really get into the assessment. For this one child (out of four I tested) this was a distraction, but in the main the teddy was useful, especially the spectacles, we all tried them on!*

By contrast, other testers felt the teddy bear could be used earlier and given more to do!

*There should be a more active role for the teddy! Start by introducing him at the beginning.*

*Should it be introduced earlier, for earlier tasks? It might have kept some children going.*

*The teddy bear etc. brought 'life' to the testing. I would have liked to have introduced it much earlier to relieve the monotony that some children found initially*
Despite this comment about keeping children going, there was no evidence to suggest that motivation was a problem, indeed, earlier comments in this chapter show that the reverse was the case. The need for the teddy bear or not clearly depends on each child and it will not be consistent at this age. Some testers felt that they had little need for the teddy bear as a provider of additional encouragement to write.

*I did not need to use it as all the children were willing to write*

On balance, it seems that the teddy bear, introduced in Part 3 of the Profile, is helpful as it provides another interest to enliven the final part of the Profile. Comments from testers confirm this:

*Very helpful*

*The bear was extremely helpful and really offered an incentive to perform well*

*Helpful - it helped to keep children interested.*

*Yes - very helpful. He particularly motivated one little girl who was flagging after being unable to answer lots of the earlier questions.*

### Implications for Version 3

- Taking everything into consideration it seems that the teddy bear does provide extra impetus for some children to write and therefore helps them to complete the test. Version 3 will keep the teddy bear and limit its role to part 3 of the Profile as in Version 2

### Time

A detailed analysis of the length of time taken to administer each test will be reported in chapter 10. The concern here is whether the testers felt that the time they spent was acceptable in terms of using the Profile in addition to normal workloads. One nursery teacher commented that she *seemed to get quicker* as she became more familiar with the Profile and its administration.
Others commented on the length of time taken to administer the Profile:

*It took on average 20 minutes - that's quite long enough*

Three made specific comments on the usefulness of time spent administering the Profile. One tester felt that time was justified because it was a useful indicator of children's early literacy - she said:

*The purpose of it has a bearing on whether it is too long*

Another commented on the practicality of using the Profile in an everyday teaching situation:

*It only takes about 20 minutes and it's all done, so it can be fitted in*

This was confirmed by a nursery head teacher who indicated that, as a manager, she would be prepared to allocate time to the use of the Profile because the time required was a manageable requirement and the Profile was useful. She said:

*I can easily make time for staff to do this, finding 20 minutes isn't a problem. I'd like it to be available to do with all the children*

<table>
<thead>
<tr>
<th>Implication for Version 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Time taken to administer the Profile is manageable and modifications should not unduly lengthen it.</td>
</tr>
</tbody>
</table>

**c. Refusals**

The testers reported that no children actually refused to participate but one child lost concentration for a while. There was a consensus, demonstrated in earlier sections of this chapter, that the children were interested in what they were being asked to do.
Implication for Version 3

- No children refused to participate but some guidance on when to discontinue a Profile should be included in Version 3

d. scoring

Testers had some criticism of the scoring system. In particular they expressed some dislike of the scoring for Part 1 Task 2 Environmental Print *Identifying words and logos*. Scores here are divided by 8 in order to balance this part of the test with the other parts. This process of division by 8 was criticised:

*The part where we had to divide by 8 was a little complicated!*

*Rather complicated - especially dividing by 8*

Other testers felt that aspects of the scoring sheet were unclear and therefore time consuming:

*Totaling up was unclear - this added on administration time*

*took me a while to fill this in*

*Confusing and time consuming. Probably because I felt under pressure about taking 'time out'*

The score sheet contained *Possible* scores printed in and a blank space for *Actual* scores to be written in. This confused some testers.

*Some confusion on the score sheet summary re possible and actual scores I wanted to total the entire list as actual scores!!*

*You didn't really need to have the 'possible score' on the final grid*

There was one comment on the format of the score sheet, with a suggestion that would have added clarity:

*Thicker lines for the 'total scores' would be helpful*
Implications for Version 3

- Simpler scoring system with easier or no division should be considered.
- The score sheet format needs to be clearer and simple to complete.

3. Profile Tasks

a. Part 1 Environmental Print

This part contains two Tasks: i. Identifying Print in the Outdoor Environment, ii. Identifying words and logos.

i. Identifying Print in the Outdoor Environment

One tester commented that a few children did not know the word 'sign'. One said:

'Sign' seemed a difficult word for a lot of children. It signified 'signpost' or 'road sign' to several of them. Others thought they were the notices in shop windows rather than the signs above shops. I was tempted to substitute 'notice' or 'writing' to help out - but didn't.

Specific comments were made about some of the tasks chosen and the responses of children.

Our children did not know too many signs. Probably because they do not go to that part of town. Signs nearer the market area of town may have meant more to our children.

The children were not familiar with the shops. They do not go down to that part of the City.

Whether the children actually recognise the place itself is not relevant to this study.

The point of the Task is to see if children can identify the existence of environmental print, say what it is for and recognise some of it.

The format of the presentation of this task was criticised:

Some children found the four 'outdoor' environmental print pictures confusing since they were not isolated pictures. This may have influenced their performance.
Testers confirmed that there was a degree of difficulty in one particular question in this Task:

The 'what is it for' (What are signs for?) question was generally difficult and children (if they answered) had to think hard.

**Implications for Version 3**
- Carefully consider phrasing of questions and the words used.
- Consider 1 large photo of a street scene rather than the current montage of 4 used in version 2.
- Maintain the harder questions

ii. Identifying words and logos

Some commented that some children did not find the succession of 10 products easy to respond to.

*A number of items in part 1 task 2 (logos) seemed repetitive to some children particularly if they were failing. Several children pointed to the largest word on the picture*

*one child 'failed' on several logos*

This could be off putting for children and there was a suggestion that 10 examples was too many:

*Logo identification - If the children can't do this very easily they become quite distracted and bored. Perhaps there are too many?*

A suggestion was made about the presentation if this task, changing the album format for a single sheet to make it simpler and quicker to administer and seemingly less repetitive.

*Try putting the logos in a sheet form and just pointing to each*

For other children this was a simple a straightforward task even though some products were less familiar or mistaken for others:
Recognising logos was clear and most children recognised the products even though they did not know what the writing said in each case.

Baked beans was mistaken for cat food.

Washing powder was difficult - do most families use liquid?

Implications for Version 3

- Reduce the number of logos (Part 1 Task 2) from 10 to say, 5
- Change the format of logos (Part 1 Task 2) from album to all on 1 sheet

b. Part 2 Book Knowledge

This part of the Profile included two tasks: i. Knowing about books, ii. Using books, retelling stories. Before focusing on the two tasks I will consider the comments made about the books used in this Part.

There was some discussion about the choice of book for this part of the Profile with one tester summing up the consensus of the group: *getting the right book is vitally important.*

The Profile suggests that the book should be 'unfamiliar'. This was challenged:

*Should it be a book children know well? It would be testing something different - do both? A new book means a foreign situation for children where children are being asked to deal with a new book on their own - contrary to normal practice.***

Conversely, one tester suggested that the unfamiliarity was an asset:

*The unfamiliar book proved to be excellent for test purposes; the bright colours and pronounced characters seemed to offer a good guide to the story content.*

Suggestions were made about the criteria given for choosing the book which would make selection easier:

*Say how many pages - I felt we chose a book that was too long*
Have a list of suggested books

Say you need to have bright, clear pictures

I asked the testers to give details of the books they used. There were:

**Katie and the Smallest Bear**  Ruth McCarthy  (1985)  Picture Corgi

**Kippers' Toybox**  Mick Inkpen  (1992)  Hodder and Stoughton

**My Old Teddy Bear**  Dom Mansell  (1991)  Walker

**Bear Hunt**  Anthony Browne  (1979)  Hamish Hamilton

I analysed these books to see what particular qualities they shared. They had three main qualities in common:

- clear pictures with repeated illustrations of the main characters
- bold text
- the story was discernible from the pictures alone.

These characteristics may help in the listing of criteria for book selection.

### Implications for Version 3

- Stress that the 'right' book is important
- Consider 'familiarity' versus 'unfamiliarity'
- Include list of criteria for selection of a book drawing on the following points:
  
  1. clear pictures with repeated illustrations of the main characters
  2. bold text
  3. the story was discernible from the pictures alone.

**i. Knowing about books**

Testers commented on the questions in this task that children responded to with little difficulty, that is where children are asked to show the picture and then show the words:

*Children found it easy to differentiate text from picture*
Later in this task the Profile asks the tester to say the letter name, not the sound.
There was some discussion about the acceptance of letter 'sounds' as well as 'names'.
Two teachers voiced the opinion of the group that this was 'harsh':

"Question 9 Show me the letter 'c'. I asked one child and she showed me an 's' I know she knows the sound names for 'c'. Why is this not valid?"

"I think that not getting a point when you say the sound instead of the letter is a bit harsh"

This item is included to increase the degree of difficulty and the teachers' reaction indicated their desire for the children they teach to do well.

### Implications for Version 3
- Maintain easier to score questions
- Maintain harder to score questions

### ii. Using books - retelling stories

Talking about this section of the Profile one teacher said:

"The least interesting part of the test was the book - children expected me to do more - to read it"

The children are given a minute to look at the book on their own. One teacher queried this:

"Is that minute really necessary?"

Teachers reported that some children just told the story, others referred to the book, some remembered in a random order. Testers thought that the way in which children told the story could be given more significance, say in the scoring, one commented:

"There are quite a few levels in that (sequencing, ordering, beginning ending etc.)"

A further comment drew attention to the phrasing of the question:
When asked 'how does the story begin' 2 of the 4 children I tested turned to the first page with a picture - the title page - instead of telling me.

So far as instructions to the testers were concerned this posed little problem:

*Instructions were fairly clear*

---

**Implications for Version 3**

- Consider whether the book used should be read to the child by the tester before questioning begins
- Consider time given for child to look at the book alone
- Consider adding possibility of additional points for correct sequencing of the story rather than events recalled at random
- Consider clear phrasing of questions to ensure that children point when required to point and give verbal response when required
- Maintain clear instructions in the Profile Administration booklet

---

c. **Part 3 Early Writing**

The role of the teddy bear in this Part of the profile has been discussed earlier in this chapter. There were two other comments from testers.

There was a question of validity where a child copies rather than writes their own writing.

*One child could see the word 'score' and wrote that word - is that valid?*

Some children tended to draw rather than write:

*Drawings often done rather than writing*

Testers would have liked guidance on what to do about this.
Implications for Version 3

- Consider the place of copying writing
- Give guidance on scoring writing stating that drawing - unless it features some writing does not score

D. Implications for Version 3

Analysis of the teachers' views shows that Version 2 of the Profile is interesting and enjoyable for both teachers and children, it is relevant to current practice and has potential as an assessment instrument for use by teachers. It is also seen as a way of challenging adverse political decisions and statements and providing evidence of children's literacy ability. These qualities are interesting and encouraging as in earlier parts of this thesis I suggested that a successfully developed measure may be of use to teachers as well as researchers (chapter 5) and that one reason for the need for new measures was political (chapter 1). The teachers' views confirm these ideas.

From the analysis of teachers views in this chapter there emerged 23 points for consideration in the development of Version 3. These have already been stated at intervals throughout the chapter but I will reiterate them now, in summary, so that a full impression of the implications for Version 3 can be conveyed.
Profile Administration Booklet and Materials
- Maintain the current format and presentation (Version 2) and ensure that modifications do not unduly lengthen Profile preparation time
- Keep the teddy bear in Version 3 and limit the use of the teddy bear to Part 3 of the Profile as in Version 2
- Ensure that modifications do not unduly lengthen Version 3
- Include some guidance on when to discontinue administration of the Profile

Scoring
- Use a simpler scoring system with easier or no division
- Ensure the score sheet has a clear format and is simple to complete

Part 1 Environmental Print
  i. Identifying Print in the Outdoor Environment
- Carefully consider phrasing of questions and the words used
- Consider 1 larger photo of a street scene rather than a montage used in Version 2
- Maintain harder questions
  ii. Identifying words and logos
- Reduce the number of logos from 10 to say 5
- Change the format of logos from album to all on one sheet

Part 2 Book Knowledge
  choice of book
- Stress the ‘right’ book is important
- Consider ‘familiarity’ versus ‘unfamiliarity’
- Include list of criteria for selection of a book drawing on the following points:
  i. clear pictures with repeated illustrations of the main characters
  ii. bold text
  iii. the story is discernible from the pictures alone
  i. Knowing about books
- Maintain easier to score questions
- Maintain harder to score questions
  ii. Using books - retelling stories
- Consider whether the book used should be read to the child by the tester before questioning begins
- Consider time given for child to look at the book alone
- Consider adding possibility of additional points for correct sequencing of the story rather than events recalled at random
- Consider clear phrasing of questions to ensure that children point when required to point and give verbal response when required
- Maintain clear instructions in the Profile Administration booklet

Part 3 Early Writing
- Consider the place of copying writing
- Give guidance on scoring writing stating that drawing - unless it features some writing does not score
These suggestions for modifications of Version 2 of the Profile will be considered again in chapter 11 where decisions about modifications for Version 3 will be made taking account of the teachers' views discussed in this chapter and analysis of the children's score sheets to be discussed next in chapter 10.
Chapter 10

Evaluation study of version 2 - Analysis of children's performances

Overview

This chapter reports the analysis of children's performances on Version 2 of the Early Literacy Development Profile. The sample and analytical processes will be discussed in seven sections: details of the sample (1); five stages of analysis using SPSS for windows (2-6); conclusions and design implications (7). The framework for analysis and structure of the chapter is as follows:

Section A  Stage 1. The sample

Section B  Stage 2. Analysis of total Profile scores
i. spread of scores
ii. variation with age
iii. variation with sex

Stage 3. Analysis of sub-scores for Environmental Print, Book Knowledge and Early Writing
i. relationship to the total scores
ii. correlations between sub-scores

Stage 4. Analysis of scores for Environmental Print
i. spread of scores
ii. variability with age
iii. item analysis

Stage 5. Analysis of scores for Book Knowledge
i. spread of scores
ii. variability with age
iii. item analysis

Stage 6. Analysis of scores for Early Writing
i. spread of scores
ii. variability with age
iii. item analysis
iv. revision of scoring system

Section C. Stage 7. Conclusions arising from stages 2 - 6 and implications for design of Version 3.
This seven stage structure represents the steps in quantitative analysis which have contributed to the refinement of the Profile in order to improve it. Reasons for each stage of analysis, and discussion of the characteristics that contribute to the design of this Profile are given as appropriate.

Working through the seven stage framework set out at the start of this chapter meant the following.

**Section A**  (Stage 1)

**Stage 1**

Establishing the details and characteristics of the data set: Age range, sex, schools, testers, rated ability, and administration time.

**Section B**  (Stages 2 - 6)

**Stage 2**

Working with the total scores, two basic questions had to be addressed:

1. Was there a reasonable spread of scores across the sample?
2. Did the scores vary appropriately with age?

Satisfactory answers to these two questions led me to investigate whether and how the total scores varied with sex, further to establish the strength of the age-score relationship.

**Stage 3**

Since (as will be shown later) it was worth probing the data further, the next stage of analysis was to look in detail at the three sub-scores (for Environmental Print, Book Knowledge and Early Writing) in order to establish their relationship to the total score and their relationship with each other. It was important to establish whether all three components of the Profile were measuring different things and had therefore earned their place in the Profile as a whole, thus providing the sought for continuum of relevant tasks.
Stages 4, 5, and 6

In the three further steps of analysis (4, 5 and 6) I planned to take each component of the Profile in turn and analyse it in more detail. I examined the spread of scores in each section. For each section I carried out an item analysis to check that each element of the Profile was necessary. Any items where all children scored nil or all scored full marks were to be rejected at this point as unnecessary, or amended to make them useful. Also where several items appeared to have similar effects, there would be scope for dropping some.

Section C Stage 7

Stage 7

At each point in the analytical process (stages 1 - 6) I reached certain conclusions that satisfied me that it was appropriate to continue to the next stage of the analysis. These conclusions are stated at the end of each section and are brought together in the concluding section of this chapter where necessary amendments are identified, (stage 7).

SECTION A Stage 1 The sample

This section presents the details and characteristics of the data set.

i. Age range of children tested
ii. Sex of children tested
iii. Relationship between age and sex of children in the sample
iv. Schools where children were tested
v. Testers
vi. Rated ability of children tested
vii. Administration time for each profile.
i. Age range

Figure 10.1 shows the ages and numbers of children tested. The Early Literacy Development Profile (ELDP) was trialled with children within the age range of 3 years 2 months and 4 years 11 months, giving a good spread of ages across this range. The bar chart shows the number of children tested in each age group. There is a cluster of children in the age 4 years 6 months - 4 years 9 months (54 - 57 months) but the maximum number of children in any age band is 8. Only two ages are missing in this trial, 3 years 6 months and 4 years. Given that children's developmental ability varies greatly between 3 and 5 years, I was satisfied from analysis of this sample that there was an adequate spread of ages even though there are more children at the upper end.

Figure 10.1 The frequency of ages of children tested

ii. Sex

71 children, 36 girls and 35 boys were tested.

iii Relationship between age and sex of children in the sample

Putting information about age and sex together shows that the mean age of the girls was 49.5 months and that of the boys was 52.2 months. The mean age of the girls is therefore less than that for the boys in the sample by 2.7 months.
Grouping the children into four age bands and separating them according to sex shows the numbers of boys and girls tested in each age band. Figure 10.2 shows that there were more younger girls and older boys in the sample.

The nature of the sex/age imbalance arose because testers at four sites were asked to test an equal number of girls and boys from across their age range. In one of the schools the admission age is three years, in others the admission age is higher due to demand on places. Therefore a 'younger girl' in school 4 could be almost four whereas in school 1 a 'younger girl' could be just three years old. The preponderance of older boys could be mainly chance (although a further explanation could be that some intakes include more children of one and in this sample boys in the upper 2 age bands were older than the girls in those age bands).

Figure 10.2 Numbers of girls and boys in the sample in each age band

The difference in numbers of tests carried out in each school (table 10.1) also explains the details of age/sex across the sample. The variation of numbers of children tested and the number of testers at each site is not problematic because it is the Profile itself that is of interest here, not the individual achievements of children. Uneven sampling across the four sites does not affect this because the aim is to develop a criterion referenced Profile, not a norm-referenced and standardised test. I was interested in
data from a range of settings and a range of testers and the sample provided the required data.

iv. Schools

Four schools participated in the trial, with 15 teachers acting as testers. The number of testers in each school largely depended upon the number of teachers on the staff. Table 10.1 shows the numbers of testers and tests carried out at each school.

<table>
<thead>
<tr>
<th>School</th>
<th>Number of testers</th>
<th>Number of tests carried out</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>27</td>
</tr>
<tr>
<td>2</td>
<td>6</td>
<td>18</td>
</tr>
<tr>
<td>3</td>
<td>4</td>
<td>14</td>
</tr>
<tr>
<td>4</td>
<td>3</td>
<td>12</td>
</tr>
</tbody>
</table>

vi. Testers

15 testers carried out the trial. Figure 10.3 shows that the number of tests conducted by each varied from 2 to 15.

Figure 10.3 The number of tests conducted by each tester
v. Rated Ability

Testers were asked to rate the children they tested in terms of general ability, either 'below average', 'average' or 'above average' for their age. In 26 of the 71 cases this data is missing. Teachers expressed reluctance to grade children so it was agreed at the initial training session that each school would trial the Profile with a 'representative' sample of children in their school. Of those who rated ability, figure 10.4 shows that the majority (31 out of 45) have been rated 'average'. This could be a fair picture or it could be a further indicator of reluctance on the part of teachers to grade children as 'above' or 'below' average. I had hoped to compare the Profile scores with teachers evaluation of children's ability, but as it would only be possible to do this in 45 cases its validity would be dubious, therefore I did not proceed with this line of inquiry.

![Figure 10.4](image)

**Figure 10.4** Rated ability of children tested

vi. Administration time

Testers were asked to record the time it took to administer the Profile from start to finish (i.e. including the completion of the score sheet after the child had left). Figure 10.5 indicates that 28 of the 71 tests (39%) were said to take 20 minutes to administer. Nine of the 28 were administered by tester 1 (who carried out 12 tests in total) and
the rest were administered by 7 other testers (see data spreadsheets Appendix 10.1 and Table 10.2). This could represent a degree of 'rounding up' or 'rounding down' by testers. Even if there is some element of unreliability in the time recorded by tester 1, there is still evidence provided by 7 other testers that, in the main, the Profile takes between 20 and 25 minutes to administer.

This enabled me to conclude that, Version 2 of the Profile required about 20 minutes to administer and score - a time that made it potentially workable in practice. If it took much longer to administer there would be a need to re-examine components to reduce the time required for two reasons: first to make it practical in terms of future use in specific research studies and possibly by teachers and second, young children may tire after about 20 minutes and parts of the Profile may not give a fair picture of their capability.

Figure 10.5 Frequency of reported administration times

![Frequency of reported administration times](image-url)
## Table 10.2 Numbers of tests and reported administration times for each tester

<table>
<thead>
<tr>
<th>Tester</th>
<th>Number of tests</th>
<th>Number of reported administration times in minutes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>9  10  13  15  17  18  19  20  21  22  23  25  27  28  30  33</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>1  1</td>
<td>1  1  2  1  3  1  1  1  1  1  1  1  1  1  1</td>
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<tr>
<td>2</td>
<td>1  1</td>
<td>1  1  2  1  3  1  1  1  1  1  1  1  1  1  1</td>
</tr>
<tr>
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<td>1  1</td>
<td>1  1  2  1  3  1  1  1  1  1  1  1  1  1  1</td>
</tr>
<tr>
<td>4</td>
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<td>1  1  2  1  3  1  1  1  1  1  1  1  1  1  1</td>
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<tr>
<td>5</td>
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<tr>
<td>6</td>
<td>1  1</td>
<td>1  1  2  1  3  1  1  1  1  1  1  1  1  1  1</td>
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<td>7</td>
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</tr>
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</tr>
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<tr>
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</tr>
<tr>
<td>12</td>
<td>1  1</td>
<td>1  1  2  1  3  1  1  1  1  1  1  1  1  1  1</td>
</tr>
<tr>
<td>13</td>
<td>1  1</td>
<td>1  1  2  1  3  1  1  1  1  1  1  1  1  1  1</td>
</tr>
<tr>
<td>14</td>
<td>1  1</td>
<td>1  1  2  1  3  1  1  1  1  1  1  1  1  1  1</td>
</tr>
<tr>
<td>15</td>
<td>1  1</td>
<td>1  1  2  1  3  1  1  1  1  1  1  1  1  1  1</td>
</tr>
</tbody>
</table>

### Summary of Section A

The characteristics of the sample suggested a satisfactory range of age, sex, abilities, testers and locations but there was an imbalance of age and sex with more younger girls and more older boys. However, it was worth proceeding further with this analysis as I was interested at this point in the components of the profile and their usefulness in a criterion referenced measure. I was not concerned with issues of achievement in relation to gender. The imbalance of this sample in terms of age and sex will be borne in mind in the evaluation of Version 3. Having established the characteristics of the sample, I proceeded with further analysis of the data.
ANALYSIS OF STAGES 2, 3, 4, 5, and 6

Stage 2. Analysis of total Profile scores

i. Spread of total scores

The maximum total score for the Profile as a whole was 40 points. Figure 10.6 shows the spread of scores across the whole range. The lowest score was 9 points and highest was 39, with 2 children reaching this score. The scores are spread across most of the range of possibility with a mode of 26 (7 children) and a median of 27. More children have scored in the range 20-40 than in the range below 20 but there are not large numbers of children with excessively high scores. This suggests that, even if some children scored highly on some parts of the Profile, they do not necessarily score highly on all. Further analysis of this was carried out in stages 3 to 6.

The spread of scores was encouraging and indicated a measure broadly appropriate to the intended age range with more children scoring in the middle range and children's scores spread throughout the scoring range. Any adjustments in the individual parts of the Profiles would of course effect the final scores. Precisely how the Profile should be revised would depend on the results of further analysis.

Figure 10.6 Spread of total scores for the whole sample.

<table>
<thead>
<tr>
<th>Total score</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>9.00</td>
<td>1</td>
</tr>
<tr>
<td>10.00</td>
<td>1</td>
</tr>
<tr>
<td>11.00</td>
<td>3</td>
</tr>
<tr>
<td>12.00</td>
<td>1</td>
</tr>
<tr>
<td>13.00</td>
<td>2</td>
</tr>
<tr>
<td>14.00</td>
<td>1</td>
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<tr>
<td>15.00</td>
<td>1</td>
</tr>
<tr>
<td>16.00</td>
<td>2</td>
</tr>
<tr>
<td>17.00</td>
<td>1</td>
</tr>
<tr>
<td>18.00</td>
<td>1</td>
</tr>
<tr>
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<td>1</td>
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<td>22.00</td>
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<td>26.00</td>
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<tr>
<td>27.00</td>
<td>2</td>
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<tr>
<td>28.00</td>
<td>1</td>
</tr>
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<td>29.00</td>
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<td>30.00</td>
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<td>31.00</td>
<td>2</td>
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<td>32.00</td>
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<td>33.00</td>
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<td>37.00</td>
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<td>38.00</td>
<td>1</td>
</tr>
<tr>
<td>39.00</td>
<td>1</td>
</tr>
</tbody>
</table>

Maximum score: 40 points
As was the case with Version 1, some changes were indicated to increase the degree of difficulty because, despite the changes made from Version 1 to Version 2 there was a suggestion of a ceiling effect with 5 children scoring within 2 or 3 points of the maximum. The range of items was not sufficient to take account of the extent of children's literacy abilities.

