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TRAINING VERSUS NON-TRAINING OF PARENTS AS HOME READING TUTORS

by

Raymond Thomas James Wilks

Being a report of an investigation submitted as a requirement for the degree of Master of Arts in the School of Education at Deakin University

April, 1987
DEAKIN UNIVERSITY

CANDIDATE'S CERTIFICATE

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ABSTRACT

This thesis compared the merits of training parents as home-based reading tutors with simply encouraging parents to regularly hear their child read.

The research was based on: (a) a discussion of the critical issues in parent training and their implications for training parents as reading tutors, (b) an overview of the reading process, and (c) an evaluation of parent involvement in reading programmes.

The central focus of the research was to determine the effects on children's reading - gain scores of home-based parent tutoring under two experimental conditions. Under the first experimental condition, parents were trained as reading tutors using an adaptation of the parent tutoring procedures devised by McNaughton, Glynn and Robinson (1981). Under the second experimental condition parents were simply encouraged to hear their children read regularly each week. The results obtained under these two conditions were compared with those of a control group where parents were given no instruction or encouragement.

The basis of comparison between children in each group included reading age scores, school attitude scores, and general school ability scores. The basis of comparison between parents included biographical and educational data, extent of assistance in reading offered to the child, and measures of parent tutoring skills. Tutoring skills were measured according to attention to errors (total error attention, percentage of delayed attention, percentage of prompts, percentage of tutor's prompts resulting in correction of errors), and attention to proficient reading (praise for self corrections and promoted corrections, praise for other responses such as whole sentences read correctly.
Data were collected from a sample of 42 parent-child pairs. The sample comprised 26 boys and 16 girls with an average age of nine years and seven months.

An analysis of the data revealed three significant findings. First, a statistically significant change was produced in the reading comprehension scores of the children in the trained group. Second, the amount of training provided for parents in the trained group was sufficient to bring about statistically significant changes in all but one of the tutoring behaviours measured. Third, a number of these parent tutoring behaviours correlated at a statistically significant level with reading accuracy and reading comprehension scores.

A number of criticisms of the study were made and some suggestions for future research were discussed.
ACKNOWLEDGEMENTS

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CHAPTER 1

OVERVIEW

The teaching of reading is perhaps the area of the school curriculum in which parents have been most heavily involved. Whilst there are many reported studies where parents have acted as home reading tutors to their children, the majority of these studies are designed primarily to assess the effects of this involvement on the children's reading gains (e.g. Hoskisson, Scherrmann & Smith, 1974). A study by McNaughton, Glynn and Robinson (1981) differs in that it pays attention to how parents are trained to effectively and efficiently carry out the tutoring. To date, however, no study assesses the merits of training. For example, no comparison has been made between the results obtained when parents are trained as reading tutors with those obtained when parents are given no specific training, but merely encouraged to hear their child read (e.g. Hewison & Tizzard, 1980). The purpose of the present research is to compare the effects on children's reading gains (a) when parents are trained as home reading tutors, (b) when parents are not trained as home reading tutors but are encouraged to hear their child read regularly, and (c) when parents receive no training or encouragement to hear their child read.

Before describing this research, three issues pertinent to the investigation will be discussed. The first concerns parent training as it relates to the treatment of children's general behaviour problems. The second concerns the extent and nature of parent involvement in the teaching of reading and the remediation of reading problems. Third, the findings from the above two issues will be related to the training of parents as home reading tutors.

On the basis of the research reviewed, it was predicted that children in a trained parent group would score higher than children in an encouraged parent group on measures of reading change, attitudes to school subjects and school achievement, and that the
children in the encouraged parent group would score higher on each of the measures than children in a control group. Furthermore, it was predicted that parents in the trained parent group would gain higher scores on a tutoring skills checklist in the posttest than in the pretest.

Analysis of the results will be made concerning three issues: (a) description of the total sample, (b) comparability of the three groups, and (c) effect of experimental treatment on the child and the parents samples.

The results will be discussed under four headings: (a) characteristics and comparability of the samples, (b) the effects of the experimental conditions on children's behaviour, (c) the effect of tutor training on parent tutoring behaviour, and (d) the effect of parent tutoring on children's reading.