**ii. variation of total scores with age**

In order to analyse the variation of total scores in relation to age the sample was grouped into 4 age bands 3;0-3;5, 3;6-3;11, 4;0-4;5, 4;6-5;0. Figure 10.7 shows the change of the mean score totals across age bands. This demonstrated, as would be expected, an increase in achievement with age (experience of literacy).

**Figure 10.7 Change of the mean score totals across age bands.**

There is another way to look at this information. The scattergram in figure 10.8 shows the relationship of age and total score of the whole sample. There is a relationship between age and total score, \( r = .56, p < .001 \) the older the children the higher their mean score.
iii. variation of total scores with sex,

Bearing in mind the sex/age characteristics of the sample, I also analysed these data to check that the age-score relationship held for each sex.

Figure 10.9 shows the relationship of age and total score of the girls in the sample, 
$r=.52$, $p<.001$ (n=36).

Figure 10.9 Scattergram showing relationship for girls, of age and total score (n=36).
Figure 10.10 shows there is also a relationship between age and total score for boys in the sample, \( r = 0.57, p < 0.000 \) (n=35).

Figure 10.10 Scattergram showing relationship for boys, of age and total score (n=35).

Figure 10.11 summarises the mean scores of boys and girls in each age band. The relationship with age is apparent, but these results indicate that the younger girls score more highly than boys in the same age band. The possibility of a ceiling effect of the Profile is illustrated in the 4;6 - 5;0 age band where girls and boys achieve the same mean score.

Figure 10.11 Mean score totals for girls and boys in each age band.
There is no clear relationship between total scores and sex ($r = .04, p < .724$).

However throughout the statutory school age range tests in English show such a relationship with girls usually scoring higher than boys. Given that the mean age difference between boys and girls is 2.7 months it could be that this test follows the same pattern of other indicators of literacy achievement for older children, (OFSTED 1993). The trend of under achievement in boys led the School Curriculum and Assessment Authority to commission its own investigation into boys under achievement in English (SCAA 1996a). The results of the Early Literacy Development Profile indicate that the children in this sample were typical of the national picture in terms of gender and achievement.

At this point it is important to emphasise that this study is focusing on developing a measurement instrument, not gender differences. Analysis of total scores of the whole group (figures 10.7 and 10.8) and of the separate scores for girls (figure 10.9) and for boys (10.10) suggest a relationship between score and age. Further separate analysis of results for girls and boys is, for the purposes of this study, not appropriate and subsequent analyses will be carried out of the whole sample. Evidence of gender difference will be borne in mind when Version 3 is evaluated.

**Stage 3. Analysis of sub-scores for Environmental Print, Book Knowledge and Early Writing**

i. relationship to the total scores

ii. correlations between sub-scores

In this stage of the analysis the three sub-scores were examined in terms of their relationship to the total score. It was important here to see the interrelationships (i) between the sub-scores and the total score and (ii) between the three subscores.
Each part of the Profile must measure something different and the following correlations make it possible to judge whether or not this was the case.

i. **relationship to the total scores**

Table 10.3 shows the correlations between three sub-scores and total score. Correlations are high so there was a strong relationship between each sub score and the total score. To some extent this would be expected as the three sub-scores made up the total score.

<table>
<thead>
<tr>
<th>Total score</th>
<th>Score Part 1</th>
<th>Score Part 2</th>
<th>Score Part 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>R=.65</td>
<td>p&lt;.001</td>
<td>R=.88</td>
<td>p&lt;.001</td>
</tr>
</tbody>
</table>

The next step was to look at the interrelationships between the sub-scores.

ii. **correlations between sub-scores**

Table 10.4 shows the correlation between sub score for Part 1 (Environmental Print) and Sub score for Part 2 (Book Knowledge). The correlation shows that there was a link - though not so strong as to suggest that these two parts of the Profile were measuring the same aspects of literacy.
Table 10.4  Correlation between sub score for Part 1 (Environmental Print) and Sub score for Part 2 (Book Knowledge)

<table>
<thead>
<tr>
<th>Total score</th>
<th>Score Part 1</th>
<th>Score Part 2</th>
<th>Score Part 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>R = .65</td>
<td>p &lt; .001</td>
<td>R = .45 p &lt; .001</td>
<td></td>
</tr>
<tr>
<td>R = .88</td>
<td>p &lt; .001</td>
<td>R = .45 p &lt; .001</td>
<td></td>
</tr>
<tr>
<td>R = .80</td>
<td>p &lt; .001</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 10.5 shows the correlation between sub-score for Part 1 (Environmental Print) and sub-score for Part 3 (Early Writing). It shows that there is a link - though, again, not so strong as to suggest that these two parts of the Profile were measuring the same aspects of literacy.

Table 10.5  Correlation between sub-score for Part 1 (Environmental Print) and Sub score for Part 3 (Early Writing).

<table>
<thead>
<tr>
<th>Total score</th>
<th>Score Part 1</th>
<th>Score Part 2</th>
<th>Score Part 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>R = .65</td>
<td>p &lt; .001</td>
<td>R = .45 p &lt; .001</td>
<td></td>
</tr>
<tr>
<td>R = .88</td>
<td>p &lt; .001</td>
<td>R = .55 p &lt; .001</td>
<td></td>
</tr>
<tr>
<td>R = .80</td>
<td>p &lt; .001</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 10.6 shows the correlation between sub-score for Part 2 (Book Knowledge) and sub-score for Part 3 (Early Writing). The correlation shows that there was a link - though not so strong as to suggest that these two parts of the Profile were measuring the same aspects of literacy.
Table 10.6  Correlation between sub-score for Part 2 (Book Knowledge) and sub-score for Part 3 (Early Writing).

<table>
<thead>
<tr>
<th>Total score</th>
<th>Score</th>
<th>Part 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>R = 0.65</td>
<td>R = 0.45</td>
<td>Part 2</td>
</tr>
<tr>
<td>p &lt; 0.001</td>
<td>p &lt; 0.001</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Score</td>
<td>Part 2</td>
</tr>
<tr>
<td>R = 0.88</td>
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<td></td>
</tr>
<tr>
<td>p &lt; 0.001</td>
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<td></td>
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</table>

<table>
<thead>
<tr>
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<th>Score</th>
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</tr>
</thead>
<tbody>
<tr>
<td>R = 0.80</td>
<td>R = 0.34</td>
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</tr>
<tr>
<td>p &lt; 0.001</td>
<td>p &lt; 0.003</td>
<td></td>
</tr>
</tbody>
</table>

Summary of Stage 3

Table 10.6 shows the interrelationships between all three sub-scores and between the total score and the sub-scores. There were stronger correlations between sub-scores and the total score than there were between the sub-scores. This suggested that the three elements made distinguishable contributions to the total score and that each of the three parts of the Early Literacy Development Profile was testing a different strand of literacy.

Stages 4, 5, and 6 were the next steps in this analysis, with examination of each part of the Profile in turn.
Stage 4. Analysis of scores for Part 1 - Environmental Print

i. spread of scores

ii. variability with age

iii. item analysis

i. Spread of scores for Part 1 - Environmental Print

The maximum possible score for this part of the Profile was 10 points. Figure 10.12 shows that scores were spread across the whole range, one child scoring 1 point and two children scoring maximum points. There was a cluster of 24 children scoring in the mid range (5 or 6 points), and the majority of children scored 5 or above. 15 children (21%) scored 9 points - giving a spread of scores where children were scoring highly, indicating that some children may be capable of more than the measure asked of them. There appeared to be a need to adjust this element of the Profile to increase the range of items, adding additional criterion and thereby extending the challenge to children.

Figure 10.12 Spread of scores for Part 1 (Environmental Print) for whole sample (n=71)

\[ \text{Scores for Part 1 - Environmental Print} \]

ii. variability with age

It was important that each part of the Profile showed a clear increase in scores in relation to the age of the children tested, as was the case for the total scores (figures
A similar increase in scores with age was needed for Part 1 of the Profile so that:

1. Repeated use of the measure would be possible, with an expectation that as children get older their scores will increase
2. This part of the measure fits the overall scoring pattern and does not distort the total score
3. This part of the measure can be used as a measure of environmental print independently of the other two parts of the Profile - should a research study focus particularly on environmental print.

Figure 10.13 shows the mean scores for Part 1 (Environmental Print) for each age band across the whole sample. This suggests that whilst the youngest age band (3;0-3;5) scored lowest and the highest age band (4;6-5;0) scored highest this pattern is not maintained in the two middle age bands.

Further analysis (Figure 10.14) shows the relationship between age and environmental print suggesting either (a) the relationship was lower than was desirable for a satisfactory increase in scores with age ($r=.22, p<.058$) or (b) knowledge of environmental print does not change much in the 3-5 year age band.
Stage 3 of this analysis (pages 222-225) established a clear relationship between scores for Part 1 and the total score ($r = 0.65$, $p < 0.001$) so this part of the Profile earned its place as a strand of literacy. Items about environmental print needed to be included in the Profile but the above analysis (figures 10.13 and 10.14) suggested that further adjustments must be made. The range of the environmental print part of the Profile could be improved by reconsidering the questions and increasing the degree of difficulty and examining the scoring. Decisions about how to change Part 1 would be informed by the following item analysis.

### iii. item analysis

I carried out an item analysis based on correlations and facility levels. The purpose of this was to search for redundant items. Three considerations guided this stage:

1. Items that were 'inappropriate' because they were either too easy (everyone got them right) or too difficult (everyone got them wrong). Items with means of 1 or 0 would be eliminated because they were not discriminating. Also, items would need to be revised in some way if the facility level did not indicate that series of questions became progressively more difficult.
2. The search for items that gave no extra information
3. Items that were either unrelated or negatively related to the overall measure
Point 1 required calculation of the means, to provide the 'facility levels', Points 2 and 3 could be investigated using a correlation matrix.

Table 10.8 shows that there were no items with means of 0 of 1 so there were none which failed to discriminate. The first three items (1.1.2, 1.1.3 and 1.1.4) increased in difficulty. Item 1.1.2 was the easiest item in this group and as this was the first question in the measure it provided a good start for the Profile activities with a strong likelihood of success. There was a strong case for retaining these three items.

The trends in the items and groups of items in this part of the measure was towards increasing difficulty within each logo, and the correlations indicated appropriate correlations with the sub-score for part 1.

There was a trend of increasing difficulty in each of the four questions relating to the ten examples of print. In every case the first two questions about each picture were easier than the second two. In the case of Weetabix, Coca Cola and Walkers Crisps the four questions increased in difficulty from question A-D. In the remainder, question B seemed to be easier than question A, but questions C and D harder than A and B. Difficulty levels for the Persil Washing Powder and Fairy Liquid suggested that these two items were most difficult of the ten logos. They could be retained in order to keep the potential for a range of scores in this section of the measure.
<table>
<thead>
<tr>
<th>Item number</th>
<th>Question</th>
<th>Facility level</th>
<th>Correlation*</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1.2</td>
<td>Can you point to some signs, some words in the picture?</td>
<td>.89/1</td>
<td>.45p&lt;.000</td>
</tr>
<tr>
<td>1.1.3</td>
<td>What are signs for?</td>
<td>.94/2</td>
<td>.72p&lt;.000</td>
</tr>
<tr>
<td>1.1.4</td>
<td>Do you know what any of these signs say?</td>
<td>.86/2</td>
<td>.45p&lt;.000</td>
</tr>
<tr>
<td>1.2.1A</td>
<td>Weetabix: What is this?</td>
<td>.86/1</td>
<td>.43p&lt;.000</td>
</tr>
<tr>
<td>1.2.1B</td>
<td>Weetabix: Show me the word(s) here</td>
<td>.58/1</td>
<td>.59p&lt;.000</td>
</tr>
<tr>
<td>1.2.1C</td>
<td>Weetabix: What do the words say?</td>
<td>.63/1</td>
<td>.41p&lt;.000</td>
</tr>
<tr>
<td>1.2.1D</td>
<td>Weetabix: Show me the word that says Weetabix</td>
<td>.94/1</td>
<td>.12p&lt;.316</td>
</tr>
<tr>
<td>1.2.1E</td>
<td>Coca Cola: Show me the word(s) here</td>
<td>.93/1</td>
<td>.13p&lt;.299</td>
</tr>
<tr>
<td>1.2.1F</td>
<td>Coca Cola: What do the words say?</td>
<td>.76/1</td>
<td>.43p&lt;.000</td>
</tr>
<tr>
<td>1.2.1G</td>
<td>Coca Cola: Show me the word that says Coca Cola</td>
<td>.66/1</td>
<td>.37p&lt;.002</td>
</tr>
<tr>
<td>1.2.1H</td>
<td>Walkers crisps: What is this?</td>
<td>.97/1</td>
<td>.15p&lt;.228</td>
</tr>
<tr>
<td>1.2.1I</td>
<td>Walkers crisps: Show me the word(s) here</td>
<td>.92/1</td>
<td>.30p&lt;.012</td>
</tr>
<tr>
<td>1.2.1J</td>
<td>Walkers crisps: What do the words say?</td>
<td>.66/1</td>
<td>.34p&lt;.003</td>
</tr>
<tr>
<td>1.2.1K</td>
<td>Walkers crisps: Show me the word that says Walkers</td>
<td>.34/1</td>
<td>.15p&lt;.212</td>
</tr>
<tr>
<td>1.2.1L</td>
<td>Kellogg's Cornflakes: What is this?</td>
<td>.79/1</td>
<td>.29p&lt;.015</td>
</tr>
<tr>
<td>1.2.1M</td>
<td>Kellogg's Cornflakes: Show me the word(s) here</td>
<td>.90/1</td>
<td>.28p&lt;.017</td>
</tr>
<tr>
<td>1.2.1N</td>
<td>Kellogg's Cornflakes: What do the words say?</td>
<td>.59/1</td>
<td>.50p&lt;.000</td>
</tr>
<tr>
<td>1.2.1O</td>
<td>Kellogg's Cornflakes: Show me the word that says Kellogg's</td>
<td>.25/1</td>
<td>.31p&lt;.009</td>
</tr>
<tr>
<td>1.2.1P</td>
<td>Mars Bar: What is this?</td>
<td>.78/1</td>
<td>.24p&lt;.043</td>
</tr>
<tr>
<td>1.2.1Q</td>
<td>Mars Bar: Show me the word(s) here</td>
<td>.92/1</td>
<td>.43p&lt;.000</td>
</tr>
<tr>
<td>1.2.1R</td>
<td>Mars Bar: What do the words say?</td>
<td>.51/1</td>
<td>.59p&lt;.000</td>
</tr>
<tr>
<td>1.2.1S</td>
<td>Mars Bar: Show me the word that says Mars</td>
<td>.73/1</td>
<td>.20p&lt;.104</td>
</tr>
<tr>
<td>1.2.1T</td>
<td>Kit Kat: What is this?</td>
<td>.87/1</td>
<td>.22p&lt;.062</td>
</tr>
<tr>
<td>1.2.1U</td>
<td>Kit Kat: Show me the word(s) here</td>
<td>.94/1</td>
<td>.22p&lt;.067</td>
</tr>
<tr>
<td>1.2.1V</td>
<td>Kit Kat: What do the words say?</td>
<td>.72/1</td>
<td>.55p&lt;.000</td>
</tr>
<tr>
<td>1.2.1W</td>
<td>Kit Kat: Show me the word that says Kit</td>
<td>.50/1</td>
<td>.21p&lt;.084</td>
</tr>
<tr>
<td>1.2.1X</td>
<td>Heinz Beans: What is this?</td>
<td>.80/1</td>
<td>.22p&lt;.069</td>
</tr>
<tr>
<td>1.2.1Y</td>
<td>Heinz Beans: Show me the word(s) here</td>
<td>.93/1</td>
<td>.33p&lt;.004</td>
</tr>
<tr>
<td>1.2.1Z</td>
<td>Heinz Beans: What do the words say?</td>
<td>.65/1</td>
<td>.48p&lt;.000</td>
</tr>
<tr>
<td>1.2.2A</td>
<td>Heinz Beans: Show me the word that says Heinz</td>
<td>.42/1</td>
<td>.32p&lt;.006</td>
</tr>
<tr>
<td>1.2.2B</td>
<td>Persil Washing Powder: What is this?</td>
<td>.72/1</td>
<td>.17p&lt;.151</td>
</tr>
<tr>
<td>1.2.2C</td>
<td>Persil Washing Powder: Show me the word(s) here</td>
<td>.89/1</td>
<td>.32p&lt;.006</td>
</tr>
<tr>
<td>1.2.2D</td>
<td>Persil Washing Powder: What do the words say?</td>
<td>.27/1</td>
<td>.26p&lt;.032</td>
</tr>
<tr>
<td>1.2.2E</td>
<td>Persil Washing Powder: Show me the word that says Persil</td>
<td>.56/1</td>
<td>.12p&lt;.373</td>
</tr>
<tr>
<td>1.2.2F</td>
<td>Fairy Liquid: What is this?</td>
<td>.73/1</td>
<td>.30p&lt;.012</td>
</tr>
<tr>
<td>1.2.2G</td>
<td>Fairy Liquid: Show me the word(s) here</td>
<td>.86/1</td>
<td>.31p&lt;.007</td>
</tr>
<tr>
<td>1.2.2H</td>
<td>Fairy Liquid: What do the words say?</td>
<td>.34/1</td>
<td>.39p&lt;.001</td>
</tr>
<tr>
<td>1.2.2I</td>
<td>Fairy Liquid: Show me the word that says Fairy</td>
<td>.47/1</td>
<td>.20p&lt;.089</td>
</tr>
<tr>
<td>1.2.2J</td>
<td>Whiskas Cat Food: What is this?</td>
<td>.92/1</td>
<td>.21p&lt;.083</td>
</tr>
<tr>
<td>1.2.2K</td>
<td>Whiskas Cat Food: Show me the word(s) here</td>
<td>.93/1</td>
<td>.23p&lt;.056</td>
</tr>
<tr>
<td>1.2.2L</td>
<td>Whiskas Cat Food: What do the words say?</td>
<td>.45/1</td>
<td>.23p&lt;.051</td>
</tr>
<tr>
<td>1.2.2M</td>
<td>Whiskas Cat Food: Show me the word that says Whiskas</td>
<td>.41/1</td>
<td>.09p&lt;.478</td>
</tr>
</tbody>
</table>

*Correlation of item with sub score for part 1

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Implications for Version 3

Changes for Version 3 could confidently exclude five of the logos as in the main they were all doing the same thing. Selection of the logos to include in Version 3 would be based on decreasing facility levels within each group of questions about each logo and the need to reduce repetition would suggest elimination of the following items in Version 3:

<table>
<thead>
<tr>
<th>Logo Numbers</th>
<th>Logos</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.2.4A, 1.2.4B, 1.2.4C, 1.2.4D, 1.2.5A, 1.2.5B, 1.2.5C, 1.2.5D, 1.2.6A, 1.2.6B, 1.2.6C, 1.2.6D, 1.2.7A, 1.2.7B, 1.2.7C, 1.2.7D, 1.2.10A, 1.2.10B, 1.2.10C, 1.2.10D,</td>
<td>(Kellogg’s Cornflakes), (Mars Bar), (Kit Kat), (Heinz Beans), (Whiskas Cat Food)</td>
</tr>
</tbody>
</table>

The search for items giving no extra information and items that were either unrelated or negatively related to the overall measure could be carried out using a correlation matrix. As all correlations were positive and none were perfect no items needed to be dropped on the basis of correlation.

The range of appropriate items increasing in difficulty in this part could be extended with the addition of a further item involving words used in environmental print without the context of colour and logo.

Implications for Version 3

Add a further question based on the retained logos using decontextualised environmental print.
Stage 5. Analysis of scores for Part 2 - Book Knowledge

i. spread of scores
ii. variability with age
iii. item analysis

The maximum possible score for this part of the Profile was 18. Figure 10.15 shows that scores were spread across the whole range: one child scored 3 points and one child scored the maximum 18 points. The mode is 11 with 11 children reaching this score, indicating a peak at the mid range of possible points. However, 15 children scored between 3 and 9 points and 56 children scored between 12 and 18 points. There would be a need to adjust this element of the Profile to ensure that facility levels decreased and so increase the likelihood of achieving a measure which could cover the range of children's abilities. The present situation where so many children achieved high scores indicated that the measure was not sufficient in its range of items.

Implications for Version 3

Decrease the facility level for the Book Knowledge part of the Profile.

Figure 10.15 Spread of scores for Part 2 (Book Knowledge) for whole sample

Score for Part 2 - Book Knowledge

Maximum score: 18 points
ii variability with age

Each part of the Profile had to show a clear increase in scores in relation to age of the children tested, as was the case for the total scores (figures 10.7, and 10.8, 10.9, 10.10 and 10.11). A similar increase in scores with age was needed for Part 2 of the Profile so that:

1. Repeated use would be possible, with an expectation that as children get older their scores would increase,
2. This part of the Profile fits the overall scoring pattern and does not distort the total score
3. This part of the measure could be used as a measure of book knowledge independently of the other two parts of the measure - should a research study focus particularly on book knowledge.

Figure 10.16 shows the mean scores for Part 2 (Book Knowledge) for each age band across the whole sample. This shows a clear relationship between age and score with the mean score increasing with each age band.

Figure 10.16 Mean scores for part 2 (Book Knowledge) for each age band for the whole sample

<table>
<thead>
<tr>
<th>Age band</th>
<th>Mean Score - Part 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>3;0-3;5</td>
<td>8</td>
</tr>
<tr>
<td>3;5-4;11</td>
<td>9</td>
</tr>
<tr>
<td>4;0-4;5</td>
<td>12</td>
</tr>
<tr>
<td>4;6-4;11</td>
<td>15</td>
</tr>
</tbody>
</table>

Age in years and months
Further analysis (Figure 10.17) shows that book knowledge scores increased with age \((r=0.47, p<0.001)\) this was a satisfactory relationship. Correlation was slightly lower than that for the total score and age \((r=0.56, p<0.001)\) but not sufficient to suggest that adjustment was needed for reasons of age/score relationship.

**Figure 10.17** scattergram showing age and score for Part 2 (Book Knowledge) for the whole sample

![Scattergram showing age and score for Part 2 (Book Knowledge) for the whole sample](image)

Stage 3 of this analysis (pages 222-225) established a clear relationship between scores for Part 2 and the total score \((r=0.88, p<0.001)\) so this part of the Profile earned its place as a strand of literacy. The items about book knowledge in the Profile differentiated between age band and the above analysis (figures 10.16 and 10.17) suggested that no further adjustment was needed so far as age/sex scoring was concerned. Decisions about how to change Part 2 to increase the degree of difficulty, thereby making the measure more challenging, would be informed by the following item analysis.

**iii. item analysis**

Following the same procedure and rationale as for Part 1 (stage 4) I carried out an item analysis of the scores for book knowledge.

Table 10.8 shows the facility levels of items in this part of the Profile.
### Table 10.8  Facility levels and Correlations for Part 2 Book Knowledge

<table>
<thead>
<tr>
<th>Item number</th>
<th>Question</th>
<th>Facility level</th>
<th>Correlation*</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.1.1</td>
<td>Pass me the book please</td>
<td>.97/1</td>
<td>.16 p &lt; .186</td>
</tr>
<tr>
<td>2.1.2</td>
<td>Do you know what this is for? What do we do with a book?</td>
<td>.85/1</td>
<td>.47 p &lt; .000</td>
</tr>
<tr>
<td>2.1.3</td>
<td>Show me the front of the book</td>
<td>.75/1</td>
<td>.30 p &lt; .010</td>
</tr>
<tr>
<td>2.1.4</td>
<td>Show me a page in the book</td>
<td>.93/1</td>
<td>.41 p &lt; .000</td>
</tr>
<tr>
<td>2.1.5</td>
<td>Show me a picture</td>
<td>.99/1</td>
<td>&lt; .03 p &lt; .790</td>
</tr>
<tr>
<td>2.1.6</td>
<td>Show me the words</td>
<td>.87/1</td>
<td>.40 p &lt; .001</td>
</tr>
<tr>
<td>2.1.7</td>
<td>Show me just one word</td>
<td>.82/1</td>
<td>.38 p &lt; .001</td>
</tr>
<tr>
<td>2.1.8</td>
<td>Show me just one letter</td>
<td>.79/1</td>
<td>.59 p &lt; .000</td>
</tr>
<tr>
<td>2.1.9</td>
<td>Show me the letter 'c'</td>
<td>.25/1</td>
<td>.34 p &lt; .004</td>
</tr>
<tr>
<td>2.1.10</td>
<td>What letter is this (point to a 'b')</td>
<td>.27/1</td>
<td>.34 p &lt; .004</td>
</tr>
<tr>
<td>2.2.1</td>
<td>Who is in the story?</td>
<td>1.75/2</td>
<td>.43 p &lt; .000</td>
</tr>
<tr>
<td>2.2.2</td>
<td>How does the story begin?</td>
<td>.93/2</td>
<td>.70 p &lt; .000</td>
</tr>
<tr>
<td>2.2.3</td>
<td>What happens in the story?</td>
<td>1.3/2</td>
<td>.71 p &lt; .000</td>
</tr>
<tr>
<td>2.2.4</td>
<td>How does it end?</td>
<td>.83/2</td>
<td>.71 p &lt; .000</td>
</tr>
</tbody>
</table>

*Correlation of item with sub score for part 2

A correlation matrix showed no perfect correlations. No items needed to be dropped on the basis of repetition. There was only one negative correlation (item 2.1.5) but this became irrelevant when examined in the light of its high facility level. Given that all the items here measured different skills and knowledge in book sharing none needed to be dropped on the basis of correlations. Facility levels showed an increasing difficulty as the items progressed. Item 2.1.10 was the most difficult in task 2.1, and items 2.2.4 was the most difficult of task 2.2. However, most facility levels were relatively high suggesting the need for further, more difficult items to be added - thus reducing the potential problem of an early ceiling effect and in so doing limiting the scope of the measure with children who are older or with greater literacy abilities. This analysis suggested that all the items in this part of the measure should be retained and further, more difficult items added.

**Implications for version 3**
Retain all current items. Add new items designed to be more difficult.
Stage 6. Analysis of scores for Early Writing

i. Spread of scores for Part 3 - Early Writing

The maximum score for this part of the Profile was 12. Figure 10.18 shows that scores were spread across the whole range, one child scored 1 point and 10 children scored the maximum 12 points. 27 children achieved high scores (11 or 12 points) and 53 children (75%) scored in the upper half of the score range (6 or more points). There was clearly a need to examine this part of the Profile and find ways to reduce the likelihood of so many children getting maximum points. This could include re-examination of the scoring system in the present Profile and/or adding new and more difficult items.

Figure 10.18 Distribution of scores for Part 3 (Early Writing) for whole sample
Each part of the Profile must show a clear increase in scores in relation to age of the children tested, as was the case to the total scores (figures 10.7, and 10.8, 10.9, 10.10 and 10.11). A similar increase in scores with age was needed for Part 3 of the Profile so that:

1. Repeated use was possible, with an expectation that as children get older their scores would increase,
2. This part of the measure would fit the overall scoring pattern and not distort the total score
3. This part of the measure could be used as a measure of early writing independently of the other two parts of the Profile - should a research study focus particularly on early writing.

Figure 10.19 shows the mean scores for Part 3 (Early Writing) for each age band across the whole sample. This shows a distinct relationship between age and score with the mean score increasing with each age band.

Figure 10.19  Mean scores for part 3 (Early Writing) for each age band for the whole sample
Further analysis (Figure 10.20) shows that early writing scores increased with age \((r=.60, p<.001)\), indicating a very satisfactory relationship. The correlation was slightly higher than that for the total score and age \((r=.56, p<.001)\) but not sufficient to suggest that adjustment was needed for reasons of age/score relationship.

Figure 10.20 scattergram showing age and score for Part 3 (Early Writing) for the whole sample

Stage 3 of this analysis (pages 222-225) established a clear relationship between scores for Part 3 and the total score \((r=.80, p<.001)\) so this part of the Profile earned its place as a strand of literacy. The items about early writing in the Profile differentiated between age bands and the above analysis (figures 10.19 and 10.20) suggested that no further adjustment was needed so far as age/sex scoring was concerned. Decisions about how to change Part 3 to increase the degree of difficulty and achieve a better spread of scores across the range of possibility would be informed by the following item analysis.

iii. item analysis

Following the same procedure and rationale as for Parts 1 and 2 (stages 4 and 5) I carried out an item analysis of the scores for Early Writing. Table 10.9 shows the facility levels of items in this part of the Profile.
There were no perfect correlations so none needed to be dropped on that basis. This item analysis suggested that all the items were working but that these items were relatively easy, so scoring could be high, with little chance for children to score more highly at a later point if the measure was administered again when they reached a different age band. This supported the view that attention needed to be given to the scoring system and some items would need to be added to version 3 to increase the continuum of tasks in this part of the measure.

**iv. Revision of scoring system.**

Analysis indicated that there could be a problem with the scoring system for this part of the measure. Testers were asked to attach the writing sample to the score sheet. This offered the possibility of re-examining the writing and applying a different scoring system for the name writing section of item 2. Earlier items in part 3 could not be re-examined because testers made judgements based on observation of the child as he or she wrote. The scoring for the name writing element of version 2 was as follows

Ask the child to write his or her name. Score as follows:  

<table>
<thead>
<tr>
<th>1 letter recognisable</th>
<th>PS</th>
<th>AS</th>
</tr>
</thead>
<tbody>
<tr>
<td>or</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 letters recognisable</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>or</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 letters recognisable</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>plus beginning name with capital letter</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

*Correlation of item with sub-score for Part 3
Maximum possible points for name writing was 4.

Revised scoring for name writing involved a change in what was acceptable. Rather than rewarding recognisable letters, the full name would need to be written correctly. This meant that children with short names could have a better chance of scoring than those with longer names but the question focused on whether they could write their name correctly - regardless of its complexity. A further point could be scored for the correct use of a capital letter. This revision may seem 'unfair' but this analysis suggests that the original scoring system underestimated children's abilities. Task 1 in Part 3 - Writing - has already recognised the early beginnings of writing with scoring which has low facility levels. The revision of scores for name writing is likely to measure something different and result in this task having a lower facility level. It is important that the items offer a range of relevant tasks. Children's ability to write their name is a discreet item and can be scored as such. The revised scoring system for name writing looks like this:

<table>
<thead>
<tr>
<th></th>
<th>PS</th>
<th>AS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name correctly written</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>plus beginning name with capital letter</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

Maximum possible points for name writing was 2.

Having developed a new scoring system I applied this system to the writing samples collected in the trial of version 2. Table 10.10 shows the old and new scores for Task 2 and the old and new total scores for the Part 3 Writing for Version 2.
Table 10.10 Old and new scores for Task 2 and the old and new total scores for the Part 3 Writing for Version 2

<table>
<thead>
<tr>
<th>ID no.</th>
<th>Old Task 2 Score</th>
<th>New Task 2 Score</th>
<th>Old Part 3 Score</th>
<th>New Part 3 Score</th>
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<tbody>
<tr>
<td>1</td>
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<th>Old Part 3 Score</th>
<th>New Part 3 Score*</th>
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<th>Old Task 2 Score</th>
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<th>Old Part 3 Score</th>
<th>New Part 3 Score*</th>
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<tr>
<td>71</td>
<td>8</td>
<td>5</td>
<td>11</td>
<td>8</td>
</tr>
</tbody>
</table>

*Old maximum score: 12 points
New maximum score: 10 points
Using the original scoring system 8 children scored the maximum 12 points. Using the revised scoring system 5 children would score the new maximum of 10 points. This suggested that the revised scoring system made it more difficult to achieve maximum points. On the original scoring system 34 children (47%) achieved scores in the top quarter (10, 11 or 12 points). In the revised scoring system 26 children (36%) scored in the top quarter (8, 9 or 10 points).

The new scores for the writing sample were added to SPSS and figure 10.21 shows the effect on the spread of scores for Part 3 writing.

**Figure 21. Spread of revised scores for Part 3 - Early Writing**

The distribution in figure 10.21 was different from that in figure 10.18 which used the original scoring system developed for version 2. It was harder to score maximum points on the new scoring system, but there was still a tendency towards the top of the range. Even with this revised scoring system there remained a danger of a ceiling effect on this part of the measure with four children scoring the maximum 10 points and a further 12 children scoring 9 points (n=71). This suggested that, despite the less generous scoring of name writing, children were still meeting the challenges posed by
this part of the Profile. More difficult items should be added to the writing part of the measure to extend the range of items and a version of the revised scoring system adopted for version 3.

**Implications for version 3**

- Include additional items with higher level of difficulty.
- Adopt a version of the revised scoring system.

Section C.

7. Conclusions (including necessary amendments)

Analysis of children's performances showed that Version 2 of the Profile was measuring three different strands of literacy and that each part had its place in the measure. There was differentiation with age.

The analysis in this chapter has identified the possibility that the Profile items do not yet fully challenge some of the children who work through it. There is therefore need for some changes in specific items mainly to reduce the likelihood of an early ceiling effect and increase the potential for using the profile on several occasions during a research study. The need for changes has been identified and discussed throughout this chapter and are presented now in summary so that a full impression of the implications of this analysis of children's performances can be conveyed without interruption.
Summary of the changes to be made to Version 2

<table>
<thead>
<tr>
<th>Part 1 Environmental print</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>i</td>
<td>Identifying print in the outdoor environment</td>
</tr>
<tr>
<td>ii</td>
<td>Identifying words and logos</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
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<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Part 2 Book Knowledge</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>i</td>
<td>Knowing about books</td>
</tr>
<tr>
<td>ii</td>
<td>Using books, retelling stories</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Part 3 Early Writing</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>i</td>
<td>Identifying and knowing about writing</td>
</tr>
<tr>
<td>ii</td>
<td>Writing</td>
</tr>
</tbody>
</table>

Scoring would need to be adjusted due to the addition of the new items, elimination of others and a revision of the scoring system for early writing. Changes to the scoring system and score sheet will be made in Chapter 11 following the development of Version 3.

These implications for modification of version 2 of the Profile will be added to suggestions at the end of chapter 9 which arose from teachers views of the measure. Chapter 11 will give details of the changes from version 2 to version 3 and present version 3 with its rationale, description and design.
Chapter 11

Early Literacy Development Profile - Version 3: Rationale, Design and Description

This chapter begins with a rationale for changes in Version 3. There follows discussion of the design changes. The chapter concludes with a description in the form of the full script of Version 3 and the score sheet.

A. Rationale

Decisions about changes were based upon the evaluation study of version 2. These included the analysis of teachers' views (chapter 9) and children's performances (chapter 10). The changes suggested as a result of an analysis of teachers' views were fully discussed in chapter 9 and those arising from analysis of children's performances were detailed in chapter 10.

The five key areas where changes could be made to improve the Profile are:

1. Part 1 - Environmental Print
2. Part 2 - Book Knowledge
3. Part 3 - Early Writing
4. The administration booklet and materials
5. Scoring

Changes arising from the evaluation study of version 2 (Chapters 9 and 10) are summarised as follows:
1. **Part 1 Environmental Print**

   i. *Identifying Print in the Outdoor Environment*
      - Carefully consider phrasing of questions and the words used
      - Consider 1 large photo of a street scene rather than a montage as in Version 2
      - Maintain harder questions
      - Change scoring here

   ii. *Identifying words and logos*
      - Reduce the number of logos from 10 to say 5
      - Change the format of logos from album to separate cards
      - Reduce the number of logos used.
      - Eliminate the following:
        - 1.2.4A, 1.2.4B, 1.2.4C, 1.2.4D *Kellogg's Cornflakes*
        - 1.2.5A, 1.2.5B, 1.2.5C, 1.2.5D *Mars Bar*
        - 1.2.6A, 1.2.6B, 1.2.6C, 1.2.6D *Kit Kat*
        - 1.2.7A, 1.2.7B, 1.2.7C, 1.2.7D *Heinz Beans*
        - 1.2.10A, 1.2.10B, 1.2.10C, 1.2.10D *Whiskas Cat Food*
      - Add a further question which uses decontextualised print from the five logos remaining in this task

2. **Part 2 Book Knowledge**

   *choice of book*
   - Stress the 'right' book is important
   - Consider 'familiarity' versus 'unfamiliarity'
   - Include list of criteria for selection of a book drawing on the following points
     i. clear pictures with repeated illustrations of the main characters
     ii. bold text
     iii. the story is easily discernible from the pictures alone

   i. *Knowing about books*
   - Maintain easier to score questions
   - Maintain harder to score questions
   - Extend the continuum of tasks by adding more challenging tasks.

   ii *Using books, retelling stories*
   - Consider whether the book used should be read to the child by the tester before questioning begins
   - Consider time given for child to look at the book alone
   - Consider adding possibility of additional points for correct sequencing of the story rather than events recalled at random
   - Consider clear phrasing of questions to ensure that children point when required to point and give verbal response when required
   - Maintain clear instructions in the Profile Administration booklet
3. **Part 3 Early Writing**
   
i. *Identifying and knowing about writing*
   - Consider the place of copying writing
   - Give guidance on scoring writing stating that drawing - unless it features some writing does not score
   - Add new tasks with higher difficulty level

   ii. *Writing*
   - Adopt a revised scoring system for the name writing item -

4. **Scoring system**
   
   - Use a simpler scoring system with easier or no division
   - Ensure the score sheet has a clear format and is simple to complete

5. **The administration booklet and materials**
   
   - Maintain the current format and presentation (Version 2) and ensure that modifications do not unduly lengthen Profile preparation time
   - Keep the teddy bear in Version 3 and limit the use of the teddy bear to Part 3 of the Profile as in Version 2
   - Ensure that modifications do not unduly lengthen Version 3
   - Include some guidance on when to discontinue administration of the Profile

B. **Design**

I will now discuss the five areas of change identified above, taking each of the three parts of the Profile item by item and demonstrating where changes relating to the areas above were made from Version 2 to Version 3. Extracts from each Version will be used where appropriate to illustrate those changes. Changes to the administration booklet and materials and the scoring system will be incorporated into description and discussion of changes in parts 1, 2 and 3.
1. Part 1 - Environmental Print

**TASK 1 Identifying print in the outdoor environment**

Four features were identified in Version two that had implications for Version 3: the phrasing of questions and the words used; use of one large photograph rather than a montage; maintaining the use of harder questions to increase the chances of a lower facility level; changing the scoring to reduce the chances of high scoring and a ceiling effect. Version 2 looked like this:

<table>
<thead>
<tr>
<th>Materials needed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colour photograph montage of street scene including several examples of environmental print. (A)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Instructions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Show the child the colour photographs of the street scenes (A).</td>
</tr>
<tr>
<td>Ask the following questions in this order:</td>
</tr>
<tr>
<td>1. <em>What can you see in the picture?</em></td>
</tr>
<tr>
<td>2. <em>Can you point to some signs, some words in this picture?</em></td>
</tr>
<tr>
<td>3. <em>What are signs for?</em></td>
</tr>
<tr>
<td>4. <em>Do you know what any of these signs say?</em></td>
</tr>
</tbody>
</table>

Even though testers suggested that terminology such as the term 'sign' should be changed as it was too difficult I decided not to make changes to questions in the development of version 3, but to observe children's reactions and responses to those questions carefully and consider rephrasing in the development of further versions if necessary. I favoured this course of action because knowledge of the word 'sign' is part of a child's developing competence and understanding in environmental print and I was reluctant to drop the term without further investigation into how difficult children found the term to be and whether this inhibited their scoring on this part of the Profile. Version 3 now looks like this with the main change to the materials - not the questions:
Version 3

Materials needed
Colour photographs of street scenes including several examples of environmental print, (A) (Appendix 11A)

Instructions
Show the child the colour photographs of the street scenes (A).
Ask the following questions in this order:
1. What can you see in the picture?
2. Can you point to some signs, some words in this picture?
3. What are signs for?
4. Do you know what any of these signs say?

The item analysis in chapter 10 suggested that facility levels for this task were on the high side (.89/1, .94/2, .86/2) so some changes were desirable to make the scoring slightly more difficult. However, this is the first task of the Profile so easier questions are important to give a high likelihood of success for the child in the initial stages. In version 3 the same maximum score of 5 remains a possibility but a child will need to give more detailed answers to achieve the higher score. In the light of this change, clear instructions have been added on how to score each response. Version 2 looked like this:

Version 2
Scoring
1. no score - this is a 'warm up' question
2. score 1 point
3. score 2 points
4. score 2 points
Maximum score for Task E1 5 points

Version 3 now looks like this:

Version 3
Scoring
1. no score - this is a 'warm up' question
2. score 1 point
3. score 1 points for simple answer: roads, shops, bags OR score 2 points for more detailed answer showing greater understanding or knowledge showing the way, showing what's in the shop, telling you......
4. score 1 points for one correct response OR score 2 points for two or more correct responses
Maximum score for Task E1 5 points
**TASK 2 Identifying words and logos**

Version 2 included four questions for each of the 10 logos presented in a small album, one at a time. Version 2 looked like this:

<table>
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<tr>
<th>Version 2</th>
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</thead>
<tbody>
<tr>
<td><strong>Materials needed</strong></td>
</tr>
<tr>
<td>Small booklet containing a selection of photographs of the 'top ten' logos chosen from the following categories:</td>
</tr>
<tr>
<td>• cereals</td>
</tr>
<tr>
<td>• sweets</td>
</tr>
<tr>
<td>• groceries</td>
</tr>
<tr>
<td>• tinned foods</td>
</tr>
<tr>
<td>• household items</td>
</tr>
<tr>
<td>These may be chosen according to the top ten best selling products. For this measure the following items were selected in this way:</td>
</tr>
<tr>
<td>• Weetabix</td>
</tr>
<tr>
<td>• Coca Cola</td>
</tr>
<tr>
<td>• Walkers crisps</td>
</tr>
<tr>
<td>• Kellogg's Cornflakes</td>
</tr>
<tr>
<td>• Mars bar</td>
</tr>
<tr>
<td>• Kit Kat</td>
</tr>
<tr>
<td>• Heinz Beans</td>
</tr>
<tr>
<td>• Persil washing powder</td>
</tr>
<tr>
<td>• Fairy liquid</td>
</tr>
<tr>
<td>• Whiskas cat food</td>
</tr>
<tr>
<td>The photographs of logos should be arranged in a small booklet, one on each right hand page. (B)</td>
</tr>
<tr>
<td><strong>Instructions</strong></td>
</tr>
<tr>
<td><em>Show</em> the book of photos to the child. Look at each picture in turn.</td>
</tr>
<tr>
<td><em>Ask</em> the following questions for each photograph:</td>
</tr>
<tr>
<td>1. <em>What this is?</em></td>
</tr>
<tr>
<td>2. <em>Show me the word(s) here?</em></td>
</tr>
<tr>
<td>3. <em>What do the words say?</em></td>
</tr>
<tr>
<td>4. <em>Show me the word that says...</em></td>
</tr>
<tr>
<td>Weetabix</td>
</tr>
<tr>
<td>Coca Cola</td>
</tr>
<tr>
<td>Walkers</td>
</tr>
<tr>
<td>Mars</td>
</tr>
<tr>
<td>Kit</td>
</tr>
<tr>
<td>Heinz</td>
</tr>
<tr>
<td>Persil</td>
</tr>
<tr>
<td>Fairy</td>
</tr>
<tr>
<td>Whiskas</td>
</tr>
</tbody>
</table>
In Version 3 there remain the same four questions, these are unchanged because the evaluation of version 2 showed the changes made from version 1 to version 2 to be effective. The number of logos has been reduced from 10 to 5 because the testers' evaluation (chapter 9) indicated that this task was repetitive and children lost interest and the item analysis (chapter 10) suggested that there was no purpose in including all ten logos as the additional items did not provide additional information about children's literacy knowledge. On the basis of the item analysis discussed in chapter 10 five logos were eliminated, leaving four questions about five logos in version 3. Following testers' comments, the five remaining logos will be presented to children in the form of photographs on individual cards one at a time rather than in the album form of version 2. Version 3 now looks like this:

**Version 3**

**Materials needed**

Set of photographs B (Appendix 11B) showing logos from best selling products:
- cereals
- drinks
- foods
- household tasks

These may be chosen according to the top ten best selling products. For this measure the following tasks were selected in this way:
- Weetabix
- Coca Cola
- Walkers crisps
- Persil washing powder
- Fairy liquid

The photographs should be mounted on separate cards (set B)

**Instructions**

*Show* the child one photograph at a time.

Ask the following questions for each photograph:

1. *What is this?*
2. *Show me the word(s) here?*
3. *What do the words say?*
4. *Show me the word that says...*  
   Weetabix  
   Coca Cola  
   Walkers  
   Persil  
   Fairy
The 10 logos in version 2 offered the possibility of scoring 1 point for each correct answer but so as not to have unwieldy scores and keep a balance with the rest of the Profile these scores were weighted. Each point was effectively worth 0.125 of 1 point, the final score being divided by 8 to achieve a maximum score of 5 points for this task.

Scoring for Version 2 looked like this:

<table>
<thead>
<tr>
<th>Version 2 Scoring</th>
</tr>
</thead>
<tbody>
<tr>
<td>Question 1</td>
</tr>
<tr>
<td>Question 2</td>
</tr>
<tr>
<td>Question 3</td>
</tr>
<tr>
<td>Question 4</td>
</tr>
</tbody>
</table>

Total possible 'raw' score for task 2 is 40. Divide the maximum score by 8 Maximum final score for task 2 5 points

Many testers commented that this scoring system for version 2 was cumbersome. There was a need to revise the scoring system in the light of adjustments made to the number of logos used in this task. Scoring was changed in version 3 to make each response to the 20 questions worth 0.5 point. Each response was worth a raw score of 1 giving a maximum 'raw' score of 20. This was divided by 2 to give a maximum final score for task 2 of 10 points. This was done to maintain the balance of scores with other parts of the Profile and to reflect the fact that children are given 5 chances to
answer similar questions, albeit using different logos. These changes meant that scoring for version 3 now looks like this:

<table>
<thead>
<tr>
<th>Version 3 Scoring</th>
<th>For each photograph score as follows</th>
</tr>
</thead>
<tbody>
<tr>
<td>Question 1</td>
<td>PS 1 Point</td>
</tr>
<tr>
<td></td>
<td>Description of use or purpose is acceptable for example <em>breakfast</em> is acceptable for <em>Weetabix</em></td>
</tr>
<tr>
<td>Question 2</td>
<td>PS 1 Point</td>
</tr>
<tr>
<td></td>
<td>Pointing at any words on the picture is acceptable - but not pictures</td>
</tr>
<tr>
<td>Question 3</td>
<td>PS 1 Point</td>
</tr>
<tr>
<td></td>
<td>Approximation of the words on the package is acceptable for example <em>Crisps</em> is acceptable for <em>Walkers Crisps</em></td>
</tr>
<tr>
<td>Question 4</td>
<td>PS 1 Point</td>
</tr>
<tr>
<td></td>
<td><em>The exact word listed must be pointed to</em></td>
</tr>
</tbody>
</table>

Total possible 'raw' score for task 2 is 20. Divide the maximum score by 2
Maximum final score for task 2 - 10 points
Record scores during the Profile on the score sheet in the appropriate boxes.
Record the final score in the total column in the box marked PART 1 Task 2

A further modification was suggested from the analysis of version 2 - the addition of a further item which used decontextualised environmental print. This was included to increase the difficulty of reaching maximum points for this part of the Profile.

The new task for version 3 looked like this:

**TASK 3 Decontextualised Print**
Shuffle the five cards (C) (Appendix 11C) printed with decontextualised words from the environmental print examples.
Show the child each card in turn and ask *What does this say?*

**Scoring**
Score 1 point for each word read correctly. No approximations are acceptable.
Record scores during the Profile on the score sheet in the appropriate boxes.
Record the final score in the total column in the box marked PART 1 Task 3
2. Part 2 - Book Knowledge

Some changes were needed to the second part of the Profile 'Book Knowledge'.

Changes fell into three parts: the choice of book; task 1 and task 2.

**Choice of book**

The comments by testers raised in chapter 9 about the choice of book for these tasks suggested that it was important to stress that the 'right' type of book is chosen. For this reason the details about materials included an additional criteria for selection and a clear statement about taking care in selecting the book (or books). The issue of familiarity or unfamiliarity was raised. Some testers in Version 2 thought that asking children in the three to five age range to work unaided with an unfamiliar book was unfair and more help should be given by the tester or a familiar book should be chosen.

I decided to bear this in mind when trialling version 3 but not to change the task at this point. Trialling of version three would be an opportunity to use more than one book chosen according to the criteria to see if the Profile worked with more than one book.

Version 2 looked like this:

| Version 2 |
| Task 1 | Knowing about books |
| Materials needed | Three objects of which one is a book selected according to the criteria below e.g. a teddy, the book another object (e.g. cup, ball, jigsaw). |
| Criteria for book selection | a. pictures and print should be clearly differentiated and should appear together on the majority of pages  
   b. the book should be 'unfamiliar', possibly newly published or at least not available in the nursery/group book stock  
   c. there should be a clear story line which is also discernible from the illustrations |
Version 3 now looks like this:

**Version 3**  
**Materials needed**  
Three objects of which one is a book selected according to the criteria below e.g. a teddy, the book another object (e.g. cup, ball, jigsaw).

The selection of the book is important. Check the books you plan to use according to the criteria below and then, as you make your final selection go through the questions in the two tasks for the Book Knowledge section and ensure that it is possible to answer all the questions using the book you have chosen. If this is not the case, make another choice. If you are working with children in a nursery setting, check as far as reasonably possible that the book you are using is not in daily use.

**Criteria for book selection**

a. clear pictures and bold print should be clearly differentiated and should appear together on the majority of pages
b. the book should be 'unfamiliar', possibly newly published or at least not available in the nursery/group book stock
c. there should be a clear story line which is also discernible from the illustrations with, where appropriate repeated illustrations of key characters.
d. Text should include full stops and capital letters

In the development of version 3, I decided to use books that, as far as could be judged, were unlikely to be familiar to the children and did this by checking with the nursery staff which books were currently part of nursery stock. I did not use books that were read daily in the nursery. However, I was not in a position to check book availability in children's homes - and this will be the case for other potential users of the Profile. I will discuss the outcomes of these development decisions in chapter 12 - the evaluation study of version 3.
Chapter 11 Early Literacy Development Profile - Version 3: Rationale, Design and Description

**TASK 1 Knowing about books**

The evaluation of version 2 showed that some children scored highly on this task and there was a danger of too low a ceiling for scores, limiting the potential of subsequent re-use of the Profile. It was necessary to make changes in version 3 that would maintain the easier elements so that younger children could still score, keep the existing, more difficult questions and raise the ceiling by adding some new and more challenging items. Version 2 looked like this:

**Version 2**

*Instructions*

Arrange the three objects, one of which is the book, on the table.