Finally, a number of criticisms of the study will be made and some suggestions for future research will be discussed.
CHAPTER 2

PARENT TRAINING

Child psychologists, particularly those with a social learning orientation, have successfully used parents to modify a wide variety of childhood problems. These range from behaviour problems such as chronic crying (Patterson, 1971; Wagner, 1968), toileting (Ayllon, Smith, & Rogers, 1970; Azrin & Foxx, 1974), eating problems (Bernal, 1972; Martin & McLaughlin, 1975), non-compliance (Ayllon, Gerber & Pisor, 1975) and phobias (Tahmision & McReynolds, 1971), to educational problems including academic motivation (Ryback & Surwitt, 1970), school work completed (Swinehart, 1973) and reading achievement (Morgan & Lyon, 1979; Tizard, Schofield & Hewison, 1982; Umansky & Umansky, 1975). In all the above studies, parents have been successful in their attempts to produce more useful behaviours in their children.

The reasons for the increased willingness of professionals to involve parents in areas previously considered "sacred" are probably many and varied, ranging from political and economic to common sense. Griffin and Hudson (1978) suggest there are three major reasons for this increase in parent involvement. First, they believe there has been an increased acceptance by both the professionals and paraprofessionals of the importance of the child-parent relationship (Gordon, 1970; Hess, 1971). The co-operation, involvement and training of the other significant people in the child's life, therefore, has a certain degree of merit enabling a more complete approach to the presenting problem. Second, the training of parents in such areas as child management and educational principles may prevent many problems before they start. Third, the shortage of appropriately trained specialist staff has led to the realization that parents can be and should be efficiently and effectively trained in intervention programmes.
Although Griffin and Hudson's (1978) suggestions refer to parent involvement in child behaviour problems, a parallel can be drawn with the reasons for the increased involvement of parents in education. While the role of parents in affecting children's success in academic subjects, particularly reading, is becoming increasingly recognized (Tizard, Schofield & Hawison, 1982) little attention has been given to the question of training parents as home reading tutors. Attention has, however, focused on training parents in the management of behaviour problems. A review of this literature may develop guidelines for the evolution and evaluation of training programmes for parents of remedial readers.

Parent Training Issues

Comprehensive reviews of the parent training literature have been completed by several authors (Berkowitz & Graziano, 1972; Gardner, 1976; Griffin & Hudson, 1978; O'Dell, 1974). Each reviewer identified the same six issues. These include level of training, methods of training, problems of generalization, parent background variables, motivation of parents, and involvement of children. Each of these issues will be briefly discussed.

Level of Training

The first issue concerns the level of skill to which parents need to be trained. A decision about this issue will largely determine the specificity of content, and the complexity of the training programme. Gardner (1976) has identified four possible levels of professional training: the applicator, the technician, the generalist, and the consultant.

The applicator applies specific techniques under very limited conditions to solve a particular problem. The applicator would work under the direct instruction of someone more skilled. The technician applies a wider range of techniques but still under limited conditions and with some supervision. The generalist is trained to apply theory and practice to a wider range of problems working with a minimum of supervision. The consultant is the individual who trains others in the skills required.
Although parents have been successfully trained in behaviour management techniques to the generalist level (Watson & Bassinger, 1974; Schreibman & Koegal, 1975), Griffin and Hudson (1978) claim that this level is difficult to attain. Furthermore, they suggest that it may be more training than is required by most parents to solve everyday childhood problems. They recommend that training to the technician level is sufficient.

**Methods of Training**

Three basic methods of training have been identified: the consultative approach, the educational group, and the controlled learning environment (Walder, Cohen, Breiter, Gaston, Hirsch & Leibowitz, 1969).

The consultative approach involves parents presenting with a specific problem and being instructed to carry out a particular intervention.

The educational group approach is usually conducted over a period of time ranging from four to fifteen weeks and involves two to three hours of class time each week. Class sizes vary from four to twenty people and participants are required to carry out homework tasks. Each individual's progress is monitored by the use of data sheets presented at each session. Open discussion of the various programmes is also conducted with a view to promoting generalization of the skills across different types of behaviours. The educational group is a more economical way of training parents than is the consultative approach. Whereas the consultative approach is primarily appropriate for training to Gardner's applicator level, the educational group approach aims at training parents to a higher level, namely the generalist level.