*Ask the following*
1. *Pass me the book please?*
2. Take the book from the child (or from the table if the child does not succeed with question 1)
   *Do you know what this is for? What do we do with a book?*
3. *Show me the front of the book.*
5. *Show a picture.*
6. *Show me the words.*
7. *Show me just one word.*
8. *Show me just one letter.*
9. *Show me the letter 'c'*(tester say the letter name not sound).
10. *What letter is this* (point to a 'b')

Two extra questions were added in Version 3 which looks like this:

**Version 3**

*Instructions*

Arrange the three objects, one of which is the book, on the table.

*Ask the following*
1. *Pass me the book please?*
2. Take the book from the child (or from the table if the child does not succeed with question 1)
   *Do you know what this is for? What do we do with a book?*
3. *Show me the front of the book.*
5. *Show a picture.*
6. *Show me the words.*
7. *Show me just one word.*
8. *Show me just one letter.*
9. *Show me the letter 'c'*(tester say the letter name not sound).
10. *What letter is this* (point to a 'b')
11. *Show me a full stop on this page* (open the book at a page where there is a full stop).
12. *Show me a capital letter on this page* (open the book where there is a capital letter).
Scoring changed accordingly with one point for each correct response. The maximum score in Version 2 was 10 points, in Version 3 the maximum score was 12 points.

Version 2 looked like this:

<table>
<thead>
<tr>
<th>Scoring</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Score 1 point for picking the book</td>
</tr>
<tr>
<td>2. Score 1 point for a suitable answer, e.g. 'for stories', 'to read', 'for bedtime', or other such reply which suggests that the child knows what a book is for.</td>
</tr>
<tr>
<td>3. Score 1 point if front is identified correctly</td>
</tr>
<tr>
<td>4. Score 1 point if page is identified correctly</td>
</tr>
<tr>
<td>5. Score 1 point if picture is identified correctly</td>
</tr>
<tr>
<td>6. Score 1 point if words are identified correctly</td>
</tr>
<tr>
<td>7. Score 1 point if a single word is identified correctly</td>
</tr>
<tr>
<td>8. Score 1 point if a single letter is identified correctly</td>
</tr>
<tr>
<td>9. Score 1 point if a letter 'c' is identified correctly</td>
</tr>
<tr>
<td>10. Score 1 point if the child says 'b' (name or sound acceptable)</td>
</tr>
</tbody>
</table>

Maximum score for Task 1: 10 points
Record scores during the Profile on the administration sheet in the appropriate boxes.
Record the final score in the total column in the box marked PART TWO Task 1.

Version 3 looks like this:

<table>
<thead>
<tr>
<th>Version 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scoring</td>
</tr>
<tr>
<td>1. Score 1 point for picking the book</td>
</tr>
<tr>
<td>2. Score 1 point for a suitable answer, e.g. 'for stories', 'to read', 'for bedtime', or other such reply which suggests that the child knows what a book is for.</td>
</tr>
<tr>
<td>3. Score 1 point if front is identified correctly</td>
</tr>
<tr>
<td>4. Score 1 point if page is identified correctly</td>
</tr>
<tr>
<td>5. Score 1 point if picture is identified correctly</td>
</tr>
<tr>
<td>6. Score 1 point if words are identified correctly</td>
</tr>
<tr>
<td>7. Score 1 point if a single word is identified correctly</td>
</tr>
<tr>
<td>8. Score 1 point if a single letter is identified correctly</td>
</tr>
<tr>
<td>9. Score 1 point if a letter 'c' is identified correctly</td>
</tr>
<tr>
<td>10. Score 1 point if the child says 'b' (name or sound acceptable)</td>
</tr>
<tr>
<td>11. Score 1 point for correctly pointing to full stop</td>
</tr>
<tr>
<td>12. Score 1 point for correctly pointing to capital letter</td>
</tr>
</tbody>
</table>

Maximum score for Task 1: 12 points
Record scores during the Profile on the administration sheet in the appropriate boxes.
Record the final score in the total column in the box marked PART TWO Task 1.
TASK TWO  Using books - retelling stories

There were a number of changes to consider here: whether the tester should read the book to the child; how long children were given to look at the book; extra points for a sequenced retelling rather than simply accepting random reporting of events in the story; rephrasing of questions so that children pointed to what they were required to identify (e.g. point or give a verbal response), and the need to ensure that instructions in the booklet remained clear.

I reflected first on whether the tester should read the story to the child at the start of this task. I decided not to include this in the testers instructions as the point of this task was to assess what a child can do with a book, whether they used the pictures (or text) to retell the story (or a version of it) so to begin with reading the story would be inappropriate. It seemed necessary therefore to give a little time to the child to look at the book but the time could be flexible with the tester judging what was appropriate. Consideration was also given to the phrasing of the questions and I decided to leave them unchanged in version 3 though if children's responses suggested that there was a tendency for children to point, changes would be needed in a subsequent version.

Versions 2 and 3 remain the same:

<table>
<thead>
<tr>
<th>Version 2 and 3</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Materials</strong></td>
</tr>
<tr>
<td>The same book chosen according to specified criteria</td>
</tr>
<tr>
<td><strong>Instructions</strong></td>
</tr>
<tr>
<td>Give the book to the child and say: <em>I just need to tidy up a bit, would you like to look at this book while I do that, then you can tell me about the story.</em> Give the child time to look at the book then ask. Will you tell me about that book?</td>
</tr>
<tr>
<td>1. <em>Who is in the story?</em></td>
</tr>
<tr>
<td>2. <em>How does the story begin?</em></td>
</tr>
<tr>
<td>3. <em>What happens in the story?</em></td>
</tr>
<tr>
<td>4. <em>How does it end?</em></td>
</tr>
</tbody>
</table>
Even though the task itself remained the same scoring for this task changed, it was
harder to score maximum points. Version 2 looked like this:

Version 2
Scoring
1. score 1 point for mention of single character either by name or by description (a
teddy, a dolly, patch, mummy, baby, etc.)
score 2 points for mention of two or more characters
2. Score 1 point for brief description of the start of the story (e.g. there was a lady
with a dog, there was a postman)
Score 2 points for a fuller description giving more specific detail
3. Score 1 point for a brief description of events (they went to the sea side, they had a
party)
Score 2 points for a more detailed description of the plot
4. Score 1 point for brief description of the ending (they came home and went to be,
they found the dog)
Score 2 points for a fuller description of the ending.

Maximum score for Task 2 8 points
Record score in the appropriate boxes.

In Version 3 the higher score for task 3 could only be achieved if the events were
described in sequence.

Version 3
Scoring
1. score 1 point for mention of single character either by name or by description (a
teddy, a dolly, patch, mummy, baby, etc.)
OR
score 2 points for mention of two or more characters
2. Score 1 point for brief description of the start of the story (e.g. there was a lady
with a dog, there was a postman)
OR
Score 2 points for a fuller description giving more specific detail
3. Score 1 point for a brief description of events (they went to the sea side, they had a
party)
OR
Score 2 points for a more detailed description of the plot with events in the correct
order
4. Score 1 point for brief description of the ending (they came home and went to bed,
they found the dog)
Score 2 points for a fuller description of the ending.

Maximum score for Task 2 8 points
Record score in the appropriate boxes.
Record the final score in the total box marked PART 2 Task 2
3. **Part 3 - Early Writing**

The main factors to be borne in mind for changes to Part 3 were: the place of copy writing; guidance on scoring writing, and addition of new tasks to increase difficulty.

In task 2 of this part, 'name writing', a new scoring system was to be adopted.

**TASK ONE   Identifying and knowing about writing**

This task asked children first to identify what was writing. Version 3 is unchanged. The task and the scoring remained the same as in version 2.

**TASK TWO   Writing**

The task remained the same children were asked to write independently and then to write their name. As suggested in chapter 9, I considered the possibility of including some copy writing but there seemed to be sufficient challenge in version 3 of this Profile without its inclusion and to have done so would reveal little about children's knowledge and skills in writing rather their ability to reproduce visual forms.

The task in version 2 and 3 looked like this:
Version 2 and 3
Materials
Writing paper
Black felt tip pen
Teddy bear with glasses to fit

Instructions
Ask the child if s/he thinks teddies can write. Introduce the teddy who is wearing glasses. Say This teddy can't write very well but he can read when he wears these magic glasses.

The use of the teddy is to make the administration of the writing part of the profile more user friendly and give the child some encouragement to write.

1. Give the paper a pencil to the child. Ask the child to write a message on the paper for the teddy to read. Let the child write, encourage this effort. If the child says that s/he can't write say that the teddy can read all sorts of writing so long as he wears his magic glasses. Suggest that the child 'pretend' to write if he/she insists they cannot. If the child refuses at this point say OK, let's try the last bit, and go on to the next part of the Profile.

When the child has finished his/her 'independent' writing (or if they refused):

2. Ask
Will you write your name at the bottom so that teddy knows it is from you? If the child has already written your name either let them repeat it if they wish or identify for you which is their name in the first piece of writing.

What changed here was not the task but the way in which writing was scored. There were clearer instructions in the administration sheet about scoring. Version 2 was as follows.
Version 2

Scoring

Score the child's writing as follows:

1. Making any line of marks  
   Making letter like marks  
   Writing conventional letters  
   Writing left to right  
   Writing top to bottom  
   score 1 point  

2. Name writing
   One letter recognisable
   or
   Two letters recognisable
   or
   Full name written correctly
   plus
   beginning name with a capital letter  
   score 1 point

Maximum score for Task 2  9 points

Record scores on the score sheet in the appropriate boxes.

Record the final score in the total box marked PART 3 Task 2

Scoring for version 3 now looks like this:

Version 3

Scoring

Score the child's writing as follows whilst they are writing:

1. Making any line of marks  
   Making letter like marks  
   Writing conventional letters  
   Writing left to right  
   Writing top to bottom  
   score 1 point

2. Name writing after the child has left
   Full name written correctly
   plus
   beginning name with a capital letter  
   score 1 point

Maximum score for Task 2  7 points

Record scores on the score sheet in the appropriate boxes.

This reduced the maximum points available for this task from 9 in Version 2 to 7 in Version 3 and made maximum points on name writing (task 2) a more challenging task than task one.
In addition to the changes described above a further two tasks were added to Part 3 Early Writing. Children were to write 'words they knew'. This new task for version 3 looks like this:

**Version 3**

**TASK 3  Writing Words**
Give the child a new piece of blank paper. Ensure that no words are visible.
Say
*Write down some words you know*
Give the child a maximum of 1 minute - stop before this if the child stops or says he/she has done all they can

**Scoring**
After the child has left
Words must be spelled correctly to score
Score 1 point for writing 1 word in addition to their name (if this is written again) **OR**
Score 2 points for writing 2-4 or words **OR**
score 3 points for writing 5 or more words
Maximum score 3 points
Record the score in the box marked **PART 3 Task 3**

A further task was developed to be trialled in version 3. This focused on children's ability to write letters of the alphabet. Task 4 for version 3 looked like this:

**Version 3**

**TASK 4  Writing letters**
Give the child a new sheet of paper and say
*Write all the letters you know*

If the child is unsure say...
*Do you know some letters in your name, or the alphabet? - have a go.*

**Scoring**
After the child has left
Check off the letters on the score sheet for part 3 task 4.
Score according to the following scale:

<table>
<thead>
<tr>
<th>Letters written</th>
<th>points scored</th>
<th>Letters written</th>
<th>points scored</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-6</td>
<td>1</td>
<td>29-35</td>
<td>5</td>
</tr>
<tr>
<td>7-13</td>
<td>2</td>
<td>36-49</td>
<td>6</td>
</tr>
<tr>
<td>14-21</td>
<td>3</td>
<td>50-52</td>
<td>7</td>
</tr>
<tr>
<td>22-28</td>
<td>4</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Maximum score 7 points
Record the score in the appropriate box marked **PART 3 Task 4**

Record the final score in the total box marked **PART 3**
4. **The administration booklet and materials**

Changes to the administration booklet and materials for version 3 have been discussed and described throughout this chapter. These changes took account of the suggestions made by teachers discussed in chapter 9 and the analysis of children's performances in chapter 10. The full text of version 3 completes this chapter.

5. **Scoring**

Changes to scoring have been discussed and described throughout this chapter alongside the items that they refer to. This necessitated changes to the score sheet as a whole, the full version of which follows the administration booklet of version 3.

C. **Description**

I have discussed the rationale and design of version 3 with illustrations of changes from version 2 to version 3. A full description of version 3 now follows in the form of the complete text of version 3 and the score sheet in order that it can be examined without the interruption of analytical commentary.
Early Literacy Development Profile

Version 3
PART ONE ENVIRONMENTAL PRINT

TASK 1 Identifying print in the outdoor environment

Materials needed
Colour photographs of street scenes including several examples of environmental print. (Appendix 11 A)

Instructions
Show the child the colour photographs of the street scene (A).
Ask the following questions in this order:
1. What can you see in the picture?
2. Can you point to some signs, some words in this picture?
3. What are signs for?
4. Do you know what any of these signs say?

Scoring
1. no score - this is a 'warm up' question
2. score 1 point
3. score 1 points for simple answer: roads, shops, bags OR
   score 2 points for more detailed answer showing greater understanding or knowledge
   showing the way, showing what's in the shop, telling you.....
4. score 1 points for one correct response OR
   score 2 points for two or more correct responses

Maximum score for Task E1 5 points

Record scores during the administration on the score sheet in the appropriate boxes

Record the final score in the total column in the box marked PART 1 Task 1
TASK 2 Identifying words and logos

Materials needed
Set of photographs (Appendix 11B) showing logos from best selling products including:
- cereals
- drinks
- foods
- household tasks

These may be chosen according to the top ten best selling products. For this measure the following tasks were selected in this way:
- Weetabix
- Coca Cola
- Walkers crisps
- Persil washing powder
- Fairy liquid

The photographs should be mounted on separate cards (set B)

Instructions
Show the child one photograph at a time.

Ask the following questions for each photograph:
1. What is this?
2. Show me the word(s) here?
3. What do the words say?
4. Show me the word that says... Weetabix Coca Cola Walkers Persil Fairy

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Scoring

For each photograph score as follows

Question 1  PS  1 Point  Description of use or purpose is acceptable for example 'breakfast' is acceptable for Weetabix

Question 2  PS  1 Point  Pointing at any words on the picture is acceptable - but not pictures

Question 3  PS  1 Point  Approximation of the words on the package is acceptable for example 'Crisps' is acceptable for 'Walkers Crisps'

Question 4  PS  1 Point  The exact word listed must be pointed to

Total possible 'raw' score for task 2 is 20. Divide the maximum score by 2

Maximum final score for task 2  10 points

Record scores during the Profile on the score sheet in the appropriate boxes.

Record the final score in the total column in the box marked PART 1 Task 2

TASK 3  Decontextualised Print

Shuffle the five cards ((Appendix C) printed with decontextualised words from the environmental print examples.

Show the child each card in turn and ask

What does this say?

Scoring

Score 1 point for each word read correctly. No approximations are acceptable.

Record scores during the Profile on the score sheet in the appropriate boxes.

Record the final score in the total column in the box marked PART 1 Task 3
PART TWO BOOK KNOWLEDGE

TASK 1 Knowing about books

Materials needed

Three objects of which one is a book selected according to the criteria below e.g. a teddy, the book another object (cup, ball, jigsaw).

Criteria for book selection

a. clear pictures and bold print should be clearly differentiated and should appear together on the majority of pages
b. the book should be 'unfamiliar', possibly newly published or at least not available in the nursery/group book stock
c. there should be a clear story line which is also discernible from the illustrations with, where appropriate, repeated illustrations of key characters
d. text should include appropriate punctuation and at least full stops and capital letters.

Instructions

Arrange the three objects, one of which is the book, on the table.

Ask the following

1. Pass me the book please?
2. Take the book from the child (or from the table if the child does not succeed with question 1)
   Do you know what this is for? What do we do with a book?
3. Show me the front of the book.
4. Show me a page in the book.
5. Show a picture.
6. Show me the words.
7. Show me just one word.
8. Show me just one letter.
9. Show me the letter 'c' (tester say the letter name not sound).
10. *What letter is this* (point to a 'b')

11. *Show me a full stop on this page* (open the book at a page where there is a full stop)

12. *Show me a capital letter on this page* (open the book at a page where there is a capital letter)

**Scoring**

1. Score 1 point for picking the book
2. score 1 point for a suitable answer, e.g. 'for stories', 'to read', 'for bedtime', or other such reply which suggests that the child knows what a book is for.
3. score 1 point if front is identified correctly
4. score 1 point if page is identified correctly
5. score 1 point if picture is identified correctly
6. score 1 point if words are identified correctly
7. score 1 point if a single word is identified correctly
8. score 1 point if a single letter is identified correctly
9. score 1 point if a letter 'c' is identified correctly
10. score 1 point if the child says 'b' (name or sound acceptable)
11. score 1 point for correctly pointing to full stop
12. score 1 point for correctly pointing to capital letter.

**Maximum score for Task 1** 12 points

Record scores during the Profile on the score sheet in the appropriate boxes
Record the final score in the total column in the box marked PART TWO Task 1.
**TASK TWO** Using books - retelling stories

**Materials**

The same book chosen according to specified criteria

**Instructions**

Give the book to the child and say: *I just need to tidy up a bit, would you like to look at this book while I do that, then you can tell me about the story.* Give the child time to look at the book then ask.

Will you tell me about that book?

1. *Who is in the story?*
2. *How does the story begin?*
3. *What happens in the story?*
4. *How does it end?*

**Scoring**

1. Score 1 point for mention of single character either by name or by description (*a teddy, a dolly, patch, mummy, baby, etc.*) **OR** score 2 points for mention of two or more characters
2. Score 1 point for brief description of the start of the story (e.g. *there was a lady with a dog, there was a postman*) **OR** Score 2 points for a fuller description giving more specific detail
3. Score 1 point for a brief description of events (*they went to the sea side, they had a party*) **OR** Score 2 points for a more detailed description of the plot with events in the correct order
4. Score 1 point for brief description of the ending (*they came home and went to bed, they found the dog*) Score 2 points for a fuller description of the ending.
Maximum score for Task 2  8 points
Record score in the appropriate boxes.

Record the final score in the total box marked PART 2 Task 2

PART THREE  EARLY WRITING

TASK ONE  Identifying and knowing about writing

Materials
Five pictures: animals, a toy, child's drawing, blank piece of coloured card, adult writing (D) (Appendix 8A)
Blank writing paper - fine tipped black felt tip pen

Instructions
*Write* a few lines in front of the child.
*Ask* the following
1. *Do you know what I am doing?*
2. *Do you know what writing is for?*
Put this writing out of site of the child and move on to the next task.

Lay the five pictures out on the table in front of the child:
* toy (D1)
* animals (D2)
* child's drawing (D3)
* adults handwriting (D4)
* blank coloured card (D5)

Tester take care not to 'eye' point or give other clues about the correct choice here.
*Ask*
3. *Which one of these is writing?*
Scoring

1. score 1 point for correct description (for example you're writing)
2. score 1 point for suitable answer e.g. letters, cards, stories etc.
3. score 1 point for identifying the adults writing

Maximum score for Task 1 3 points

Record scores during Profile on the score sheet in the appropriate boxes

Record the final score in the total box marked PART 3 Task 1

TASK 2 Writing

Materials

Writing paper
Black felt tip pen
Teddy bear with glasses to fit

Instructions

Ask the child if s/he thinks teddies can write. Introduce the teddy who is wearing glasses. Say This teddy can't write very well but he can read when he wears these magic glasses.

The use of the teddy is to make the administration of the writing part of the profile more user friendly and give the child some encouragement to write if this is needed.

1. Give the paper a pencil to the child. Ask the child to write a message on the paper for the teddy to read. Let the child write, encourage this effort. If the child says that s/he can't write say that the teddy can read all sorts of writing so long as he wears his magic glasses. Suggest that the child 'pretend' to write if
he/she insists they cannot. If the child refuses at this point say *OK, let's try the last bit*, and go on to the next part of the Profile.

When the child has finished his/her 'independent' writing (or if they refused):

2. **Ask**

   *Will you write your name at the bottom so that teddy knows it is from you?*

If the child has already written their name either let them repeat it if they wish or identify for you which is their name in the first piece of writing.

**Scoring**

Score the child's writing as follows whilst they are writing:

1. Making any line of marks score 1 point
   - Making letter like marks score 1 point
   - Writing conventional letters score 1 point
   - Writing left to right score 1 point
   - Writing top to bottom score 1 point

2. Name writing after the child has left
   - Full name written correctly score 1 point
     - plus
     - beginning name with a capital letter score 1 point

Maximum score for Task 2 7 points

Record scores on the score sheet in the appropriate boxes.

**TASK 3  Writing Words**

Give the child a new piece of blank paper. Ensure that no words are visible.

Say

*Write down some words you know*
Give the child a maximum of 1 minute - stop before this if the child stops or says he/she has done all they can

**Scoring**

After the child has left

Words must be spelled correctly to score

Score 1 point for writing 1 word in addition to their name (if this is written again) OR

Score 2 points for writing 2-4 or words OR

Score 3 points for writing 5 or more words

Maximum score

3 points

Record the score in the box marked PART 3 Task 3

**TASK 4  Writing letters**

Give the child a new sheet of paper and say

*Write all the letters you know*

If the child is unsure say...

*Do you know some letters in your name, or the alphabet? - have a go.*

**Scoring**

After the child has left. Check off the letters on the score sheet for part 3 task 4. Score according to the following scale:

<table>
<thead>
<tr>
<th>Letters written</th>
<th>points scored</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-6</td>
<td>1</td>
</tr>
<tr>
<td>7-13</td>
<td>2</td>
</tr>
<tr>
<td>14-21</td>
<td>3</td>
</tr>
<tr>
<td>22-28</td>
<td>4</td>
</tr>
<tr>
<td>29-35</td>
<td>5</td>
</tr>
<tr>
<td>36-49</td>
<td>6</td>
</tr>
<tr>
<td>50-52</td>
<td>7</td>
</tr>
</tbody>
</table>

Maximum score  7 points

Record the score in the appropriate box marked PART 3 Task 4

Record the final score in the total box marked PART 3
TEST CONCLUDES

Thank the child.

Complete the Profile score summary on the final page of the score sheet.

Attach writing sample to the score sheet.