The controlled learning environment approach involves direct shaping of parent-child interactions by the therapist using a number of techniques, either singly or in combination: role playing (Doherty, 1975; Gardner, 1972; Nay, 1975), modelling (Doherty, 1975; Forehand, Cheney & Yoder, 1974; Nay, 1975), and devices for
signalling and/or feedback when the parent works with the child. These devices may be (a) visual, such as hand signals (Hawkins, Peterson, Schweid & Bijou, 1966) or colored lights (Johnson & Brown, 1969; Wahler, Winkel, Patterson & Morrison, 1965), (b) auditory, such as a "bug-in-the-ear" receiver (Forehand, Cheney, & Yoder, 1974; Krapfl, Bry & Nawas, 1969) or a buzzer (Bernal, 1972), or (c) audio-visual devices such as videotape (Bernal, 1972). The controlled learning environment approach has arisen because some parents do not respond readily to group training and because research has suggested the superiority of more structured individual training methods (Gardner, 1972; Nay, 1975; Panyon & Patterson, 1974).

As Griffin and Hudson (1978) have pointed out, although educational groups usually follow the format as indicated above, some aspects of the controlled learning environment approach are often also included. Thus parent groups may acquire some of their skills through the use of modelling, role-playing and videotape feedback.

Problems of Generalization

The parent training literature addresses two issues regarding generalization of the skills learned in parent training programmes. First, there is the need to measure child behaviour change as a result of parent training, and second, there is the need to measure parent behaviour change. While the first of these issues is of concern to all therapy, the second is peculiar to parent training. For the purposes of this research, both issues are of importance. Three of the considerations to receive research attention refer to the generalization of skills learned in training across time, generalisation across children, and generalisation across behaviours.

Generalization across time. This refers to whether or not the new skills learned will persist after training (often referred to as the maintenance of treatment effect). One major rationale for parent training is that parent-administered therapy is more likely to produce maintenance than professionally administered therapy. This
would be expected since parents have ongoing contact with the child whereas professionals can only affect the child during therapy sessions. The research into this question is, however, equivocal with some studies demonstrating substantial long-term change (Donofrio, 1976; Rinn, Vernon & Wise, 1975) and others reporting minimal long-term change (Ferber, Kealey & Shemberg, 1974; Johnson & Christensen, 1975). The reasons for these inconsistent findings include the failure of some programmes to plan for maintenance, the non-inclusion of follow-up data, and the often infrequent, informal, and indirect nature of post-treatment assessment when it is carried out (Johnson & Katz, 1973). A further complication concerns the inconsistent findings on the validity of parental reports (Cox, 1975; Rapaport & Beroit, 1975).

Generalization across children. This addresses the question, "Will skills learned in relation to one child generalize to other children in the family?" In general, the research evidence suggests that they will, even when this is not initially intended by the parents (Arnold, Levine & Patterson, 1975; Lavigneur, 1975).

Generalization across behaviours. This is said to occur when there is change in a behaviour that was not targeted for treatment. The majority of the research suggests that some level of behavioural generality can effectively be taught to parents (Glowgower & Sloop, 1976; Koegel, Glahn & Nieminen, 1978). The relative efficacy of particular techniques, however, has not been widely researched.

Parent Variables
The major parent variables to receive research attention are socio-economic status, educational level and marital status. While it has been found that better educated middle-class parents tend to respond more effectively to training than do less educated working-class parents, no differences have been found when the training is highly structured (Gardner, 1978).

While marital status has not often been regarded as an important variable in parent training research, the extent of involvement of
both parents has been considered important. Conventional wisdom would suggest that intervention is more likely to be successful if both parents are involved in the training programme. Some evidence indicates this may not necessarily be the case (Martin, 1977). In fact, one study (Reisinger, Frangia & Hoffman, 1976) suggests that the involvement of both parents may not be the critical issue. Their work suggests that it is the presence of marital difficulties, rather than the non-involvement of one of the parents that is associated with a low success rate.

Motivation of Parents

Problems of parental dropout have been of concern for sometime (Mira, 1970) and can be as high as 70 percent (O'Dell, 1974). To overcome these problems some trainers have charged a fee and made reimbursement contingent upon appropriate parenting behaviours (Hirsch & Walder, 1969; Mira, 1970; Patterson, McNeale, Hawkins & Phelps, 1972) while others have relied on the use of social reinforcers (Johnson & Brown, 1969). It has been pointed out that it is important for trainers to remember that they must apply the very same principles to their training that they are trying to teach to the parents (O'Dell, 1974). Most of the studies have relied upon manipulation of consequences to maintain appropriate levels of parent behaviour. Little attention has been given to the need for antecedent stimulus control procedures. The use of specific verbal instructions concerning the requirements of participants (e.g. punctuality, attendance at each session, completion of homework tasks) and the provision of structured handouts for data collection are examples of stimulus control procedures worthy of further investigation.