Ensure all details on the score sheet are complete

Add your own notes on the section headed testers' comments
Early Literacy Development Profile - Score sheet - Version 3

<table>
<thead>
<tr>
<th>Child's first name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date of birth</td>
</tr>
<tr>
<td>Date of test</td>
</tr>
<tr>
<td>Age at testing</td>
</tr>
</tbody>
</table>

Note

PS refers to the Possible score
AS refers to the Actual score achieved by the child

PART 1 ENVIRONMENTAL PRINT

Task 1

Show the child the set of colour photographs of street scenes. Ask the following in this order

<table>
<thead>
<tr>
<th>No.</th>
<th>Question</th>
<th>PS</th>
<th>AS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>What can you see in the pictures?</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Can you point to some signs, some words, in the pictures?</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>What are signs for? (simple 1) more detailed (2)</td>
<td>1 or 2</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Do you know what any of these signs say?</td>
<td>1 or 2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(simple 1 detailed 2)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>5</td>
<td></td>
</tr>
</tbody>
</table>
### Task 2

<table>
<thead>
<tr>
<th>Picture</th>
<th>PS</th>
<th>AS</th>
<th>PS</th>
<th>AS</th>
<th>PS</th>
<th>AS</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weetabix</td>
<td>1</td>
<td></td>
<td>1</td>
<td></td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Coca Cola</td>
<td>1</td>
<td></td>
<td>1</td>
<td></td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Walkers crisps</td>
<td>1</td>
<td></td>
<td>1</td>
<td></td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Persil Washing Powder</td>
<td>1</td>
<td></td>
<td>1</td>
<td></td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fairy Liquid</td>
<td>1</td>
<td></td>
<td>1</td>
<td></td>
<td>1</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Raw total

Divide by 2 for actual score

Add the total scores for each row. Total all the scores in the total boxes on the right hand side of the table. Insert the 'raw' score. Divide by 2 for the actual score for Task 2

### Task 3 Decontextualised print

**Any order**

<table>
<thead>
<tr>
<th>Word</th>
<th>PS</th>
<th>AS</th>
</tr>
</thead>
<tbody>
<tr>
<td>weetabix</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Coca Cola</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Walkers</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Persil</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Fairy</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

**Total**

5
## PART 2 BOOK KNOWLEDGE

### Task 1 Knowing about books

<table>
<thead>
<tr>
<th>No</th>
<th>Question</th>
<th>PS</th>
<th>AS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Pass me the book please?</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Do you know what this is for? What do we do with a book?</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Show me the front of the book?</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Show me a page in the book?</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Show me a picture?</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Show me the words?</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Show me just one word?</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Show me just one letter</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Show me the letter 'c' (say letter name)</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>What letter is this (point to 'b')</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Show me a full stop on this page</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Show me a capital letter on this page</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

### Task 2 Using books, retelling stories

<table>
<thead>
<tr>
<th>No</th>
<th>Question</th>
<th>PS</th>
<th>AS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Who is in the story? (one character 1 - 2+ score 2)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>How does the story begin? (brief description score 1 more detailed score 2)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>What happens in the story? (brief description score 1 more detailed score 2)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>How does the story end? (brief description score 1 more detailed score 2)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Part 2 Book Knowledge Possible score 20 Child's score
### PART 3 EARLY WRITING

**Task 1 Identifying and knowing about writing**

<table>
<thead>
<tr>
<th>No</th>
<th>Question</th>
<th>PS</th>
<th>AS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Tester writes in front of the child</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Do you know what I am doing?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Do you know what writing is for?</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Show the 5 cards: (D1,2,3,4,5) Which one of these is writing?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Task 2 Writing**

Child does a sample of writing, score after the child has left the room as follows

<table>
<thead>
<tr>
<th>PS</th>
<th>AS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

ask the child to write his or her name, score as follows

<table>
<thead>
<tr>
<th>PS</th>
<th>AS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Task 3 Writing words

<table>
<thead>
<tr>
<th>PS</th>
<th>AS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1 word written (spelled) correctly apart from own name **OR**

2 - 4 words written (spelled) correctly **OR**

5 words written (spelled correctly)

Maximum score
### Task 4 Writing letters

<table>
<thead>
<tr>
<th>Description</th>
<th>PS</th>
<th>AS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-6 letters</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>7-13 letters</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>14-21 letters</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>22-28 letters</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>29-35 letters</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>36-49 letters</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>50-52 letters</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>maximum score</td>
<td>7</td>
<td></td>
</tr>
</tbody>
</table>

**Part 3 Early Writing**

Possible score: 20

Child's score: [ ]
Score sheet - Part 3 Task 4 Write all the letters you know

a b c d e f g h i j
k l m n o p q r s t
u v w x y z
A B C D E F G H I J
K L M N O P Q R S T
U V W X Y Z

Total number of letters written
Score (see scale below)
Name ____________________________
Date ____________________________

Version 3 Scoring scale

<table>
<thead>
<tr>
<th>Letters written</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 - 6</td>
<td>1 point</td>
</tr>
<tr>
<td>7 - 13</td>
<td>2 points</td>
</tr>
<tr>
<td>14 - 21</td>
<td>3 points</td>
</tr>
<tr>
<td>22 - 28</td>
<td>4 points</td>
</tr>
<tr>
<td>29 - 35</td>
<td>5 points</td>
</tr>
<tr>
<td>36 - 49</td>
<td>6 points</td>
</tr>
<tr>
<td>50 - 52</td>
<td>7 points</td>
</tr>
</tbody>
</table>
Chapter 11  Early Literacy Development Profile - Version 3: Rationale, Design and Description

EARLY LITERACY DEVELOPMENT PROFILE SCORE SHEET SUMMARY

<table>
<thead>
<tr>
<th>Part</th>
<th>Focus</th>
<th>PS</th>
<th>AS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Environmental Print</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Task 1 Identifying print in the outdoor environment</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Task 2 Identifying words and logos</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Task 3 Decontextualised print</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Book Knowledge</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Task 1 Knowing about books</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Task 2 Using books - retelling stories</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Early Writing</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Task 1 Identifying and knowing about writing</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Task 2 Writing</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Task 3 Writing words</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Task 4 Writing the Alphabet</td>
<td>7</td>
<td></td>
</tr>
</tbody>
</table>

Total score for Profile 60

PLEASE REMEMBER TO ATTACH THE WRITING SAMPLE TO THE SCORE SHEET

Testers Comments
Note briefly any points which were of particular interest in the administration on this occasion e.g. anything you did which may have influenced the outcomes, any interruptions, refusal to continue, abandonment of the Profile etc.

Time taken to administer the Profile .......minutes This includes completing the score sheet when the child has left.

Tester..................................

School..................................

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Chapter 12

Evaluation study of Version 3

A. Implementation of Evaluation of Version 3

B. Data

C. Analysis of testers observations
   1. Administration
      a. materials
      b. time
      c. refusals
      d. scoring
   2. Profile Items
      a. Part 1 Environmental Print
      b. Part 2 Book Knowledge
      c. Part 3 Early Writing

D. Analysis of children's performances
   1. Analysis of Version 3
      a. The sample
      b. Analysis of total Profile scores
      c. Analysis of sub-scores for Environmental Print, Book Knowledge and Early Writing
      d. Analysis of scores for Environmental Print
      e. Analysis of scores for Book Knowledge
      f. Analysis of scores for Early Writing
   2. Comparison of version 3 with LARR

E. Implications for Version 4
Chapter 12  Evaluation study of Version 3

A. Implementation of Evaluation of Version 3

Following the development of Version 3 of the Early Literacy Development Profile a trial was arranged. This was to be smaller in scale than the trial of Version 2 because the purposes were a) to find out whether the changes that were made were effective, and b) to make some comparison with the LARR test of Emergent Literacy (NFER Nelson 1993). So that I could make decisions based on the testers' role I decided to conduct this trial myself.

I contacted the head teacher of an inner city nursery school and made arrangements to work with children in the 3 to 5 age range in her school. I visited the school, showed the head teacher the Early Literacy Development Profile and the LARR test of Emergent Literacy, and discussed the sample of children that would be needed. The children attending this school came from a range of backgrounds, some lived in difficult circumstances in local authority housing near the school, others were brought to the nursery in their parents' cars as they travelled into the city centre from the more affluent south side of the city to work. The children in this nursery were as representative a sample of children in the city as a whole as it is possible to find in any single school. The sample was therefore neither drawn from a singularly affluent or severely disadvantaged group. I was as confident as I could be that the performances of this group of children would test the limits of the profile, some children were likely to struggle with some items, others may score highly and therefore provide a good indicator of the effectiveness of the new items that had been added to make the Profile more difficult.

The head teacher agreed that her staff would identify 16 children, two girls and two boys in each of the four age bands (3.0-3.5; 3.6-4.0; 4.1-4.5; 4.6-4.11). I asked that the children in the sample were neither exceptionally able nor known to be in need of particular learning support. The staff also agreed to identify a further set of children
with similar characteristics that could be involved if any of the chosen group was absent at the time of the trial. The school agreed to inform parents about the trial and give them the information they needed to enable them to give informed consent to their children's involvement in the trial. The trial of version 3 took place on two consecutive days at the nursery school.

B. Data

Profile score sheets were kept for each child, giving details of children's individual performance on each item and other information such as the book used and the time taken to administer the Profile. In addition to the Profile score sheets I kept notes of procedures and issues that arose that might need consideration in the analysis of version 3.

C. Analysis of testers observations

My observations during the trial of version 3 covered two main topics: the administration of the Profile and the items themselves.

1. Administration
   a. materials

The materials seemed to work well. The Profile booklet was clear and easily used in parallel with the child's score sheet. I did not note any need to make further changes to the format of the materials.

   b. time

The Profile took an average of 12 minutes to administer. The quickest time was 7 minutes and the longest, 21 minutes. Figure 12.1 shows the time taken to administer each Profile.
The administration time for Version 3 was less than the average time taken for version 2 which was 20 minutes (Figure 10.5). It seemed that even though some items were removed, and others added, this still reduced the length of time taken for each profile.

The trial for Version 3 suggests that testers familiar with the material could expect the profile to take an average of 12 minutes to administer.

c. refusals

One child, a 4 year old girl, was unhappy from the start of the Profile. She said she did not want to look at the first picture. I decided not to proceed with the administration of the profile. To try to do so would have been unacceptable for the child and would probably have resulted in an unreliable profile score. I referred to my alternative list and selected another girl in the same age band. Information about dealing with refusals is simple. If children are unhappy, or do not wish to proceed, the administration of the Profile should be discontinued.
The scoring system was straightforward and worked well. I was able to complete the score sheets whilst the child was working through the tasks and score the appropriate writing tasks immediately after the child had left the room. From a tester's viewpoint this part of the profile seems satisfactory.

2. Profile Items
I made brief notes about my use of the profile items as I worked through them with children.

a. Part 1 Environmental Print
All the photographs were of a similar (4x5) size and were shown to the children one at a time. This means that they can be held in the hand like playing cards and placed in front of the child one at a time at a speed that is appropriate for the rate of response. The materials in this format seems preferable to the use of the album format trialled in Versions 1 and 2. Environmental print seems a good starting point as all the children were able to recognise some of the signs and logos shown to them.

There was a suggestion from testers in version 2 that the word 'sign' should be changed in favour of an easier word that children were more likely to know. I paid attention to this whilst administering this part of the Profile. None of the children had difficulty with the concept of a 'sign' and all scored on this item. For this reason I will retain the word 'sign' in Version 4.

b. Part 2 Book Knowledge
I selected the books for this part of the Profile according to the criteria set. This is a time consuming task. Many books for children do not have sufficient illustrations to tell most, if not all, of the story. Version 4 could provide some help with this by including a list of books that fit the criteria - not necessarily to be used but as examples.
of the kinds of books that are required to enable children to respond to all items. In this trial four books were used because I was interested to find out whether the profile could be used with different books. This seems to be the case, confirming my position that it is criteria for selection that are more important than identifying a particular book.

I also considered children's responses to looking at the book alone and being asked to talk about the story from an unfamiliar book. This seemed unproblematic. All children responded to this and all scored on this part of the profile. It seems that using unfamiliar books and responding without adult support to a story book is within the capabilities of children in this age range.

I did not rephrase the questions from version 2 to version 3 as some testers in version 2 suggested might be necessary. Instead I paid close attention to children's responses to the questions. Children gave clear answers to the questions in this part and so I do not see a need to revise the wording of questions in Version 4.

c. Part 3 Early Writing

This part of the profile included the use of the teddy as an encouragement for children to write. Though most of the children in the sample were happy to write immediately. The teddy was a useful aid at the point in the Profile where children have worked quite hard and intensively, providing light relief and then, in some cases, acting as a stimulus for children to write. The teddy had a minimal role but is worth keeping in Version 4 both because of the time he is introduced and because a few children may be reluctant to write and he provided the extra impetus to do so.

This summary of my observations whilst administering the Profile with 16 children answers some of the outstanding points raised by the testers who participated in trial of
version 2. They justify the decisions made in the development of version 3 and confirm that there is no need to make any further changes in terms of format of materials, time, refusals or scoring system other than those that may arise as a result of the analysis of the children's performances.

D. Analysis of children's performances

The analysis of children's performances in Version 3 is not a repeat of the processes of analysis carried out in the analysis of version 2. It is more selective. During this trial I checked the effects of changes made in Version 3 and identified implications for Version 4, and took the opportunity to compare my measure with the only other published measure of literacy for the age range. The LARR test of Emergent Literacy (NFER/Nelson 1993) was published around the same time as the trial of Version 2. It seemed appropriate therefore, as it was recent and purported to measure similar things, that even though my sample was small, some comparison should be made between LARR and the Early Literacy Development Profile. Therefore this analysis falls into two parts:

1. Analysis of version 3
2. Comparison of version 3 with LARR

1. Analysis of version 3

a. The sample

The sample of children in the trial of Version 3 was selected specifically to enable me to check that changes made in the development of Version 3 were appropriate and that they accomplished what was required. A large sample was not necessary because this was not to be a full review of the whole Profile, rather a check to see what difference the changes made to overall scores and to the relationships between sub scores. As has been reported in section C, it was also important to observe children's reactions to certain elements and to record testers' observations of the effects of specific decisions.
In order to achieve a balanced sample, I chose to trial Version 3 with 16 children, 2 girls and 2 boys from each of the four age bands, (3.0-3.5; 3.6-4.0; 4.1-4.5; 4.6-4.11). I tested the 8 children in the upper two age bands using the LARR test of Emergent Literacy (NFER Nelson, 1993) and all children scored an average standardised score (between 93-115). This suggests that according to the only published standardised test for the age range, the sample used in the trial of version 3 is of average literacy ability. I did not use the LARR test with the children under four as the materials are not intended for children below four and standardised score information is only available for the 4.0 - 5.03 age range. I will first discuss the analysis of the children's performances on Version 3 then I will compare the performances of children in the upper two age bands on Version 3 and LARR.

b. Analysis of total Profile scores

Though there are many processes on analysis that the Profile can be subjected to, the most important single piece of information on which to make a judgement about the effectiveness of Version 3, and whether further analysis is worthwhile is the total Profile score. When Version 2 was trialled the overall Profile scores resulted in a broad spread of scores. It is not appropriate to carry out this analysis for Version 3 - the result with a sample of 16 would be meaningless. It is appropriate however to examine the way in which the total score in Version 3 varies with age. Figure 12.2 shows that the increase of score with age is maintained in Version 3. In both versions, scores increased with age band but the main difference between Version 2 and Version 3 is that some children in the top age band reached near maximum points on Version 2. In Version 3 the upper age band scores the highest mean score of 36 points out of a maximum possible score of 60. This shows that Version 3 has successfully extended the continuum of relevant tasks. The ceiling of scores for the whole profile has been raised making it possible to use Version 3 on more than one occasion over time with the opportunity for children to increase their scores.
Figure 12.2  Variation of mean scores within age bands

![Variation of mean scores within age bands](image)

**c. Analysis of sub-scores for Environmental Print, Book Knowledge and Early Writing**

In Version 2 correlations were calculated to establish the relationships between all three sub-scores and between the total score and the sub-scores. There were stronger relationships between sub-scores and the total score than there were between the sub-scores. The three parts of the Profile in Version 2 were making distinguishable contributions to the total score and each part was measuring a different strand of literacy. Figure 12.3 show the correlations of sub scores with the total score and between sub-scores in Version 3.

Figure 12.3  Correlations of sub-scores with total score and between sub-scores - Version 3

<table>
<thead>
<tr>
<th>Total score</th>
<th>Score Part 1</th>
<th>Score Part 2</th>
<th>Score Part 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>R = .69</td>
<td>p &lt; .003</td>
<td>R = .25</td>
<td>R = .42</td>
</tr>
<tr>
<td>R = .53</td>
<td>p &lt; .034</td>
<td>p &lt; .345</td>
<td>p &lt; .101</td>
</tr>
<tr>
<td>R = .94</td>
<td>p &lt; .001</td>
<td>R = .49</td>
<td></td>
</tr>
</tbody>
</table>

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Figure 12.3 shows that the pattern of relationships established in Version 2 has been maintained in Version 3, with stronger relationships between sub scores and total scores and more distant relationships between sub scores. Changes in items in Version 3 have not adversely affected the relationships between sub-scores and the total score and between sub-scores. There is a very high correlation between the sub score for Part 3 - Writing, and the total score, though relationships between sub scores are lower and remain satisfactory. Though outside the scope of this study, the implications of Part 1 Environmental Print and Part 2 Book Knowledge scores in combination being very highly correlated with Part 3 Writing scores, represents an interesting avenue for further research. As figure 12.3 shows, there are stronger relationships between the total scores and the sub-scores than there are between the sub-scores. This suggests that, as established with version 2, the three parts of Version 3 each make a distinguishable contribution to the total score and each of the three parts of the Profile is measuring a different strand of literacy.

\[\text{Analysis of scores for Environmental Print}\]

The purpose of change in this part of the Profile was to extend the range of tasks and increase challenge with each task. In Version 2, 17 children scored either 9 or the maximum 10 points. It was necessary to increase the range, maintaining the easier items so that younger or less experienced children could score and adding new, more challenging items. Scoring was changed and a further, more difficult item on decontextualised print was added. Figure 12.4 shows the variation of mean scores for environmental print within the four age bands.
The maintained increase in scores with age is satisfactory and figure 12.4 shows that the ceiling on this part of the profile has been raised thus increasing the potential for the profile to be used on more than one occasion with the same children.

Having established that scores increase with age, I turned to the detail of this part of the Profile. To assess the extent to which changes achieved their intended outcome I carried out an item analysis and calculated the facility level of each item in tasks 1, 2 and 3 of Part 1. There were no changes to task 1 from version 2 to version 3 but there was a change to the scoring of this task, There were changes to task 2 and task 3 was a new task for version 3, therefore all items in this part were examined.

Table 12.1 shows the facility levels for versions 2 and 3 and the correlations of scores for each item with the sub score for part 1 of version 3.

Changes to scoring in task 1 resulted in increased difficulty on one of the three items. As this was the first task of the Profile I did not plan further amendments to the three items that made up task 1. In task 2, Version 3 the facility level had decreased in 11 of the 20 items, making the task overall slightly more difficult. Changes to this item therefore made it more difficult so no further changes were to be made in Version 4.
Task three was very difficult with children failing to score at all. The implications of this for version 4 will be discussed in section E - Implications for Version 4.

Table 12.1 Facility levels and Correlations for Part 1 Environmental Print Version 3

<table>
<thead>
<tr>
<th>Item number</th>
<th>Question</th>
<th>Facility level V2</th>
<th>Facility level V3</th>
<th>Correlation* Version 3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Identifying print in the outdoor environment</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.1.2</td>
<td>Can you point to some signs, some words in the picture?</td>
<td>.89/1</td>
<td>.94/1</td>
<td>.28p&lt;.40</td>
</tr>
<tr>
<td>1.1.3</td>
<td>What are signs for?</td>
<td>.99/2</td>
<td>.63/2</td>
<td>.63p&gt;.01</td>
</tr>
<tr>
<td>1.1.4</td>
<td>Do you know what any of these signs say?</td>
<td>.86/2</td>
<td>1.06/2</td>
<td>.63p&gt;.01</td>
</tr>
<tr>
<td></td>
<td><strong>Identifying words and logos</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.2.1A</td>
<td>Weetabix: What is this?</td>
<td>.85/1</td>
<td>.69/1</td>
<td>.42p&lt;.11</td>
</tr>
<tr>
<td>1.2.1B</td>
<td>Weetabix: Show me the word(s) here</td>
<td>.86/1</td>
<td>.81/1</td>
<td>.63p&gt;.01</td>
</tr>
<tr>
<td>1.2.1C</td>
<td>Weetabix: What do the words say?</td>
<td>.58/1</td>
<td>.75/1</td>
<td>.501p&gt;.05</td>
</tr>
<tr>
<td>1.2.1D</td>
<td>Weetabix: Show me the word that says Weetabix</td>
<td>.63/1</td>
<td>.69/1</td>
<td>.59p&gt;.02</td>
</tr>
<tr>
<td>1.2.2A</td>
<td>Coca Cola: What is this?</td>
<td>.94/1</td>
<td>.81/1</td>
<td>-.15p&gt;.56</td>
</tr>
<tr>
<td>1.2.2B</td>
<td>Coca Cola: Show me the word(s) here</td>
<td>.93/1</td>
<td>.94/1</td>
<td>.23p&gt;.40</td>
</tr>
<tr>
<td>1.2.2C</td>
<td>Coca Cola: What do the words say?</td>
<td>.76/1</td>
<td>.50/1</td>
<td>.47p&gt;.07</td>
</tr>
<tr>
<td>1.2.2D</td>
<td>Coca Cola: Show me the word that says Coca Cola</td>
<td>.66/1</td>
<td>.31/1</td>
<td>.30p&gt;.27</td>
</tr>
<tr>
<td>1.2.3A</td>
<td>Walkers crisps: What is this?</td>
<td>.97/1</td>
<td>.94/1</td>
<td>.28p&gt;.40</td>
</tr>
<tr>
<td>1.2.3B</td>
<td>Walkers crisps: Show me the word(s) here</td>
<td>.92/1</td>
<td>.94/1</td>
<td>.40p&gt;.18</td>
</tr>
<tr>
<td>1.2.3C</td>
<td>Walkers crisps: What do the words say?</td>
<td>.66/1</td>
<td>.87/1</td>
<td>.21p&gt;.44</td>
</tr>
<tr>
<td>1.2.3D</td>
<td>Walkers crisps: Show me the word that says Walkers</td>
<td>.34/1</td>
<td>.19/1</td>
<td>.56p&gt;.01</td>
</tr>
<tr>
<td>1.2.4A</td>
<td>Persil Washing Powder: What is this?</td>
<td>.72/1</td>
<td>.50/1</td>
<td>.43p&gt;.10</td>
</tr>
<tr>
<td>1.2.4B</td>
<td>Persil Washing Powder: Show me the word(s) here</td>
<td>.89/1</td>
<td>.87/1</td>
<td>.52p&gt;.04</td>
</tr>
<tr>
<td>1.2.4C</td>
<td>Persil Washing Powder: What do the words say?</td>
<td>.27/1</td>
<td>.44/1</td>
<td>.40p&gt;.12</td>
</tr>
<tr>
<td>1.2.4D</td>
<td>Persil Washing Powder: Show me the word that says Persil</td>
<td>.56/1</td>
<td>.44/1</td>
<td>.51p&gt;.04</td>
</tr>
<tr>
<td>1.2.5A</td>
<td>Fairy Liquid: What is this?</td>
<td>.73/1</td>
<td>.87/1</td>
<td>.08p&gt;.76</td>
</tr>
<tr>
<td>1.2.5B</td>
<td>Fairy Liquid: Show me the word(s) here</td>
<td>.86/1</td>
<td>.87/1</td>
<td>.33p&gt;.21</td>
</tr>
<tr>
<td>1.2.5C</td>
<td>Fairy Liquid: What do the words say?</td>
<td>.34/1</td>
<td>.63/1</td>
<td>.38p&gt;.14</td>
</tr>
<tr>
<td>1.2.5D</td>
<td>Fairy Liquid: Show me the word that says Fairy</td>
<td>.47/1</td>
<td>.19/1</td>
<td>.60p&gt;.01</td>
</tr>
<tr>
<td></td>
<td><strong>Decontextualised Print</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.3.A</td>
<td>What does this say? Weetabix</td>
<td>-</td>
<td>.06/1</td>
<td>.11p&gt;.68</td>
</tr>
<tr>
<td>1.3.B</td>
<td>What does this say? Coca Cola</td>
<td>-</td>
<td>.06/1</td>
<td>.23p&gt;.40</td>
</tr>
<tr>
<td>1.3.C</td>
<td>What does this say? Walkers</td>
<td>-</td>
<td>.06/1</td>
<td>.23p&gt;.40</td>
</tr>
<tr>
<td>1.3.D</td>
<td>What does this say? Persil</td>
<td>-</td>
<td>.06/1</td>
<td>.23p&gt;.40</td>
</tr>
<tr>
<td>1.3.E</td>
<td>What does this say? Fairy</td>
<td>-</td>
<td>.06/1</td>
<td>.23p&gt;.40</td>
</tr>
</tbody>
</table>

*Correlation of item with sub score for part 1
e. **Analysis of scores for Part 2 - Book Knowledge**

I first checked that scores for Part 2 - Book Knowledge, increased with age. Figure 12.5 shows that, as in Version 2, scores increased with age.

![Figure 12.5 Mean scores for Part 2 - Book Knowledge for each age band](image)

The aim of changes here was to decrease the facility level and thereby raise the ceiling.

An item analysis and calculation of the means for the items in part 2 tasks 1 and 2 shows that though facility levels for some items have increased marginally the addition of the two more difficult items have made Part 2 of Version 3 more difficult than that in Version 2.

Table 12.2 shows two things: that the two final items in task 1 were more difficult than earlier items in Task 1 and that, despite adjustments to scoring in Task 2, the facility levels on 3 of the 4 items were slightly higher than those in Version 2. Given the very low facility levels, of items 2.1.11 and 2.1.12 it may be said that these items were too difficult. Implications of this analysis will be discussed in section E - Implications for Version 4.
Table 12.2  Facility levels and Correlations for Part 2 Book Knowledge Version 3

<table>
<thead>
<tr>
<th>Item number</th>
<th>Question</th>
<th>Facility level V2</th>
<th>Facility level V3</th>
<th>Correlation* Version 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.1.1</td>
<td>Pass me the book please</td>
<td>.97/1</td>
<td>1.0/1</td>
<td>&quot; &quot;</td>
</tr>
<tr>
<td>2.1.2</td>
<td>Do you know what this is for? What do we do with a book?</td>
<td>.85/1</td>
<td>.94/1</td>
<td>.34p&lt;.20</td>
</tr>
<tr>
<td>2.1.3</td>
<td>Show me the front of the book</td>
<td>.75/1</td>
<td>.81/1</td>
<td>.16p&lt;.56</td>
</tr>
<tr>
<td>2.1.4</td>
<td>Show me a page in the book</td>
<td>.93/1</td>
<td>1.0/1</td>
<td>&quot; &quot;</td>
</tr>
<tr>
<td>2.1.5</td>
<td>Show me a picture</td>
<td>.99/1</td>
<td>1.0/1</td>
<td>&quot; &quot;</td>
</tr>
<tr>
<td>2.1.6</td>
<td>Show me the words</td>
<td>.87/1</td>
<td>1.0/1</td>
<td>&quot; &quot;</td>
</tr>
<tr>
<td>2.1.7</td>
<td>Show me just one word</td>
<td>.82/1</td>
<td>.63/1</td>
<td>.13p&lt;.64</td>
</tr>
<tr>
<td>2.1.8</td>
<td>Show me just one letter</td>
<td>.79/1</td>
<td>.75/1</td>
<td>.17p&lt;.52</td>
</tr>
<tr>
<td>2.1.9</td>
<td>Show me the letter 'c'</td>
<td>.25/1</td>
<td>.25/1</td>
<td>.02p&lt;.95</td>
</tr>
<tr>
<td>2.1.10</td>
<td>What letter is this (point to a 'b')</td>
<td>.27/1</td>
<td>.50/1</td>
<td>-.01p&lt;.96</td>
</tr>
<tr>
<td>2.1.11</td>
<td>Show me a full stop on this page</td>
<td>-</td>
<td>.06/1</td>
<td>.37p&lt;.16</td>
</tr>
<tr>
<td>2.1.12</td>
<td>Show me a capital letter on this page</td>
<td>-</td>
<td>.13/1</td>
<td>.42p&lt;.11</td>
</tr>
</tbody>
</table>

Task 2 Using books - retelling stories

<table>
<thead>
<tr>
<th>Item number</th>
<th>Question</th>
<th>Facility level V2</th>
<th>Facility level V3</th>
<th>Correlation*</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.2.1</td>
<td>Who is in the story?</td>
<td>1.75/2</td>
<td>1.69/2</td>
<td>.15p&lt;.58</td>
</tr>
<tr>
<td>2.2.2</td>
<td>How does the story begin?</td>
<td>.93/2</td>
<td>.69/2</td>
<td>.52p&lt;.04</td>
</tr>
<tr>
<td>2.2.3</td>
<td>What happens in the story?</td>
<td>1.25/2</td>
<td>1.56/2</td>
<td>.69p&lt;.01</td>
</tr>
<tr>
<td>2.2.4</td>
<td>How does it end?</td>
<td>.83/2</td>
<td>1.25/2</td>
<td>.75p&lt;.01</td>
</tr>
</tbody>
</table>

*Correlation of item with sub score for part 2

Despite the marginal increase in some facility levels, Figure 12.6 shows that the addition of the two items 2.1.11 and 2.1.12 have accomplished the intended result of raising the ceiling on this part of the profile with no children reaching maximum or near maximum points for part 2.