Involvement of Children

The final issue researched concerns the involvement of children in the treatment process. Although only a few studies can be found where the child actually acted as his/her own therapist within a home setting (Johnson & Katz, 1973; Meichenbaum & Goodman, 1971; Weathers & Liberman, 1975), there are some suggestions that the child could
have a more involved part than is typical at present. Techniques used to involve the child include the keeping of simple records of behaviour (Johnson & Katz, 1973), cognitive mediation techniques (Meichenbaum & Goodman, 1971) and the child's involvement in family contracts (Weathers & Liberman, 1975). While many of the important process variables have been identified in the parent training literature, it may be that the particular research findings will differ according to the purpose of the training programme. For example, the programme required for successful training of parents of non-compliant children may be quite different to a programme for the autistic child or the remedial reader.

Purpose of Training Programme

The research reviewed above is based on programmes that teach parents skills in child management. Very little research has been conducted on programmes that teach parents skills in tutoring children with academic problems - particularly reading problems. The question of whether the same training principles hold true for programmes that teach parents tutoring skills is worthy of investigation.

Before this question can be addressed, it is necessary to describe the reading process itself and the ways in which parents have been involved as tutors in home-based remedial programmes. The former issues will be discussed in Chapter 3 and the latter issue in Chapter 4.
CHAPTER 3

THE READING PROCESS

The high priority given to literacy by Western society has resulted in a great deal of theoretical and applied research. It has been claimed that for every one mathematics' research study published, there are three reading studies (Chall, 1967). In spite of the volume of literature on reading there is still considerable confusion as to what reading is and how reading should be taught.

While a thorough review of the theories of reading is beyond the scope and purpose of the present thesis, it is necessary to briefly review the major theoretical perspectives on reading. It is against the background of these perspectives that the rationale for the tutoring approach used in the research will be formulated.

Major Approaches to Teaching Reading

. Reading researchers have for many years presented their findings as the "new", "natural", "true" and "logical" way of teaching or remediating reading (Chall, 1967). All of these methods, however, have at some time met with considerable criticism, so that today the 'state of the art' is still one of considerable confusion.

Amidst this confusion, two major approaches to reading have appeared in one form or another over the 2,500 year evolution of different approaches to reading (Mathews, 1966). These approaches have been referred to as the "subskills" and the "holistic" approaches (Samuels, 1980). These approaches have invariably appeared under other titles. The subskills approach has been referred to as "phonics", "code-breaking" and "decoding", whilst the holistic approach has been referred to as "look-say", "whole-word", "meaning emphasis" and "language experience".
Subskills approaches. These are based on the premise that reading is not a natural language process and that reading requires specific instruction. In addition, it is believed that reading, being a complex skill, is comprised of subordinate skills that must be mastered and integrated to form higher order skills. Consequently, the emphasis is placed on the early teaching of correspondences between letters and sounds, the learning of which it is claimed, enables the beginning reader to blend together these sounds to form words.

Holistic approaches. These stress the communication aspect of reading and from the beginning of instruction, the emphasis is on deriving meaning from the printed page (Williams, 1979). Regarding the sequencing of instruction, proponents of holistic approaches claim the reading process requires that a multitude of skills be used simultaneously. Any sequence, therefore, will be arbitrary (Goodman, 1976). Further, it is claimed that the teaching of subskills may in fact be detrimental to the acquisition of fluent reading (Goodman, 1976).

Controversy

Controversy has existed for many decades between proponents of these two major approaches to reading instruction. This controversy has been largely concerned with the importance given to decoding skills in the teaching of reading (Chall, 1967). Supporters of holistic approaches claim that many children have reading problems because too much emphasis has been placed on word analysis skills to the detriment of meaning (Cambourne & Rousch, 1980). Decoding supporters, on the other hand, claim that many children taught by holistic methods experience difficulties because of their failure to acquire adequate word attack skills (Weaver, 1978). Almost all methods of teaching reading, however, include some letter-sound learning somewhere in the teaching sequence. The amount and exact placement of this training accounts for the central disagreement between methods (Venezky, 1972). To attempt to answer the questions
of place and amount of phonics in the teaching sequence, one needs to examine the research evidence.

Research Evidence

It appears that the evidence favours instructional programs that include a stronger and earlier emphasis on decoding than programs that place the initial emphasis on reading for meaning. Chall (1987), in her now classic text, extensively reviewed the research on beginning reading instruction. She concluded that code-emphasis programmes produce better results in word recognition, spelling, and comprehension than meaning-emphasis programmes, at least until the end of grade three. Chall also concludes that programmes with earlier, more direct, and more systematic phonics instruction were superior to programmes introducing phonics later and with less emphasis. Chall's conclusions have more recently received some support. In one review that compared instructional methods in reading, synthetic phonics was found to be significantly better than other experimental methods (Pflaum, Walberg, Karelgianes & Rasher, 1980). Other recent reviews have also supported the general finding favouring early code-emphasis programmes (Chall, 1979; Stanovich, 1982; Williams, 1979).

Research studies supporting an early emphasis on meaning and a diminished emphasis on decoding skills are difficult to find. The major argument used by those proposing this approach is based on the assumption that the skills used by the highly skilled reader are those that must be taught to the beginning reader (Cambourne & Rousch, 1980; Goodman, 1967; Smith, 1975).

A recent study by Cambourne and Rousch (1980) demonstrated differences in the amount of use made of phonetic, semantic, and syntactic skills by proficient, average, and low ability readers. One of their findings was that poor readers made more graphophonic errors than did the other groups of readers. In addition, it was found that the proficient readers rely much less on the graphic and phonemic aspects of print and are able to expend much more effort
monitoring the story line and the grammar of the material being read. The authors concluded from these findings that the poor readers are relying too heavily on graphophonetic cues at the expense of semantic and syntactic cues. A far more parsimonious explanation, however, is that the poor readers have problems in the phonic area and so require extra teaching of these skills. This explanation is more consistent with other research findings. Clay (1968), for example, demonstrated that beginner readers rely more heavily on syntactic information than on graphic information. A further claim by Cambourne and Rousch (1980) is that beginning readers should be taught the same skills and in the same proportion as those used by the proficient and experienced reader. Such an assumption is unfounded. The evidence in fact, indicates that phonological coding plays a critical role in helping the child become a skilled reader and provides the beginning readers with a built-in self-teaching mechanism for unfamiliar words (Jorm & Share, 1982).

One of the problems with the many studies showing the superiority of programmes having a phonic component is that these programmes combine two elements: a phonic emphasis, and systematic teaching based on task analysis notions. It is difficult to tell whether either or both of these elements are responsible for the programme's success. Non-phonics programmes, on the other hand, not only lack a phonics emphasis, but they generally also lack systematic teaching.

While the available evidence appears to favour reading instruction that places an early emphasis on developing graphophonetic skills, this is not to underplay the importance of developing the use of semantic and syntactic skills. Guessing from the meaning context, as advocated by Goodman (1967), for example, is also a valuable strategy for working out unfamiliar words. Unfortunately, the reading debate can often appear to present totally opposing views with little in common. However, this debate has predominately concerned itself with the amount and exact placement of graphophonetic training in the teaching sequence. Reading approaches share the
common view that reading involves the use of phonic, semantic, and syntactic skills. The development of all of these skills seems necessary in any method of teaching reading. Programmes that have used parents as reading tutors for children have tended to include the development of each of these cueing systems. Most, however, have combined a phonics emphasis with a systematic teaching programme. This is demonstrated in the following review of home tutoring programmes for parents of remedial readers.
CHAPTER 4

READING PROGRAMMES INVOLVING PARENTS AS TUTORS

The literature pertaining to parental involvement in the reading process centres around three major issues: should parents be involved in their child's reading; amount and type of parent involvement in prereading; and the effectiveness of parent involvement in reading.

Justification of Parental Involvement

The literature addressing this issue is varying directed towards parents, teachers and those in administrative positions in education (see for example, Cramer, 1971; Criscuolo, 1979; Crisp, 1978; Davies, 1970; Freshour, 1972; Nicholson, 1980; O'Rourke, 1979; Quisenberry, Blakemore & Warren, 1977; Wells, 1978). The consensus within the literature clearly supports parental involvement at all levels of a child's reading development.