Analysis of scores for Part 3 - Early Writing

As with the whole Profile and scores for parts 1 and 2, the scores for part 3 of the profile increased with age with the ceiling being raised. Figure 12.6 illustrates the increase in scores with each of the four age bands.
I carried out an item analysis and calculated the facility levels of each item in task 2 to examine the detail of the changes to scoring the items in this task and of tasks 3 and 4 to ascertain the facility level for the new items (Table 12.3). No changes were made from task 1 so no further analysis was needed of the items in task 1.

<table>
<thead>
<tr>
<th>Item number</th>
<th>Question</th>
<th>Facility level V2</th>
<th>Facility Level V3</th>
<th>Correlation* Version 3</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Task 2 Writing</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.2.1</td>
<td>Writing sample: making any line of marks</td>
<td>87/1</td>
<td>69/1</td>
<td>.62p&gt;.01</td>
</tr>
<tr>
<td>3.2.2</td>
<td>Writing sample: making letter like marks</td>
<td>85/1</td>
<td>50/1</td>
<td>.68p&gt;.01</td>
</tr>
<tr>
<td>3.2.3</td>
<td>Writing sample: writing conventional letters</td>
<td>.59/1</td>
<td>.38/1</td>
<td>.80p&gt;.01</td>
</tr>
<tr>
<td>3.2.4</td>
<td>Writing sample: Writing left to right</td>
<td>.75/1</td>
<td>.63/1</td>
<td>.79p&gt;.01</td>
</tr>
<tr>
<td>3.2.5</td>
<td>Writing sample: Writing top to bottom</td>
<td>.58/1</td>
<td>.44/1</td>
<td>.85p&gt;.01</td>
</tr>
<tr>
<td>3.2.6</td>
<td>Writing sample: name writing</td>
<td>1.83/2</td>
<td>.63/1</td>
<td>.69p&gt;.03</td>
</tr>
<tr>
<td>3.2.7</td>
<td>Writing sample: beginning name with a capital letter</td>
<td>.55/1</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Task 3 Writing words</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.3.1</td>
<td>Write down some words you know</td>
<td>.13/3</td>
<td>.07p&gt;.01</td>
<td></td>
</tr>
<tr>
<td><strong>Task 4 Writing letters</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.4</td>
<td>Write all the letters you know</td>
<td>1.31/7</td>
<td>.36p&gt;.18</td>
<td></td>
</tr>
</tbody>
</table>

*Correlation of item with sub score for Part 3

In Version 3 the facility levels of Task 2 were lower than those in Version 2 therefore this task was more difficult than the earlier Version. Tasks 3 and 4 had very low facility
levels but some children scored on the items so these new tasks earned their place in Version 4.

Implications of this analysis of scores for parts 1, 2 and 3 will be discussed in section E.

2. Comparison of Version 3 with LARR

The LARR test of Emergent Literacy (NFER Nelson 1993) is intended for use with children aged from 4 to 5.3. I administered this test to the eight children in the two upper age bands of my sample of sixteen.

Before using the LARR test with the children in my sample I appraised the test according to the basis upon which my own profile was constructed (page 27-31). The LARR test claims suitability for research involving comparisons, it can be re-used within the 4.00-5.3 age range), and does have a scoring system. The LARR test asks children to identify, by drawing a circle around, various pictures, letters, words and punctuation. It does not ask children to interpret environmental print, to use a book or to write, (other than to draw a circle). The face validity of this test as a measure of emergent literacy is weak if it is appraised in terms of the three strands of literacy that form the basis of the Early Literacy Development Profile. Children are not asked to write, neither are they asked to handle or tell a story from a book, the environmental print used in the test consists of stylised drawings, not versions of print from everyday contexts that children may recognise. However, as the test was becoming more widely used and it was, so far as I could ascertain, the only standardised published test of 'emergent literacy' I decided to compare the results of children on my Profile and LARR.
Chapter 12  Evaluation study of Version 3

Figure 12.7 suggests that there is no discernible, clear relationship between the Early Literacy Development Profile.

Figure 12.7 Scattergram showing scores for Early Literacy Development Profile and LARR Test of Emergent Literacy

I took this analysis further and examined the results in a different way. Table 12.4 shows the scores on both test in relation to each other and provides further indication that there is no relationship between the two tests.

Table 12.4 Comparison of rank scores on Early Literacy Development Profile and LARR (n = 8)

<table>
<thead>
<tr>
<th>ELDP scores ranked from highest (1) to lowest (8)</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td>LARR Scores ranked from highest (1) to lowest (8)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
If two tests, intended for use with children of the same age and developed to measure the same things, are used with the same sample of children it would be reasonable to expect to find similar score patterns. This was not the case with these two measures, so there appears to be no relationship between LARR and the Early Literacy Development Profile. If this is the case the LARR test and the Early Literacy Development Profile are measuring different things. As the basis for the latter is sound and it includes tasks which are based on observations of children engaged in literacy in everyday contexts, and given the perceived weaknesses in face validity of the LARR test it therefore questions whether the LARR test is, as it claims to be, actually a measure of emergent literacy.

The information presented here was from a sample of eight, far too few on which to base confident claims. The question about the extent to which LARR measures what it purports to measure, and its comparison with other measures of emergent literacy lies outside the scope of this thesis. However, it is worthy of further investigation and I will discuss this further in chapter 14.

E. Implications for Version 4

This section reviews the analysis carried out in this chapter and details the aspects of Version 3 that need to be changed in the development of Version 4.

Scoring trends

Scores on the whole Profile and each of the three constituent parts increased with age. Therefore no further changes were needed on this basis.
Repeated use of the Profile

The ceiling of the whole Profile and of the three constituent parts had been raised indicating that the continuum of relevant tasks has been extended. The Profile maintained its high facility level items and included further items which had lower facility levels. It therefore had more of a range in each of the three parts and because the problem of a low ceiling had been solved, the Profile could be used on more than one occasion. There was no need for further changes on this basis.

The Constituent Parts

All three parts of the Profile earn their place. As they all appeared to measure a different strand of literacy, there was no need for further change on this basis.

Administration Time

An average of 12 minutes was needed to administer the Profile. This was a most satisfactory result for children, teachers and researchers. For children 12 minutes is not so long that they may tire. For teachers the time needed to administer this one to one profile is manageable. For researchers, the time is manageable and the Profile offers a quick measure of individual children's literacy development.

Refusals

Some guidance was needed at the start of the Profile Administration booklet to help testers decide what to do when children either refuse to start or are reluctant to continue.

Scoring

The scoring sheet format worked well. No changes were needed to this aspect.
PART 1 ENVIRONMENTAL PRINT

Materials

Materials for Part 1 - Environmental Print included 4x5 photographs used like playing cards. This worked well. Version 4 will maintain this format and presentation style.

Terminology

The terminology in Part 1 included the word 'sign' which some testers in the trial of version 2 thought too difficult for children in the age range. In the trial of Version 3 the word was understood and could therefore be maintained in Version 4.

Increase in difficulty

Changes to tasks 1 and 2 produced only a slight increase in difficulty but the introduction of tasks 3 (decontextualised print) made this part as a whole much more difficult. Only 1 child in the sample of 16 scored on task 3. The result was not surprising when the literature discussed in chapter 2 illustrated that children can recognise familiar signs and logos in context but found it more difficult to read the words when the context of colour, font and other contextual clues were withdrawn (Jones and Hendrickson, 1970; Ylisto, 1977; Goodman and Altwerger, 1981). I considered whether task 3 should be omitted from Version 4, but as one child scored one point and given that decontextualised print is the next logical step in work on environmental print I decided to leave retain all the items in this task in Version 4.

PART 2 - BOOK KNOWLEDGE

Criteria for book selection

Criteria set in Version 3 for selecting the book to be used in the Profile will be maintained in Version 4. A list of examples will be added to this criteria in Version 4. This list includes books that fit the criteria but not necessarily titles that must be used. The Profile was shown to work with several different books confirming that the criteria for selection was more important than the identification of a specific set book or books.
The unfamiliarity of the book

Version 4 will maintain the items that request children to talk about the book even though it is unfamiliar to them. This demonstrates how they tackle the book and shows their knowledge of book use, not simply the content of this particular book. These items posed few problems in terms of children's ability to work through them without discomfort so there will be no changes to the questions on book knowledge from Version 3 to Version 4.

New items

The addition of two new items in task 1 of Part 2 - Book Knowledge has made this aspect of the Profile more difficult. These new items will be maintained in Version 4

Scoring Task 2

Changes in scoring in Task 2 of Part 2 Using books and retelling stories have not resulted in a more difficult task. However, overall Part 2 is now more difficult so I do not propose further changes to Part 2.

PART 3 - EARLY WRITING

The teddy bear

The teddy bear will be maintained as an enabling prop for this part of the Profile only.

Task 1

Task 1 was satisfactory in the trial of version 2 and did not change in Version 3. This task will be maintained in Version 4.

Task 2

This task was now more difficult due to changes in the scoring of writing. This will be maintained in Version 4.
Chapter 12  Evaluation study of Version 3

Tasks 3 and 4

Tasks 3 and 4 were newly developed for Version 3. These two tasks had very low facility levels but some children scored on each task. They will be maintained in Version 4.

Scoring for task 4

An interim scoring system was developed for the trial of version 3 with a view to using the actual scores in Version 3 to develop a scale of scoring based on children's performance on this task. In addition to the sample of 16 children in the trial of Version 3, I asked a further 9 children to do task 4: *Write all the letters you know*. I will use the data from children in the sample and the additional group to develop a new ranking scale for scoring of this item in Version 4.

ITEMS WITH VERY LOW FACILITY LEVELS

Each part of the Profile had some items with very low facility levels. (Part 1 task 3; Part 2 Task 1 items 11 and 12; Part 3 Tasks 3 and 4). However, some children scored in each of these items and tasks. I therefore decided to maintain them in the development of Version 4, because though they are very difficult for many children in my sample of 16, some children achieved them, therefore in a larger sample more children are likely to score on these items.

There may be a further advantage of maintaining these more difficult elements of the Profile in Version 4 as they may make the Profile applicable to a wider age range, say up to 5;5. Version 4 could be trialled with a sample to include children in the age band 5;0-5;5 to see if the profile is also a useful measure of literacy in the first months of compulsory schooling. This lies outside the scope of this study but would be worth investigating as it could extend the potential of the measure.
Summary of Changes to be made for Version 4

There are three changes to be made from Version 3 to Version 4:

- Guidance on children who refuse to begin or complete the Profile
- Addition of a list of books that meet the criteria for Part 2 - Book Knowledge.
- Adjustment of scoring of Part 3 Task 4 Write all the letters you know

Chapter 13 will discuss the details of the three changes and present the full text of Version 4.
Chapter 13
Early Literacy Development Profile Version 4: Rationale, Design and Description

This chapter begins with a rationale for changes that led to the development of Version 4. There follows a discussion of the design changes and the chapter concludes with a description of Version 4 in the form of the full script of Version 4 and the score sheet.

A: Rationale

The evaluation study of Version 3 (chapter 12) detailed and discussed the changes to be made to develop Version 4. Changes presented here were based on my appraisal of the materials and an analysis of the children's performances, already reported in chapter 12.

There were three main features that needed to be changed, further to improve the Profile:

- Inclusion of guidance on how to deal with children who refuse to participate or continue
- Part 2 - Book Knowledge - inclusion of a list of books to be added to the criteria for selection of books.
- Part 3 - Early Writing - a reconsideration of the scoring of task 4 - writing letters.

B. Design

I will now discuss the three areas of change identified above illustrating the changes with extracts from Version 3 where appropriate. These changes will then be incorporated into the full text of Version 4 presented in section C of this chapter.
Guidance on dealing with refusals

Some guidance on children who refuse either to begin or continue with the Profile needed to be included. The best place for this was at the start of the Profile administration booklet. This was also an opportunity to include other information about the administration of the Profile. The following will be inserted at the start of the Profile in Version 4:

- The Early Literacy Development Profile has been developed to measure three strands of children's literacy: environmental print, book knowledge and early writing.

- The profile is designed to be administered with individual children aged between 3;0 and 4;11 years. The best location is a private room away from distractions.

- Administration time takes an average of 12 minutes but can vary and there is no time limit. Children must be allowed the time they need to complete the tasks.

- A small number of children may be reluctant to participate at all - others may decide that they do not wish to continue when they are part way through.

- At no point should children be put under pressure to work through the profile. Testers are advised to write 'discontinued' on the child's score sheet at the point where they stop administering the Profile.

- If children have completed one or two parts of the Profile these could be scored, but the total score will not give a reliable measure of the child's early literacy development.

- The Profile can be administered on more than one occasion with little risk of children becoming 'practised', so there is the option to invite children to try again later should they be willing.

- Parents should be asked for their informed consent before the Profile is used with their children.
Addition of examples of books that fit the criteria in Part 2

The following list of books fit the four criteria set for the selection of books. They are examples of the material that can be selected whilst applying all four criteria. The four books to be listed in Version 4 were used in the trial of Version 3 and have been shown to work successfully with the Profile.

Some books which fit these criteria

Reconsideration of scoring for Part 3 Task 4
Scoring for Version 3 of this task which asks children to write all the letters they know looks like this:

<table>
<thead>
<tr>
<th>Letters written</th>
<th>Points scored</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 - 6</td>
<td>1</td>
</tr>
<tr>
<td>7 - 13</td>
<td>2</td>
</tr>
<tr>
<td>14 - 21</td>
<td>3</td>
</tr>
<tr>
<td>22 - 28</td>
<td>4</td>
</tr>
<tr>
<td>29 - 35</td>
<td>5</td>
</tr>
<tr>
<td>36 - 49</td>
<td>6</td>
</tr>
<tr>
<td>50 - 52</td>
<td>7</td>
</tr>
</tbody>
</table>

Maximum score 7 points
The scale for scoring points was provisional and I planned to use the data from the trial of version 3 to develop a scoring scale based on actual scores. I took the details of numbers of letters written from the 16 children in the sample and a further 9 who I asked to do only this task because I knew I would need to calculate the best way of scoring this item. Figure 13.1 shows the numbers of letters written and the frequency of each (n=25, maximum possible score =52).

Chapter 12 established that this task was very difficult and this chart shows that on a sample of 25 (which included the sample of 16 who trialled Version 3), the maximum number of letters written was 17.

This suggests that it may be appropriate to adjust the scoring scale slightly, creating more opportunity for children who only write a few letters to score more highly. This will not change the potential for high scores or alter the continuum within the item, because it will still be necessary to write between 45 and 52 letters to score 7 points. The scoring scale for version 4 looks like this:
Version 4

**TASK 4 Writing letters**

**Scoring**

After the child has left. Check off the letters on the score sheet for part 3 Task 4

Score according to the following scale:

<table>
<thead>
<tr>
<th>Letters written</th>
<th>points scored</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 - 5</td>
<td>1</td>
</tr>
<tr>
<td>6 - 10</td>
<td>2</td>
</tr>
<tr>
<td>11 - 15</td>
<td>3</td>
</tr>
<tr>
<td>16 - 25</td>
<td>4</td>
</tr>
<tr>
<td>26 - 32</td>
<td>5</td>
</tr>
<tr>
<td>33 - 44</td>
<td>6</td>
</tr>
<tr>
<td>45 - 52</td>
<td>7</td>
</tr>
</tbody>
</table>

Maximum score 7 points

**C. Description**

I have discussed the rationale and design to Version 4 with details of changes from version 3 to version 4. The three changes discussed in this chapter were incorporated into Version 4. The full text of Version 4 with Profile booklet and Score sheet follows.
Early Literacy Development Profile

Version 4
ABOUT THE EARLY LITERACY DEVELOPMENT PROFILE

- The Early Literacy Development Profile has been developed to measure three strands of children's literacy: environmental print, book knowledge and early writing.

- The profile is designed to be administered with individual children aged between 3;0 and 4;11 years. The best location is a private room away from distractions.

- Administration time takes an average of 12 minutes but can vary and there is no time limit. Children must be allowed the time they need to complete the tasks.

- A small number of children may be reluctant to participate at all - others may decide that they do not wish to continue when they are part way through.

- At no point should children be put under pressure to work through the profile. Testers are advised to write 'discontinued' on the child's score sheet at the point where they stop administering the Profile.

- If children have completed one or two parts of the Profile these could be scored, but the total score will not give a reliable measure of the child's early literacy development.

- The Profile can be administered on more than one occasion with little risk of children becoming 'practised', so there is the option to invite children to try again later should they be happy to do so.

- Parents should be asked for their informed consent before the Profile is used with their children.
PART ONE ENVIRONMENTAL PRINT

TASK 1 Identifying print in the outdoor environment

Materials needed

Colour photograph of street scene including several examples of environmental print (A)

Instructions

Show the child the colour photographs of the street scene (A).

Ask the following questions in this order:

1. What can you see in the picture?
2. Can you point to some signs, some words in this picture?
3. What are signs for?
4. Do you know what any of these signs say?

Scoring

1. no score - this is a 'warm up' question
2. score 1 point
3. score 1 points for simple answer: roads, shops, bags OR score 2 points for more detailed answer showing greater understanding or knowledge showing the way, showing what's in the shop, telling you.....
4. score 1 points for one correct response OR score 2 points for two or more correct responses

Maximum score for Task E1 5 points

Record scores during the administration on the score sheet in the appropriate boxes

Record the final score in the total column in the box marked PART 1 Task 1
TASK 2 Identifying words and logos

Materials needed

Set of photographs B showing logos from best selling products including:

- cereals
- drinks
- foods
- household tasks

These may be chosen according to the top ten best selling products. For this measure the following tasks were selected in this way:

- Weetabix
- Coca Cola
- Walkers crisps
- Persil washing powder
- Fairy liquid

The photographs should be mounted on separate cards (set B)

Instructions

Show the child one photograph at a time.

Ask the following questions for each photograph:

1. What is this?
2. Show me the word(s) here?
3. What do the words say?
4. Show me the word that says... Weetabix
   Coca Cola
   Walkers
   Persil
   Fairy
Scoring

For each photograph score as follows

Question 1 PS 1 Point  
Description of use or purpose is acceptable for example 'breakfast' is acceptable for Weetabix

Question 2 PS 1 Point  
Pointing at any words on the picture is acceptable - but not pictures

Question 3 PS 1 Point  
Approximation of the words on the package is acceptable for example 'Crisps' is acceptable for 'Walkers Crisps'

Question 4 PS 1 Point  
The exact word listed must be pointed to

Total possible 'raw' score for task 2 is 20. Divide the maximum score by 2

Maximum final score for task 2 10 points

Record scores during the Profile on the score sheet in the appropriate boxes.

Record the final score in the total column in the box marked PART 1 Task 2

TASK 3 Decontextualised Print

Shuffle the five cards (C) printed with decontextualised words from the environmental print examples.

Show the child each card in turn and ask

What does this say?

Scoring

Score 1 point for each word read correctly. No approximations are acceptable.

Record scores during the Profile on the score sheet in the appropriate boxes.

Record the final score in the total column in the box marked PART 1 Task 3
PART TWO BOOK KNOWLEDGE

TASK 1 Knowing about books

Materials needed

Three objects of which one is a book selected according to the criteria below e.g. a teddy, the book another object (cup, ball, jigsaw).

Criteria for book selection

a. pictures and print should be clearly differentiated and should appear together on the majority of pages

b. the book should be 'unfamiliar', possibly newly published or at least not available in the nursery/group book stock

c. there should be a clear story line which is also discernible from the illustrations with, where appropriate, repeated illustrations of key characters.

d Text should include appropriate punctuation and at least full stops and capital letters.

Some books which fit these criteria


Instructions

Arrange the three objects, one of which is the book, on the table.

Ask the following

1. Pass me the book please?
2. Take the book from the child (or from the table if the child does not succeed with question 1)
   Do you know what this is for? What do we do with a book?
3. Show me the front of the book.
4. Show me a page in the book.
5. Show me a picture.
6. Show me the words.
7. Show me just one word.
8. Show me just one letter.
9. Show me the letter 'c' (tester say the letter name not sound).
10. What letter is this (point to a 'b')
11. Show me a full stop on this page (open the book at a page where there is a full stop)
12. Show me a capital letter on this page (open the book at a page where there is a capital letter)

Scoring

1. Score 1 point for picking the book
2. score 1 point for a suitable answer, e.g. 'for stories', 'to read', 'for bedtime', or other such reply which suggests that the child knows what a book is for.
3. score 1 point if front is identified correctly
4. score 1 point if page is identified correctly
5. score 1 point if picture is identified correctly
6. score 1 point if words are identified correctly
7. score 1 point if a single word is identified correctly
8. score 1 point if a single letter is identified correctly

9. score 1 point is a letter 'c' is identified correctly

10. score 1 point if the child says 'b' (name or sound acceptable)

11. score 1 point for correctly pointing to full stop

12. score 1 point for correctly pointing to capital letter.

Maximum score for Task 1 12 points

Record scores during the Profile on the score sheet in the appropriate boxes

Record the final score in the total column in the box marked PART TWO Task 1.

TASK TWO  Using books - retelling stories

Materials

The same book chosen according to specified criteria

Instructions

Give the book to the child and say: *I just need to tidy up a bit, would you like to look at this book while I do that, then you can tell me about the story.* Give the child time to look at the book then ask.

Will you tell me about that book?

1. *Who is in the story?*

2. *How does the story begin?*

3. *What happens in the story?*

4. *How does it end?*
Scoring

1. score 1 point for mention of single character either by name or by description (a teddy, a dolly, patch, mummy, baby, etc.) OR score 2 points for mention of two or more characters

2. Score 1 point for brief description of the start of the story (e.g. there was a lady with a dog, there was a postman) OR Score 2 points for a fuller description giving more specific detail

3. Score 1 point for a brief description of events (they went to the sea side, they had a party) OR Score 2 points for a more detailed description of the plot with events in the correct order

4. Score 1 point for brief description of the ending (they came home and went to bed, they found the dog) OR Score 2 points for a fuller description of the ending.

Maximum score for Task 2 8 points

Record score in the appropriate boxes.

Record the final score in the total box marked PART 2 Task 2
PART THREE EARLY WRITING

TASK ONE Identifying and knowing about writing

Materials

Five pictures: animals, a toy, child's drawing, blank piece of coloured card, adult writing (D)
Blank writing paper - fine tipped black felt tip pen

Instructions

Write a few lines in front of the child.
Ask the following

1. Do you know what I am doing?
2. Do you know what writing is for?

Put this writing out of sight of the child and move on to the next task.

Lay the five pictures out on the table in front of the child:

- toy (D1)
- animals (D2)
- child's drawing (D3)
- adults handwriting (D4)
- blank coloured card (D5)

Tester take care not to 'eye' point or give other clues about the correct choice here.

Ask

3. Which one of these is writing?
Scoring

1. score 1 point for correct description (for example you’re writing)
2. score 1 point for suitable answer e.g. letters, cards, stories etc.
3. score 1 point for identifying the adults writing (C4)

Maximum score for Task 1 3 points

Record scores during Profile on the score sheet in the appropriate boxes

Record the final score in the total box marked PART 3 Task 1

TASK 2 Writing

Materials

Writing paper

Black felt tip pen

Teddy bear with glasses to fit

Instructions

Ask the child if s/he thinks teddies can write. Introduce the teddy who is wearing glasses. Say *This teddy can't write very well but he can read when he wears these magic glasses.*

The use of the teddy is to make the administration of the writing part of the profile more user friendly and give the child some encouragement to write if this is needed.
Chapter 13  Early Literacy Development Profile Version 4: Rationale, Design and Description

1. Give the paper a pencil to the child. Ask the child to write a message on the paper for the teddy to read. Let the child write, encourage this effort. If the child says that s/he can't write say that the teddy can read all sorts of writing so long as he wears his magic glasses. Suggest that the child 'pretend' to write if he/she insists they cannot. If the child refuses at this point say *OK, let's try the last bit*, and go on to the next part of the Profile.