Parent Involvement in Prereading

At this initial stage in the child's acquisition of reading skills, parents are usually advised to focus on the development of their child's oral language and on the development of an interest in and love of books (Share, Jorm, Maclean, Matthews & Waterman, 1983). In addition, it is recommended that parents encourage listening skills and visual discrimination skills (Baker, 1980; Bilski, 1976; Hubbard & Salt, 1975; Larrick 1975). At this prereading stage, skills are predominantly taught through play situations and informal activities.

Effectiveness of Parent Involvement

This issue concerns the experimental demonstration of effective parental involvement in their child's reading. The studies are based on a variety of theoretical orientations and include programmes ranging from the very simple to the very complex. Unfortunately, many of the reported studies have been conducted using small samples
that make generalization impossible, or at best questionable. It is useful, however, to review some of these studies as they involve a variety of approaches used across a variety of settings. In particular, the following approaches will be reviewed: paired reading; assisted reading; token reinforcement as an adjunct to tutoring; parent involvement in school-based remedial reading programmes; parent involvement in the prevention of reading difficulties; and finally, the efficacy of using untrained parent/tutors.

**Paired reading.** This approach involves the parent reading aloud with the child. The two components of this approach are referred to as simultaneous reading and independent reading.

During simultaneous reading, parent and child read in close synchrony with any adjustment of pace being made by the parent. The purpose of this component is to provide a continuous prompt to the child as the parent presents a model of correct oral reading.

When reading independently, the child reads alone to the parent who provides frequent positive verbal reinforcement for correctly read words or part words. Particular attention is paid throughout this stage to the reinforcement of spontaneously corrected errors and the correct reading of unfamiliar or complex words. When reading simultaneously the child is able to signal (e.g. a tap on the table) to change to independent reading.

A paired reading technique was used by Morgan and Lyon (1979) with four children, three aged 8 years and one aged 11 years, who were identified by their teachers as being in need of additional help with reading. A baseline measure of the parents' tutoring skills indicated that positive reinforcement played a negligible part in helping with reading. Mothers typically listened in silence to their child's correct reading and reacted only to errors. Parents very rarely read to their children during this time. Following baseline measurements parents were trained for a total of 1½ to 2 hours in the
paired reading techniques. The average estimated duration of tuition at home was 16½ hours for each child. At the end of tuition, the group of four children averaged 11.75 months progress in 6.25 months on reading accuracy, and 11.50 months progress in 6.25 months on comprehension (as measured by the Neale (1963) Analysis of Reading Ability Test).

This study, although based on a sample of only four children, suggests that paired reading is a useful technique to improve a child's reading accuracy and comprehension. It is not clear, however, which components of the reading programme (e.g. simultaneous reading, reinforcement, increased practice, independent reading) are the more essential elements.

A study by Bushell, Miller and Robson (1982) utilized a similar approach to that of Morgan and Lyon (1979) with the aim of applying paired reading techniques to a larger group of parents and children. The Bushell et al. (1982) study also attempted to identify some of the essential components in the approach. Three schools were invited to participate in the project. From each school, teachers nominated ten children they regarded as having acute or chronic reading difficulties. Two parent meetings were arranged during which time the 'reading together' and 'independent reading' aspects were taught using role playing and modelling. After these meetings the project proper began and lasted for eight weeks. Parents were advised to read with their child for 20 minutes each night and for six nights each week. The researchers visited the homes fortnightly. During these visits the parent and child were observed in paired-reading. A checklist of the component skills provided a structure for these visits. This record served as a basis for feedback and to highlight specific aspects for extra tuition. The Neale (1963) Analysis of Reading Ability Test was used as the pre- and posttest measure of reading accuracy and comprehension. A parent questionnaire and record of the frequency and duration of reading sessions was also obtained at the conclusion of the project.
Results indicated that over the two months of the project children made almost six months improvement in reading accuracy and over twelve months improvement in reading comprehension. The amount of time parents and children spent in paired-reading was reported to average 12 hours. This study reports that gains in both accuracy and comprehension were not significantly related to the total time spent on paired-reading. The checklist of component skills revealed that the simultaneous reading aspect had been more easily mastered than the independent reading aspect. Other aspects that resisted learning and/or application were those concerned with parent praise for signalling and for short periods of independent reading. Despite this, all children were reported to have made significant gains.

Information obtained from the parent questionnaires indicated that parents regarded all aspects of the training as easy to learn and useful in helping their child learn to read. The child's signalling was seen as the least essential aspect. Parents generally found it most difficult to refrain from "making a fuss" over their child's mistakes. At a six month follow-up, the Neale test was again administered. The data were interpreted as showing that, whereas children from two schools had maintained the gains made during the project, their rate of improvement was considerably less once the programme had ceased. The children from the third school, while maintaining the gains, continued to improve at a rate higher than those from the other two schools. The explanation given for this difference relates to the continued involvement of the school in the project. Additionally, the role played by the parents in helping their children was acknowledged individually on the end of term report cards.

The results reported from these two studies indicate the usefulness of the paired reading technique. It is unfortunate that neither of these studies compared the experimental group with a control group. Until this is done, conclusions remain speculative. A more detailed analysis is also needed to identify the elements which are essential in this approach.
Assisted reading. Other studies have focussed on assisted reading, which is a procedure where the parents supply the words the child does not know. The children read aloud at their natural pace with the parents only giving corrections when required. Any criticism is to be avoided and correct responses should be reinforced.

Hoskisson, Sherman and Smith (1974) used this approach with two children aged nine and seven years. Following an initial group meeting where the parents were instructed in the technique, one of the researchers held individual sessions with each child three times each week. During these sessions the assisted reading programme was carried out to assess the children’s reading rate and to conduct a miscue analysis. Results indicated that after four months of assisted reading, improvements were made by both children in word recognition, vocabulary, and comprehension. It was also reported that the percentage of miscues decreased for both children. As was the case in the paired reading studies it is difficult to know which aspects of the assisted reading technique are effective. The considerable input from the researchers (30 minutes per child, three times per week) makes it difficult to conclude that the improvements in reading were due solely to the involvement of the parents. The gains in fact may have had little to do with the tutoring approach used. It could by that a Rosenthal (1966) effect is operating whereby the expectations of the parents, teachers or children have changed to bring about the improvement. Further, the improvements may be due simply to the effect of showing an increased interest in the children.

A methodological problem exists with studies like those reviewed above, concerning the use of reading age changes in lieu of a control group to demonstrate effectiveness of intervention. These types of designs ignore the regression effect. Jorm (1983) explains that:

one of the consequences of the regression effect is that any group of people who are selected because they get extreme scores on a test will tend to appear more like the average if tested a second time. This effect of regressing towards the average has to do with the imperfect nature of tests used to assess reading
achievement. In the case of poor readers, this means that they will tend to show some improvement if retested a second time, irrespective of whether the events that have intervened between the first and second tests have had any effect on their reading abilities (p.114).

To overcome these problems the use of a control group (which receives no remediation) is necessary.

Token Reinforcement as an Adjunct to Tutoring

This has been used in a number of studies (Koven & LeBow, 1973; Ryback & Staats, 1970). The use of token reinforcement has long been a part of behavioural management of children with conduct disorders and learning problems (Wolf, Giles & Hall, 1968). A number of studies have also demonstrated the usefulness of tokens in programmes involving parents as tutors of remedial readers.

Ryback and Staats (1970) had the parents of four dyslexic children aged from 8 to 13 years use tokens which were then backed up by monetary value. The study used the Staats Motivation-Activating Reading Technique (SMART) (Ryback & Staats, 1970). Reading passages were graded and subjects were required to learn the vocabulary contained in each paragraph prior to reading the whole passage. Comprehension questions followed each passage. The lessons in the SMART programme consisted of four phases: an individual word learning phase; an oral paragraph-reading phase; a short silent reading phase; and a comprehension question phase.

Parents were familiarized with the programme and taught tutoring skills over a four hour period. This was followed by direct supervision by researchers during the first couple of weeks. This supervision was gradually phased out until parents were working independently. Half-hour group meetings were held with the experimenters at the end of the first, third and eighth weeks of the programme to discuss progress. As well as the researchers assessing children's reading progress, parents' tutoring skills were also assessed using a checklist of tutoring behaviours. The checklist evaluated the parents' ability to pause in presenting single word
stimuli before prompting, re-present the missed words, deliver tokens, present paragraphs until the child had them entirely correct, use prompting to direct the child's attention, give positive social reinforcement, and avoid any negative social reinforcement. Results suggest that the SMART programme was effectively used by the parents to improve the reading skills of their children. A further, but related finding, was that parents with minimal educational qualifications were able to successfully administer the programme after only four hours of training.