When the child has finished his/her 'independent' writing (or if they refused):

2. Ask

   *Will you write your name at the bottom so that teddy knows it is from you?*

If the child has already written their name either let them repeat it if they wish or identify for you which is their name in the first piece of writing.

**Scoring**

Score the child's writing as follows **whilst they are writing**:

1. Making any line of marks  score 1 point
   Making letter like marks  score 1 point
   Writing conventional letters  score 1 point
   Writing left to right  score 1 point
   Writing top to bottom  score 1 point

2. Name writing **after the child has left**

   Full name written correctly  score 1 point  plus
   beginning name with a capital letter  score 1 point

Maximum score for Task 2  7 points

Record scores on the score sheet in the appropriate boxes.
**TASK 3** 
*Writing Words*

Give the child a new piece of blank paper. Ensure that no words are visible.

Say

*Write down some words you know*

Give the child a maximum of 1 minute - stop before this if the child stops or says he/she has done all they can

**Scoring**

After the child has left

Words must be spelled correctly to score

Score 1 point for writing 1 word in addition to their name (if this is written again) OR

Score 2 points for writing 2-4 or words OR

score 3 points for writing 5 or more words

Maximum score 3 points

Record the score in the box marked PART 3 Task 3

**TASK 4** 
*Writing letters*

Give the child a new sheet of paper and say

*Write all the letters you know*

If the child is unsure say...

*Do you know some letters in your name, or the alphabet? - have a go.*

**Scoring**

After the child has left, Check off the letters on the score sheet for part 3 Task 4

Score 1 according to the following scale:
Chapter 13 Early Literacy Development Profile Version 4: Rationale, Design and Description

<table>
<thead>
<tr>
<th>Letters written</th>
<th>points scored</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 - 5</td>
<td>1</td>
</tr>
<tr>
<td>6 - 10</td>
<td>2</td>
</tr>
<tr>
<td>11 - 15</td>
<td>3</td>
</tr>
<tr>
<td>16 - 25</td>
<td>4</td>
</tr>
<tr>
<td>26 - 32</td>
<td>5</td>
</tr>
<tr>
<td>32 - 45</td>
<td>6</td>
</tr>
<tr>
<td>46 - 52</td>
<td>7</td>
</tr>
</tbody>
</table>

Maximum score 7 points
Record the score in the appropriate box marked PART 3 Task 4

Record the final score in the total box marked PART 3
Record the score in the appropriate box marked PART 3 Task 4

Record the final score in the total box marked PART 3

PROFILE CONCLUDES

Thank the child.

Complete the Profile score summary on the final page of the score sheet.

Attach writing samples to the score sheet.

Ensure all details on the score sheet are complete.

Add your own notes on the section headed testers comments.
Early Literacy Development Profile - Score sheet - Version 4

Child's first name

Date of birth

Date of Profile

Age at testing years months

Note: PS = Possible score  AS = Actual score achieved by the child

PART 1 ENVIRONMENTAL PRINT

Task 1

Show the child the set of colour photographs of street scenes. Ask the following in this order

<table>
<thead>
<tr>
<th>No.</th>
<th>Question</th>
<th>PS</th>
<th>AS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>What can you see in the pictures?</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Can you point to some signs, some words, in the pictures?</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>What are signs for? (simple 1) more detailed (2)</td>
<td></td>
<td>1 or 2</td>
</tr>
<tr>
<td>4</td>
<td>Do you know what any of these signs say? (simple 1 detailed 2)</td>
<td></td>
<td>1 or 2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5</td>
<td></td>
</tr>
</tbody>
</table>

Total
### Task 2

<table>
<thead>
<tr>
<th>Picture</th>
<th>PS</th>
<th>AS</th>
<th>PS</th>
<th>AS</th>
<th>PS</th>
<th>AS</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weetabix</td>
<td>1</td>
<td></td>
<td>1</td>
<td></td>
<td>1</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Coca Cola</td>
<td>1</td>
<td></td>
<td>1</td>
<td></td>
<td>1</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Walkers crisps</td>
<td>1</td>
<td></td>
<td>1</td>
<td></td>
<td>1</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Persil Washing Powder</td>
<td>1</td>
<td></td>
<td>1</td>
<td></td>
<td>1</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Fairy Liquid</td>
<td>1</td>
<td></td>
<td>1</td>
<td></td>
<td>1</td>
<td></td>
<td>1</td>
</tr>
</tbody>
</table>

**Raw total**

Divide by 2 for actual score

Add the total scores for each row. Total all the scores in the total boxes on the right hand side of the table. Insert the 'raw' score. Divide by 2 for the actual score for Task 2

Maximum score 10 points

### Task 3 Decontextualised print

<table>
<thead>
<tr>
<th>Word</th>
<th>PS</th>
<th>AS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weetabix</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Coca Cola</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Walkers</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Persil</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Fairy</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

**Total**

5
## PART 2  BOOK KNOWLEDGE

### Task 1  Knowing about books

<table>
<thead>
<tr>
<th>No</th>
<th>Question</th>
<th>PS</th>
<th>AS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Pass me the book please?</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Do you know what this is for? What do we do with a book?</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Show me the front of the book?</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Show me a page in the book?</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Show me a picture?</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Show me the words?</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Show me just one word?</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Show me just one letter</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Show me the letter 'c' (say letter name)</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>What letter is this (point to 'b')</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Show me a full stop on this page</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Show me a capital letter on this page</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

Maximum score 12 points

### Task 2  Using books, retelling stories

<table>
<thead>
<tr>
<th>No</th>
<th>Question</th>
<th>PS</th>
<th>AS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Who is in the story? (one character 1 - 2+ score 2)</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>How does the story begin? brief description score 1 more detailed score 2</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>What happens in the story? brief description score 1 more detailed score 2</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>How does the story end? brief description score 1 more detailed score 2</td>
<td>2</td>
<td></td>
</tr>
</tbody>
</table>

Maximum score 8 points

Part 2 Book Knowledge  Possible score 20  Child's score
### Task 1: Identifying and knowing about writing

<table>
<thead>
<tr>
<th>No</th>
<th>Question</th>
<th>PS</th>
<th>AS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Tester writes in front of the child</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Do you know what I am doing?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Do you know what writing is for?</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>Show the 5 cards: (D1,2,3,4,5) Which one of these is writing?</td>
<td></td>
<td>1</td>
</tr>
</tbody>
</table>

Maximum score 3 points

### Task 2: Writing

Child does a sample of writing. Score after the child has left the room as follows:

<table>
<thead>
<tr>
<th>PS</th>
<th>AS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Making any line of marks</td>
<td>1</td>
</tr>
<tr>
<td>Making letter like marks</td>
<td>1</td>
</tr>
<tr>
<td>Writing conventional letters</td>
<td>1</td>
</tr>
<tr>
<td>Writing left to right</td>
<td>1</td>
</tr>
<tr>
<td>Writing from top to bottom</td>
<td>1</td>
</tr>
</tbody>
</table>

Score

Ask the child to write his or her name. Score as follows:

<table>
<thead>
<tr>
<th>PS</th>
<th>AS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name correctly written</td>
<td>1</td>
</tr>
<tr>
<td>PLUS beginning name with capital letter</td>
<td>1</td>
</tr>
</tbody>
</table>

Maximum score 7 points

### Task 3: Writing words

<table>
<thead>
<tr>
<th>PS</th>
<th>AS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 word written (spelled) correctly apart from own name</td>
<td>OR 1</td>
</tr>
<tr>
<td>2 - 4 words written (spelled) correctly</td>
<td>OR 2</td>
</tr>
<tr>
<td>5 words written (spelled correctly)</td>
<td>3</td>
</tr>
</tbody>
</table>

Maximum score 3
Score sheet - Part 3 Task 4 *Write all the letters you know*

a b c d e f g h i j
k l m n o p q r s t
u v w x y z

A B C D E F G H I J
K L M N O P Q R S T
U V W X Y Z

Total number of letters written

Score (see scale below)

Name _______________________________
Date _______________________________

<table>
<thead>
<tr>
<th>Letters written</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 - 5</td>
<td>1 point</td>
</tr>
<tr>
<td>6 - 10</td>
<td>2 points</td>
</tr>
<tr>
<td>11 - 15</td>
<td>3 points</td>
</tr>
<tr>
<td>16 - 25</td>
<td>4 points</td>
</tr>
<tr>
<td>26 - 32</td>
<td>5 points</td>
</tr>
<tr>
<td>33 - 44</td>
<td>6 points</td>
</tr>
<tr>
<td>45 - 52</td>
<td>7 points</td>
</tr>
</tbody>
</table>

332
**Task 4 Writing letters**

<table>
<thead>
<tr>
<th>Number of letters written</th>
<th>PS</th>
<th>AS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 - 5</td>
<td>OR</td>
<td>1</td>
</tr>
<tr>
<td>6 - 10</td>
<td>OR</td>
<td>2</td>
</tr>
<tr>
<td>11 - 15</td>
<td>OR</td>
<td>3</td>
</tr>
<tr>
<td>16 - 25</td>
<td>OR</td>
<td>4</td>
</tr>
<tr>
<td>26 - 32</td>
<td>OR</td>
<td>5</td>
</tr>
<tr>
<td>33 - 44</td>
<td>OR</td>
<td>6</td>
</tr>
<tr>
<td>45 - 52</td>
<td></td>
<td>7</td>
</tr>
<tr>
<td>Maximum score</td>
<td></td>
<td>7</td>
</tr>
</tbody>
</table>
EARLY LITERACY DEVELOPMENT PROFILE SCORE SHEET SUMMARY

<table>
<thead>
<tr>
<th>Part</th>
<th>Focus</th>
<th>PS</th>
<th>AS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Environmental Print</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Task 1 Identifying print in the outdoor environment</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Task 2 Identifying words and logos</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Task 3 Decontextualised print</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Book Knowledge</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Task 1 Knowing about books</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Task 2 Using books - retelling stories</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Early Writing</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Task 1 Identifying and knowing about writing</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Task 2 Writing</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Task 3 Writing words</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Task 4 Writing letters</td>
<td>7</td>
<td></td>
</tr>
</tbody>
</table>

**Total score for Profile** 60

REMEMBER TO ATTACH THE WRITING SAMPLE TO THE SCORE SHEET

Testers' Comments

Note briefly any points which were of particular mention in the administration on this occasion e.g. anything you did which may have influenced the outcomes, any interruptions, the child refusing to continue and subsequent abandonment of the Profile etc.

Time taken to administer the Profile .......minutes. This includes completing the score sheet when the child has left.

Tester........................................ School...................................

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Chapter 14

Reflection, Evaluation of Outcomes and Issues for Further Research

This chapter will (A) reflect on and discuss the main issues and questions of the thesis, (B) evaluate the outcomes and (C) conclude with issues for further research.

A. Reflection

The thesis has focused on the measurement of early literacy development in the years three to five, specifically in relation to children's knowledge of environmental print, books and writing. The intention of the study was to clarify a gap in the research and identify the need for new knowledge which would contribute to the measurement of early literacy development.

Review of approaches to early literacy measurement

Having reviewed approaches to measuring literacy during the 1970s, 1980s and 1990s a multiplicity of purposes was identified and a basis for the development of a new measure was put forward.

A basis for development of a new measure

Following the development of four versions of the Early Literacy Development Profile it is appropriate to ask whether the new measure has the characteristics intended for it. The characteristics put forward in chapter 1 (page 28) can now be stated as questions:

1. Is the Profile suitable for research involving comparisons (between groups of children, ages and experiences?)
2. Is the Profile appropriate for use with children in the 3-5 year age range?
3. Does the Profile cover aspects of literacy shown to be important by key strands of recent research: environmental print; books and early writing?
4. Does the Profile have the potential for repeated use with children at different points in the 3-5 age range?
5. Does the Profile have a scoring system which would allow some statistical analysis and comparison with results of other measures?
The extent to which each of these characteristics is fulfilled in the new measure will be considered in Section B of this chapter, following this reflection on other outcomes of the thesis.

**Purposes of early literacy assessment**

Discussion of the purposes of assessing early literacy development centred on five main questions:

1. Who assesses early literacy development?
2. Who is concerned with the assessment results?
3. Why should early literacy development be assessed?
4. Which purposes are served by existing instruments?
5. Which purposes might be better fulfilled?

Three main purposes for assessment were identified: teaching; research; and policy. It was suggested that, for teaching, practitioners had sufficient variety of measures at their disposal. The analysis of purposes of literacy assessment identified a key problem which influenced the direction of the thesis from this point, that is a need for a new measure of early literacy development which was appropriate, holistic and relevant over time and useful for specific research purposes.

**Six main research questions**

From the identified problem stated above, the six main research questions were identified:

1. How is early literacy development currently assessed?
2. What is the focus of teachers’ early literacy assessment?
3. What are teachers’ purposes for assessing early literacy development?
4. What are teacher's needs in terms of assessment of early literacy development?
5. How can researchers better assess early literacy development? **This was the major question of the thesis**
6. Can early literacy development assessment instruments be developed for researchers also be useful to teachers?

These questions focused on two of the three main purposes of assessment: teaching and research. The third purpose for measuring early literacy assessment, policy, was commented on in the thesis but not pursued because policy makers are more interested
in the outcomes of measurement than the measures themselves. The study has been conducted at a time of increasing government interest in assessment and central influence in assessment processes as well as outcomes. However, it was shown in chapter 3, that consultation documents (SCAA 1996), still focus on two purposes:
i) teaching and learning and ii) the 'value added' by a school (research and accountability) and this view appears to be endorsed by consultation (SCAA 1997).

Questions 1,2,3 and 4 formed a cluster which was investigated by an interview survey of literacy assessment practice in 30 schools. The survey indicated that there was strong agreement between teachers on the need to assess early literacy development, with the impact of one particular research study being high. The survey also pointed to the need for assessment measures that could help in combating adverse and unrepresentative media and Government reports of children's early literacy abilities. The schools surveyed used a range of assessment practices and procedures and there was a variety of measures commercially available. The survey pointed to a gap between current research in early literacy development and measurement instruments and confirmed my earlier argument that the development of measures for some research purposes, not teachers, were behind in the field as far as measurement of early literacy is concerned. The path for the thesis was then clear. There was a need to develop an instrument to assess early literacy development that would enable brief measures of children's emergent and developmental literacy in a way which would support research involving comparisons between groups of children, methods and age spans. Such an instrument could narrow the gap between research and practice in this areas of early literacy research.

My response to the fifth - and principal - research question was the development of a new measure, focusing on three strands of early literacy: environmental print, book knowledge and writing. From a basis of current knowledge of early literacy
development, I developed a version, trialled it and refined it three times until I was satisfied that what had been developed was a measurement instrument that could be used in specific research studies involving statistical comparisons. I involved 15 teachers in four schools in the trial of Version 2 of the instrument (with 71 children in the three to five age range). Analysis of teachers' views and the children's performances resulted in further changes which were then used to develop Version 3. This was trialled with a small sample of 16 children with the aim of checking the effect of new changes. Three new but minor changes were made to Version 3 and development of the measure was considered adequate with Version 4 of the Early Literacy Development Profile.

In the process of investigating the major question of the thesis I also considered question 6, the usefulness of the Early Literacy Development Profile to teachers. Teachers involved in the trial of Version 2 reported that though the instrument was devised for research purposes, the format and content would yield interesting and useful information for them. They reported that such an instrument could be useful to them for teaching purposes, as well as those involved in research in the field. This is encouraging as it suggests that the measure is in tune with current teaching philosophy and literacy practices. It does not alter my conviction, stated earlier, that the best forms of assessment for teaching and learning involve teachers in a range of informal assessment strategies to build up a profile of their literacy that would include observing children, reflecting on their work, talking with their parents. It means, however, that a further means of measuring literacy can be available to teachers who want to add a quickly administered individual summative assessment to their ongoing more formative assessment processes.
B. Evaluation of Outcomes

The thesis has a number of outcomes, specifically: a review of the literature; a delineation of purposes and a new measure of early literacy development.

1. A Review of the literature

The review of three decades of research in Chapter 2 is more than a springboard for this study. It summarises the state of knowledge in the field of early literacy assessment. The chronological perspective on early literacy assessment provides a basis on which future work can be developed and pinpoints trends in the development and use of early literacy assessment in research and teaching.

2. Delineation of Purposes

Chapter 1 highlighted the multiplicity of possible purposes for assessment and introduced a measure of defining the main purposes of literacy assessment instruments across the span of education from birth to adulthood, (figure 1.1, page 26).

Chapter 3 considered three main purposes of literacy assessment: teaching, research and policy. This contributes to a debate that lies beyond the focus of this thesis. Assessment must have clear purposes and chapter 3 offers a way of considering measurement instruments in the light of the purpose for which they are intended. Clarity of purpose enables a clearer perspective on assessment issues. For example, in 1996 a Government Consultation on Baseline Assessment asked for responses about the purpose of baseline assessment (SCAA, 1996). Once it is clear that instruments for teaching and learning serve different purposes than those which are used to consider school or teacher accountability, the desirability of various instruments must be differently appraised.
3. The Early Literacy Development Profile

The major outcome of this study is a new measure of early literacy development - the Early Literacy Development Profile. The evaluation of this major outcome of the thesis can be based around four questions:

a. *In what ways does the Early Literacy Development Profile reflect its basis for development?*

b. *To what extent is the Early Literacy Development Profile useful for the purposes for which it was designed?*

c. *What factors might researchers consider in selecting an instrument to measure early literacy?*

d. *How does the Early Literacy Development Profile meet the identified factors for selection of an instrument?*

**a. In what ways does the Early Literacy Development Profile reflect its basis for development?**

This evaluation question can be considered by returning to the questions which arise from the basis for development. The characteristics which formed the basis for development (page 28) restated as questions (page 335) can now be used to evaluate the extent to which the new measure fulfils the desirable characteristics. Each characteristic will be considered in turn.

**i. Is the measure suitable for research involving comparisons (between groups of children, ages and experiences?)**

The Profile has been shown to differentiate between age bands of children with younger children generally scoring lower on the scale than children in the upper age band. Scores on each of the three subscales and the total score increase with each age band. The measure is therefore suitable for research involving comparisons (between groups of children, ages and experiences).

**ii. Is the measure appropriate for use with children in the 3-5 year age range?**

For all ages within the age range studied, all children's achievement is registered on the scoring scale. No 'floor' or 'ceiling' effects were identified in the final trial. In addition,
children in the trials responded positively to the tasks presented to them. The measure is therefore suitable for use with children in the 3-5 year age range.

iii. Does the measure cover aspects of literacy shown to be important by key strands of recent research: environmental print; books and early writing?

Three trials have been used to develop this new instrument which measures aspects of children's knowledge and abilities with environmental print, books and early writing. The three parts can be used independently or as a whole. The measure therefore covers aspects of literacy shown to be important by key strands of research: environmental print; books and early writing.

iv. Does the measure have the potential for repeated use with children at different points in the 3-5 age range?

There is no reason why the measure should not be used on more than one occasion. It would appear to be useful for research that seeks to measure children's improvement in literacy over time. The measure therefore has the potential for repeated use within the 3-5 year age range.

v. Does the measure have a scoring system which would allow some statistical analysis and comparison with results of other measures?

The measure has three subscales: environmental print, books knowledge and early writing. Each is scored on a 20 point scale. Together the three sub scales provide a measure of three strands of literacy on a 60 point scale. The measure therefore has a scoring system which would allow some statistical analysis and comparison with results of other measures.

Having considered the way in which the Early Literacy Development Profile reflects the five characteristics which formed its basis for development, the characteristics of the Profile can summarised as follows:
Chapter 14  Reflection, Outcomes and Issues for Further Research

Figure 14.1  Summary of the characteristics of the Early Literacy Development Profile which formed its basis for development.

<table>
<thead>
<tr>
<th>Instrument</th>
<th>Sets tasks in meaningful context</th>
<th>Covers knowledge of environmental print</th>
<th>Covers knowledge of books</th>
<th>Covers early writing</th>
<th>Can be repeated</th>
<th>Has a scoring system</th>
<th>Suitable for research involving comparisons</th>
</tr>
</thead>
<tbody>
<tr>
<td>Early Literacy Development Profile</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

The summary in figure 14.1 indicates that the Early Literacy Development Profile fulfils the characteristics which comprised the basis for development of the new measure. The next step in this evaluation is to explore fitness for purpose of the new Profile.

b. To what extent is the Early Literacy Development Profile useful for the purposes for which it was designed?

Figure 1.1 (page 26) showed that the Profile was to be developed for purposes of comparisons (between groups of children, methods and age spans). As has already been demonstrated, the Early Literacy Development Profile reflects its basis for development (pp340-342), and can therefore be considered useful for the purposes for which the instrument was designed. Further research involving i) comparative studies with the Profile and other measures and ii) the use of the Profile - alongside other measures - in research involving comparisons, could provide a fuller response to this question. Such research remains outside the scope of this thesis.

c. what factors might researchers consider in selecting an instrument to measure early literacy?

If the new instrument is to be used in research studies it may be helpful to consider the factors which researchers might bear in mind when selecting a measurement instrument. Some research has justified the use of measures in terms of availability, popularity or the fact that they are standardised, (Riley 1996). Such justifications are
hardly adequate and researchers may wish to consider further factors in selecting instruments for use in their research. The checklist in figure 14.2 arises out of this thesis and considers a range of factors which can be used to clarify needs. Individual measures can be considered using the checklist, which offers the opportunity for researchers to consider the attributes they require in a measure and then consider whether the measure they have examined is likely to be satisfactory for their purpose. Some blank rows remain at the bottom of the checklist so that additional factors can be added if researchers using the checklist wish to consider additional features.

**Figure 14.2** A possible checklist for selection of an instrument to measure early literacy development.

<table>
<thead>
<tr>
<th>Factors to consider in selecting measures of early literacy for research</th>
<th>Necessary feature</th>
<th>Unnecessary feature</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reflects recent research in early literacy development</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sets tasks in meaningful contexts</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Administered over a long period of time in familiar setting</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Administered in a short time on an individual basis</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Administered in a small group in a short period of time</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Involves children in a set of interactive tasks with the tester</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Involves children working through a test booklet</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Covers environmental print</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Uses environmental print, not stylised drawings</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Covers knowledge of books</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Uses children's literature, not stylised drawings of books or test books</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Covers early writing, asks children to write</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Covers aspects of oral language</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Covers age range 3-5 years</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Emphasis on literacy sub skills</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Some sub skills included, but little emphasis</td>
<td></td>
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<tr>
<td>Includes a continuum of relevant tasks</td>
<td></td>
<td></td>
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<tr>
<td>Can be repeated without danger of children becoming 'practised' in the tasks.</td>
<td></td>
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<tr>
<td>Reflects expected developmental trends (i.e. older children tend to score more highly than younger children)</td>
<td></td>
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<tr>
<td>Is criterion referenced</td>
<td></td>
<td></td>
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<tr>
<td>Is norm-referenced and standardised</td>
<td></td>
<td></td>
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</tbody>
</table>
**Chapter 14 Reflection, Outcomes and Issues for Further Research**

*d. How does the Early Literacy Development Profile meet the identified factors for selection of an instrument?*

The checklist for selection of an instrument to measure early literacy development (Figure 14.2), can be used to identify which factors were present and adequate for the purpose in the Early Literacy Development Profile. Figure 14.3 shows which of the features researchers might require are present in the Early Literacy Development Profile.

**Figure 14.3 Factors in the checklist for selection of an instrument to measure early literacy development which are features of the Early Literacy Development Profile.**

<table>
<thead>
<tr>
<th>Factors to consider in selecting measures of early literacy for research</th>
<th>Present/adequate for the purpose</th>
<th>Not present/inadequate for chosen purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reflects recent research in early literacy development</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Sets tasks in meaningful contexts</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Administered over a long period of time in familiar setting</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Administered in a short time on an individual basis</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Administered in a small group in a short period of time</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Involves children in a set of interactive tasks with the tester</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Involves children working through a test booklet</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Covers environmental print</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Uses environmental print, not stylised drawings</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Covers knowledge of books</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Uses children's literature, not stylised drawings of books or test books</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Covers early writing, asks children to write</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Covers aspects of oral language</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Covers age range 3-5 years</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Emphasis on literacy subskills</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Some subskills included, but little emphasis</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Includes a continuum of relevant tasks</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Can be repeated without danger of children becoming 'practised' in the tasks.</td>
<td>✓</td>
<td></td>
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<tr>
<td>Reflects expected developmental trends (i.e. older children tend to score more highly than younger children)</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Is criterion referenced</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Is norm-referenced and standardised</td>
<td>✓</td>
<td></td>
</tr>
</tbody>
</table>

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The measure reflects recent research in early literacy development, covering knowledge of environmental print, knowledge of books and early writing of children in the 3-5 year age range. Interactive tasks with meaningful contexts use examples of environmental print and children's literature, (not stylised drawings) and ask children to write. This is a departure from the 'test booklet' of some literacy tests. Some subskills are included as part of a continuum of relevant tasks, but subskills are not emphasised. This is a criterion referenced profile which reflects expected developmental trends. The Profile is quickly administered on an individual basis and the design of the tasks means that there is little chance of the children becoming practised and as a result achieving increased scores.

Depending on the purpose of research, different features from Figure 14.2 will be considered necessary. Figure 14.3 illustrates the features which are present in the Early Literacy Development Profile and shows how the measure meets factors which researchers might wish to apply in selecting instruments with which to measure early literacy development.

Intended for use by researchers, the Profile is also considered to be of use to teachers. It is the major outcome of the study and contributes to new knowledge to the field of early literacy research by providing one way of bridging the gap between research into how literacy develops and ways of measuring that development.

C. Further research

Reflection on the study and its outcomes suggest three lines of further research: (1) further evaluation and development of the Early Literacy Development Profile; (2) a comparison of the Early Literacy Development Profile and LARR test of Emergent
Literacy; and (3) the use of the Early Literacy Development Profile in future longitudinal or intervention studies.

1) Further evaluation and development of Version 4 of the Early Literacy Development Profile

The study ends with the development of Version 4 because there were few changes from Version 3 and because the study has at this point accomplished what it set out to do - that is to develop a measure that could be used by researchers. The measure has not been standardised because the need to do it and the resources needed to do it, lie beyond the scope of this study. Given the age range for which the measure has been developed, criterion referencing is a more preferable approach and the measure can be of use to researchers in its current form.

As definitions of literacy expand and change with the introduction of new technology there may well be a place for adding a fourth part to the Early Literacy Development Profile. Once sufficient research has illuminated understanding of children's learning in new technologies a new part could be developed, which measures children's understanding and skills in literacies that use new technology: word processing, CD ROM and the internet.

There is also the potential to evaluate the usefulness of Version 4 in assessing the literacy development of bilingual children. Development of subsequent versions of the Early Literacy Development Profile may seek ways of assessing children's emerging biliteracy.
There may well be a case for including information texts and well as stories in Part 2
*Book Knowledge*, expanding the assessment of book knowledge to include some items
that measure children's use of books to retrieve information as well as retell stories.

The implication of the relationship of scores for Part 1 *Environmental Print* and Part 2
*Book Knowledge, in combination* being very highly correlated with scores for Part 3
*Writing*, is another path for future investigation. A study of Version 4, with a sample
large enough to explore this apparent connection, could explore how environmental
print and book knowledge *in combination with* book knowledge is related to writing
development.

**(2.) Comparative study with LARR and ELDP**

The study raised questions about the suitability of LARR, suggesting that as there is no
relationship between children's scores on the Early Literacy Development Profile and
their scores on the LARR test of Emergent Literacy. The LARR test may not be
measuring the same thing as the Early Literacy Development Profile. It is necessary to
be guarded in this discussion as the sample of 8 was too small to make claims other
than to point to the need for further research into the relationship between the two
instruments.

**(3.) Using Early Literacy Development Profile as a measure in further
research**

One advantage of the Early Literacy Development Profile might be in its composition,
allowing for the three parts of the Profile to be used separately, or combination. A
study focusing on environmental print might, for example use Part 1 alone, eliminating
the need to measure other aspects of literacy that are not the focus of the study.
Future research could use the Early Literacy Development Profile, or a further version of it, in a longitudinal study of factors that affect literacy attainment, or in preschool intervention studies using control or comparison groups. These are two examples of why the measure was developed and future work would mean that the Profile could make a *contribution* to research in early literacy as well as being an *outcome* of such research.

This study has established that it is possible to measure early literacy development by involving children in literacy tasks. It has advanced the assessment of early literacy, by bringing methods of literacy *measurement* back in step with knowledge of literacy *development* and narrowing the gap between research and practice.
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Appendix 5A

Two interview transcripts from survey of assessment practice
Interview held at NFM School

Date 22.1.92

Person Interviewed nursery teacher

Post nursery

Responsibility nursery

Age range of children in the school 3 - 12 years

Question 1

Do you have any records for early literacy development or bits of reading and writing development? If so, can I see them - take copies?

If not, how do you keep a record of children’s early literacy development - e.g. saving work, tests, teachers notes...

Look at records together if possible and note how the record works and who contributes and when (how often) it is done.

Do you feel this record serves your purposes?

---------------------------------------------------------------------

ANSWER 1

The nursery record is just one sheet of A4, a summary of what children can do. This is passed on into school with examples of children’s work.

In school, the reception teachers put the nursery work into new PRAE folders as they start them off.

---------------------------------------------------------------------

Question 2

Do parents contribute to record keeping of early literacy?

---------------------------------------------------------------------

ANSWER 2

No, they are not involved in recordkeeping. They are involved in other things, they do a lot of fund raising. The record sheet is not shown to parents but the children’s work is shown to them.

---------------------------------------------------------------------
Question 3
Do children play any part in their own assessment? for example, do they make comments about what they like or can do?

ANSWER 3
No, not really, except that we write anything they might say on their pictures, but we don't consciously involve them.

Question 4
Is literacy the only subject-based record you have or are there similar records for other subjects (for this age group)? If so why.... what...

ANSWER 4
No literacy record, no subject based records, except in school they use AT checklists for teacher assessment for the National Curriculum.

Question 5
How do your literacy records fit with National Curriculum and Assessment? Have you developed your current records for literacy since N.C. Assessment?

ANSWER 5
No literacy record, but the general record is not designed with the NC in mind, we drafted this before the NC.

Question 6
What would you say are the main purposes of literacy record-keeping and assessment at this time of children's development?

ANSWER 6
In nursery it is about the experiences the children have, but these are not recorded. We record skills really. Literacy recording in school is all centred around NC recording now.
Question 7

If you could have whatever you wanted in this area of literacy and record keeping - what would you want? What would really help you?

ANSWER 7

More time.

We just record and pass on what school wants to know. But if there was more time we would do more observations of children and pass on other things about them that are important as well.

Question 8

Is there anything else about literacy, assessment and record-keeping which you think is important to note and think about?

ANSWER 8

I'm interested in emergent literacy. We have a lot of children in the early stages of writing, but for the moment we don't record it, it's obvious so we don't really need to write it down.

Follow up needed

My immediate thoughts

---------
Interview held at
Date 27.1.92
Person Interviewed
Post
Responsibility nursery teacher
Age range of children in the school 3 - 12 years

Question 1
Do you have any records for early literacy development or bits of reading and writing development? If so, can I see them - take copies? If not, how do you keep a record of children's early literacy development - e.g. saving work, tests, teachers notes,...

Look at records together if possible and note how the record works and who contributes and when (how often) it is done.
Do you feel this record serves your purposes?

ANSWER 1
We don't have a special record for literacy, we have a single sheet which records skills, pre reading and pre maths like sorting, matching, colours and so on.
In school teachers record according to ATs

Question 2
Do parents contribute to record keeping of early literacy?

ANSWER 2
No, we fill in the sheet and send it in to school. We talk to the parents about any problems. We are thinking about the new LEA record pack. That has bits in for parents to complete, so we might start some involvement in that way.
Appendix 5A Two interview transcripts from survey of assessment practice

Question 3
Do children play any part in their own assessment? For example, do they make comments about what they like or can do?

ANSWER 3
No

Question 4
Is literacy the only subject-based record you have or are there similar records for other subjects (for this age group)? If so, why... what...

ANSWER 4
No literacy record

Question 5
How do your literacy records fit with National Curriculum and Assessment? Have you developed your current records for literacy since N.C. Assessment?

ANSWER 5
Our record is general but it has been in use since before the National Curriculum. It is time to look again and we will probably think about using the LEA pack in the future.

Question 6
What would you say are the main purposes of literacy record-keeping and assessment at this time of children's development?

ANSWER 6
In the nursery, to build up a profile of their development and spot any difficulties early. It's a bit early to look at literacy in detail, but the early skills like matching, 1 to 1, sorting and recognising shapes can be acquired and recorded.
Question 7
If you could have whatever you wanted in this area of literacy and record-keeping, what would you want? What would really help you?

Answer 7
I think more time. I'd like to look at what there is around for record-keeping for under fives, and perhaps use some of that.

Question 8
Is there anything else about literacy, assessment, and record-keeping which you think is important to note and think about?

Answer 8
These children have little experience of books and things like that at home. Early experiences are as important. I'd like to do something to tell parents about these things but there is such a transient population around here. You just get things going and you find that the family has moved.

Follow up needed

My immediate thoughts
Appendix 5B

Samples of records and assessment procedures collected
Appendix 3B

Samples of records and assessment procedures collected

Name

Date of birth

- Feels confident about starting school.
- Feels comfortable with adults.
- Plays alone.
- Plays with other children.
- Aware of self and place in family.
- Knows country of origin.
- Knows own age.
- Can use scissors.
- Can pour.
- Knows own address and telephone number.
- Knows nursery and friends.
- Gets involved with an activity by noticing print in the environment.
- Is interested in stories and pictures.
- Enjoys drawing and pretending to write.
- Can write own name.
<table>
<thead>
<tr>
<th><strong>Appendix 5B</strong></th>
<th><strong>Samples of records and assessment procedures collected</strong></th>
<th><strong>DATE</strong></th>
<th><strong>COMMENTS</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>EARLY DRAWING/WRITING SKILLS</strong></td>
<td></td>
<td></td>
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<tr>
<td>Enjoys using pencils/crayons</td>
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<tr>
<td>Draws simple patterns or shapes</td>
<td></td>
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<tr>
<td>Can draw a simple man</td>
<td></td>
<td></td>
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<tr>
<td>Can recognize own first name</td>
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<td></td>
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<tr>
<td>Can trace over own first name</td>
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<td></td>
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<tr>
<td>Can copy own name</td>
<td></td>
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<tr>
<td>Can write own name</td>
<td></td>
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<tr>
<td><strong>EARLY READING SKILLS</strong></td>
<td></td>
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<tr>
<td>Enjoys listening to a story – individually</td>
<td></td>
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<tr>
<td>– in a group</td>
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<tr>
<td>Chooses to look at books</td>
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<tr>
<td>Requests a story</td>
<td></td>
<td></td>
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<tr>
<td>Knows where front of book starts</td>
<td></td>
<td></td>
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<tr>
<td>Turns pages one at a time</td>
<td></td>
<td></td>
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<tr>
<td>Communicates about own drawings</td>
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<td></td>
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<tr>
<td>Understands print has meaning</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Can match picture/picture</td>
<td></td>
<td></td>
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<tr>
<td><strong>EARLY MATHS/SCIENCE/C.D.T. SKILLS</strong></td>
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<td></td>
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<tr>
<td>Can sort according to – subject</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>– colour</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>– shape</td>
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</table>

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Appendix 6A

Photographs (A) Versions 1 and 2

Street scenes of environmental print
Appendix 6B

Photographs (B) Versions 1 and 2

Ten logos of household products
Appendix 6B

Photographs B - Ten logos - Versions 1 and 2

HEINZ
BAKED BEANS
with tomato sauce
57
varieties

1-2 kg E3 SIZE

original
non-biological

Persil
automatic
Appendix 6c

Photographs (C) Version 1

Three photographs - one of which is writing
Sorry this has taken me longer than expected - then I was dashed to canoe home & pack them for voyage yesterday and I had a puncture - so it was 5 when I moved from the spot! Then still bits to finish off but most in the done-hill-will ring you a weekend. Haven't had hope from Eva & Eel. 374
Tester shows child pictures of city centre street

Tester: What can you see here in these pictures?
Child: McDonalds just there. (pointing)
Tester: McDonalds, that's right. What's that thing you see?
Child: Telephone. (pointing)
Tester: A telephone.
Child: Bus. (pointing)
Tester: And a bus.
Child: A shop. (pointing)
Tester: And a shop, that's right. Can you see some signs Rachel. Can you see some words. (child points) That's a word isn't it, that's a sign. And what are signs for do you think?
Child: Don't know.
Tester: Why do they have signs in shops? Don't know, OK Rachel let's have a look at these. I bet you know some of these things, don't you. Now then, what do you think that is?

Tester shows child small album of photos of household products.

Child: Weetabix
Tester: Weetabix, and where's the word there. Can you see the word in the picture, good, (child points) and what does that word say do you think?
Child: Weetabix
Tester: Weetabix, it does. And what does that say? (next picture)
Child: Coke
Tester: Coke, you're right, and where's the word there Rachel. (child points) And what does the word say?
Child: Don't know?
Tester: What's that?
Child: Crisps.
Tester: Right and where's the word there? (child points) That's it, and what does that word say?
Child: Crisps.
Tester: OK and what's that? (next picture)
Child: Cornflakes
Tester: Cornflakes. And where's the word? Can you see the word, (child points) and what does that word say?
Child: Cornflakes
Tester: Yes you're good aren't you. What's that one? (next picture)
Child: Chocolate

Rachel page 1
Tester: Chocolate. Can you see the word there? *(child points)* That's right. What does that word say do you think Rachel?

Child: Chocolate

Tester: What's that one. *(next picture)*

Child: Chocolate

Tester: Chocolate, that's the word isn't it. Is that what the word says do you think? *(child shakes head)*

**Tester shows the child the next picture.**

Child: Beans

Tester: Beans you know that, where's the words there. *(child points)* What does that word say do you think? *(child shakes head)*

**Tester shows the child the next picture.**

Child: Washing powder.

Tester: Washing powder. Where's the word?

Child: Washing powder for washing.

Tester: Washing. Where's the word, *(child points)* and what does the word say?

Child: Makes bubbles. *(child looks at the next picture)* That's cat food. I got a cat called Muffy.

Tester: You've got a cat called Muffy have you? Where's the word on there? *(points)* And what does that word say Rachel?

Child: Cat food.

**Tester removes photos and moves onto next part of the test: book knowledge.**

*The book is set out on the table next to a teddy and a cup.*

Tester: Now then, can you just past me the book from over there please. *(Rachel passes book to tester)* Do you know what books are for Rachel?

Child: Reading

Tester: They're for reading, that's right. If I give you the book can you show me the front of the book. Which is the front? Which one, *(child points to front cover)* that one, good girl. Now can you open the book and now can you show me just' one page. *(Rachel points to a page)* Good girl. Now then, can you show me, let's have a look at the page here, can you show me the pictures, which are the pictures, show me with your finger?

Child: *(child points to pictures and says)* "That's a teddy, and a girl, and a donkey."

Tester: Very good. Now then can you show me where the words are, can you show me the words? *(child points to words)* Good girl. Now look at those words there and can you show me with your finger just one word. *(child points to one word)* Good girl, that's very good. Rachel I just need to tidy up a bit would you just like to have a look at that book and you can tell me about that story in a minute, OK.
Tester begins to tidy up papers and child starts to talk:

Child: I've got books at my house.
Tester: Have you
Child: My daddy usually gets them.

(1 minute pause)

Tester: Now you've had a look at that book can you tell me who's in the story, what's the story about? Who's in the story?
Child: Scarecrow
Tester: Scarecrow, anybody else?
Child: Pony.
Tester: Pony.
Child: The girl.
Tester: The girl.
Child: And a teddy.
Tester: And a teddy, you're right, they're all in the story aren't they. What happens in this story?
Child: They're talking and they're happy with each other.
Tester: They're talking and they're happy with each other. What happens next?
Child: They have a picnic.
Tester: They have a picnic.
Child: They're lying down.
Tester: They're lying down.
Child: There's a rabbit.
Tester: Rabbit, is it there do you think?
Child: He's a bit worried.
Tester: A bit worried there?
Child: Then they fell to the floor.
Tester: They fell to the floor and then what happened?
Child: He needed that sharp thing to get out.
Tester: You think that sharp thing.
Child: Then he tripped and he fell in and the bird was worried and flew off for help.
Tester: He went to get some help do you think?
Child: And then the doll and pony, they all woke up.
Tester: They all woke up when the birds made that noise. Then what happened?
Child: Went to the bear
Tester: And what did they see down there?
Child: The fence broken.
Tester: And then they saw?
Child: The bear.
Tester: What were they trying to do?
Child: Get him out then they pulled him out and they all went home.

Tester: They all went home. And what happens at the very end Rachel?

Child: They have a drink.

Tester: Very good, that’s lovely. We’ll put the book back there.

**Tester moves onto part 3 of test: Writing**

Tester: Rachel what am I’m doing if I do this? *(Tester writes her name)*

Child: Writing.

Tester: I’m writing that’s right, good girl. Why do people write do you think, what’s writing for?

Child: Because it’s their job.

Tester: It’s their job, right. Do grown ups write? What kind of things do they write?

Child: They draw and write.

Tester: They do yes, right. *(Tester places three cards on table; one shows adult writing; another a child’s drawing; another a picture of dogs.)* If I show you these three Rachel, have a look at that one, have a look at that one and have a look at that one. *(Tester points to each one as she speaks)* Which of those three is some writing? *(child points to writing)* Good girl. Now then, you see this little bear over here can you pass him to me. He wanted to come with me today, he is cuddly isn’t he? Now this little bear isn’t very good at writing. But if he wears these special glasses if keep them on his nose. *(Tester puts glasses on teddy)* Then he can read what children write. Whatever they write, so if I give you this piece of paper and this pencil with teddies on as well, will do you think you could do some writing for me in this space here.

Child: Could write my name.

Tester: Do you want to do some more?

Child: I’m writing a *(undiscipherable)*

Tester: Would you like to just write you name there Rachel so that teddy knows that it’s yours.

Child: Down here?

Tester: Just there.

Child: I’ll write Rachel.

Tester: Right

Child: I think I’ve got this pen wrong.

Tester: I think you’ve done beautifully, that’s a lot of writing. Teddy wants to give you something Rachel. Do you want one of these stickers to put on your dress. Would you like that one? OK, thank you very much.

Rachel page 4

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Appendix 8A

Photographs (C) Version 2
Photographs (D) Versions 3 and 4

Five photographs - one of which is writing
(Note: the same photographs are used in versions 2, 3 and 4 - the labelling has changed.)
Sorry this has taken me longer than expected - then I was dashing to come home and pack them for postage yesterday and I had a puncture - so it was 5 when I moved from the spot! Then still bits to finish off but most is done - will ring you at the weekend. Haven't heard from Eva to fax.
Appendix 9A

Data from independent observers notes of debriefing meeting following trial of version 2, and testers written comments
Appendix 9A Data from debriefing meeting following trial of Version 2

1. Teachers comments during debriefing meeting

The comments of the 18 teachers (including 4 head teachers three of whom did not trial the test themselves) who attended the debriefing meeting were recorded as they discussed the SELA and their experience of using it.

General Comments

Nursery teachers commented

*it kept their interest - they obviously liked the materials*

*It brings together elements from ordinary practice - for collecting work*

*We found that children were far more knowledgeable than we expected.*

*I found that they know far more than their everyday language would have indicated*

*It made me realise what some could do - some children did far better than I expected and a few didn’t do what I knew they could. One child with really good language scored less well than a child who doesn’t speak much at all - that was surprising.*

*It's a good leveller - makes you look at the same things in each child.*

A nursery head teacher, reflecting on the current political climate said

*I think it is useful because it is important to have things set down like this to show what we’re doing.*

and another headteacher said:

*This is the sort of thing we need to show exactly what children of this age can do. Then there is no doubt, no arguing, because we have the scores.*

Time

Nursery teachers commented

*seemed to get quicker*

*it took on average 20 minutes - that's quite long enough*
The purpose of it has a bearing on whether it is too long

It only takes about 20 minutes and it's all done, so it can be fitted in

A Nursery headteacher said:

I can easily make time for staff to do this, finding 20 minutes isn't a problem.
I'd like it to be available to do with all the children.

Refusals

The testers reported that no children actually refused to participate but one child lost concentration for a while. There was a consensus that the children were interested in what they were being asked to do.

Test Instructions

very clear instructions

The Teddy Bear

There was some discussion about the usefulness of the teddy bear who was included in the test materials to encourage children to write and help them to show their full ability. Some nursery teachers said that they felt that the teddy may not be necessary

One child got carried away with the teddy bear and didn't really get into the assessment

but others commented:

Should it be introduced earlier, for earlier items? it might have kept some children going.

There should be a more active role for the teddy! Start by introducing him at the beginning.

Testers then discussed the three parts of the test.

Part 1 Environmental Print

Some commented t
that some children found the succession of products not too easy. One tester commented that a few children did not know the word 'sign' one said:

\[\text{some thought it means 'road sign' others thought it meant signs in shops}\]

Two other points were made

\[\text{one child 'failed' on several logos}\]

\[\text{try putting the logos in a sheet form and just pointing to each}\]

**Part 2 Book Knowledge**

Talking about this section of the test teachers said:

\[\text{the least interesting part of the test was the book - children expected me to do more - to read it}\]

Teachers reported that some children just told the story, others referred to the book, some remembered in a random order they thought that the way in which children told the story could be given more significance, say in the scoring, one commented

\[\text{there are quite a few levels in that}\]

There was some discussion about the choice of book:

\[\text{should it be a book children know well? it would be testing something different - do both? A new book means a foreign situation for children where children are being asked to deal with a new book on their own - contrary to normal practice.}\]

The children are given a minute to look at the book on their own. One teacher queried this

\[\text{is that minute really necessary?}\]

Suggestions were made about the criteria given for choosing the book
say how many pages

have a list of suggested books

say you need to have bright, clear pictures

Part 3 Early Writing

There was a question of validity where a child copies rather than writes their own writing

one child could see the word 'score' and write that word - is that valid?

There was some discussion about the acceptance of letter 'sounds' as well as 'names'. One teacher voiced the opinion of many when she said

I think that not getting a point when you say the sound instead of the letter is a bit harsh

Scoring

The scores for part 1 are divided by 8 in order to balance this part of the test with the other parts. One teacher said

dividing by 8 was a bit hard!

Others commented on the scoring sheet

Totalling up was unclear - this added on administration time

You didn't really need to have the 'possible score' on the final grid
These comments will be borne in mind when the SELA is redrafted following analysis of all data sets from this trial.

2. written comments on sheets completed by testers

Eight out of the 15 testers also gave written comments on the testers comment sheet.

The others felt that they had given their views fully during the debriefing meeting.

Testers were asked to comment upon the test booklet: clarity, layout, format etc.

*Booklet was easy to use*

*easy to work with*

*Good*

*Familiarisation time was 30 minutes*

*OK after reading it through twice and sorting it out - but (I was) very short of time.*

**Specific Comments on items in part 1 Environmental Print**

*Baked beans was mistaken for cat food*

*Washing powder was difficult - do most families use liquid?*

*The 'what is it for' question was generally difficult and children (if they answered had to think hard)*

*'sign' also seemed to be a difficult concept. I was tempted to substitute 'notice' or 'writing' to help out - but didn't*

*Our children did not know too many signs. Probably because they do not go to that part of town. Signs nearer the market area of town may have meant more to our children.*

*Recognising logos was clear and most children recognised the products even though they did not know what the writing said in each case*

*The children were not familiar with the shops. They do not go down to that part of the City*
'Sign' seemed a difficult word for a lot of children. It signified 'signpost' or 'roadsign' to several of them. Others thought they were the notices in shop windows rather than the signs above shops. A number of items in part 1 item 2 (logos) seemed repetitive to some children particularly if they were failing. Several children pointed to the largest word on the picture

Some children found the four 'outdoor' environmental print pictures confusing since they were not isolated pictures. This may have influenced their performance

Logo identification - If the children can't do this very easily they become quite distracted and bored. Perhaps there are too many?

Specific comments on Part 2 - Book Knowledge
When asked 'how does the story begin' 2 of the four children I tested turned to the first page with a picture - the title page instead of telling me

Children found it easy to differentiate text from picture

I felt we chose a book that was too long

book must have nice clear pictures

instructions were fairly clear

Getting the right book is vitally important

The unfamiliar book proved to be excellent for test purposes; the bright colours and pronounced characters seemed to offer a good guide to the story content

Item 9 Show me the letter 'c'. I asked one child and she showed me an 's' I know she knows the sound names for 'c'. Why is this not valid?

Specific comments on part 3 - Writing
Did I ask the children to write their name 'at the bottom'? Can't remember, but it looks as if I might have.

Drawings often done rather than writing

The score sheet
The part where we had to divide by 8 was a little complicated!

rather complicated - especially dividing by 8

took me a while to fill this in

I did not like dividing by 8

Some confusion on the score sheet summary re possible and actual scores I wanted to total the entire list as actual scores!!

Confusing and time consuming. Probably because I felt under pressure about taking 'time out'

Thicker lines for the 'total scores' would be helpful

How helpful/unhelpful was the teddy bear?

For one child (out of four tested) this was a distraction, but in the main the teddy was useful, especially the spectacles, we all tried them on!

I did not need to use it as all the children were willing to write

Very helpful

Helpful for some but not all

The bear was extremely helpful and really offered an incentive to perform well

The teddy bear etc. brought 'life' to the testing. I would have liked to have introduced it much earlier to relieve the monotony that some children found initially

Helpful - it helped to keep children interested.

Yes - very helpful. He particularly motivated one little girl who was flagging after being unable to answer lots of the earlier questions.

Books Used

Ruth McCarthy 1985 Katie and the smallest bear Picture Corgi

Mick Inkpen 1992 Kippers Toybox Hodder and Stoughton

My Old Teddy bear

Anthony Brown 1979 Bear Hunt Hamish Hamilton
General comments

I felt all our children were average. It was hard to classify them and I'm sure we made errors.

I found it very interesting. Children enjoyed doing it and it made them feel quite 'special'.

I very much enjoyed the experience as did the children. It fitted in really well with our own record sheet.
Appendix 11A

Photographs (A) Versions 3 and 4
Appendix 11B

Photographs (B) Versions 3 and 4

Five logos of household products
Appendix 11B  Photographs (B) Five logos Versions 3 & 4
Appendix 11C

Five examples of decontextualised print
Versions 3 and 4
Five examples of decontextualised print - Versions 3 & 4

- Weetabix
- Coca-cola
- Persil
- Walkers
- Fairy