In another study, Umansky and Umansky (1976) trained the parents of children in behaviour modification principles and a modified version of the SMART programme. The formal training of these parents lasted approximately five hours and was conducted over three sessions. The reinforcement system used in this study consisted of token reinforcers of different values and positive social reinforcement from the parents. The tokens could later be exchanged for money. Statistical analysis revealed a significant improvement in the experimental group's reading age over a two-month period. The control group, on the other hand, exhibited no significant improvement over the same period of time.

In a study by Koven and Le Bow (1973) the SMART reading programme was also used by the mothers of three boys aged 7 to 8 years. In addition, the mothers were taught to systematically administer tokens, redeemable for favoured objects, contingent upon the child's correct reading responses. Results of this study demonstrated a substantial increase in the number of words correctly read by each child. Follow-up data after two months, showed that two of the three children had maintained a substantial proportion of their gains.

Each of the studies reviewed above has incorporated token reinforcement procedures as part of the tutoring programmes. They also report an improvement in reading skills of the experimental subjects. However, there are at least six problems associated with most of the studies that have used tokens in the reading programme.
First, none of the studies included an examination of the relative importance of the token reinforcement component of the tutoring. To determine this, the results of the control group where no token reinforcement component is included needs to be compared with the results of the experimental group where tokens are used.

Second, while it is generally accepted that tokens can have many positive advantages (Ayllon & Azrin, 1968; Bandura, 1969), it has also been claimed that in the area of such a complex cognitive skill as reading, it is not unusual for material reinforcers to have an unpredictable or even deleterious effect (Skinner, 1957; Winfield, 1977) and in some instances may make academic tasks less intrinsically interesting (Lepper & Green, 1978). The studies using token reinforcement as an adjunct to reading tutoring programmes appear to pay little attention to these considerations.

Third, in most cases, the sample sizes used in the studies are so small that they lack external validity, thus preventing generalizations to other populations.

Fourth, adequate follow-up data is rarely collected, or if it is, it is not reported. Consequently it is difficult to see if the gains made in reading during the tutoring programme are maintained.

Fifth, the parents are not randomly selected but are usually highly motivated volunteers, thus raising the question again of generalization of the research findings to other populations.

A sixth point concerns experimental mortality. Data are very rarely provided on the parents who drop out of training. Consequently, the research data that are reported can be misleading. Information concerning reasons for participant drop out could be useful in focussing on important procedural aspects of parent training programmes.
Parent Involvement in School-based Remedial Reading Programmes

Within school-based remedial reading programmes, parents have been used as models for reading in secondary schools (Jennings, 1980), as reading counsellors in primary schools (Brown & Richardson, 1978; Builder, 1980), as assistants in homework reading schemes (Ebbutt & Barber, 1979), and as teaching partners in a remedial reading programme at primary school level (Braille, 1976). Although none of these projects is experimentally based, they at least describe procedures that warrant further empirical investigation.

Parent Involvement in the Prevention of Reading Difficulties

Parent involvement has been seen as a more worthwhile and economical use of parents than parent involvement in remediation of reading difficulties (Dorval, Wallach & Wallach, 1978; Wallach & Wallach, 1976). These studies have set out to train parents and other non-professionals to teach children to read. These programmes differ from those already described in that they aim at preventing reading failure rather than remediating reading problems after they have occurred. In one study, adults from the local community were trained to give individual tutoring to children who were considered likely to be slow at learning to read (Wallach & Wallach, 1976). Children were selected on the basis of low scores on reading readiness tests which assessed knowledge of letters and sentences. The adults, who did not have any previous training or experience as teachers, were given three weeks of training in the reading programme. The basic principles behind the programme were (a) proceed in small, carefully arranged steps, and (b) make sure the child mastered each step before proceeding to the next one.

All children entering first grade in two inner-city Chicago schools were given reading readiness tests. Those with low scores were randomly assigned to either a treatment or a control group. The treatment group was given extra individual tutoring from the trained community tutors, while the control group received only the standard classroom reading instruction. At the end of the school year, the two groups were compared on a number of reading tests and it was
found that the treatment group had made significantly greater progress in reading. This study was later replicated with similar results being obtained (Dorvel, Wallach & Wallach, 1978).

While the programme appears to be a very useful way for parents to assist their children in the initial stages of reading, no long-term follow-up study has been carried out to determine whether or not the gains made initially have resulted in any relative advantage for those children.

It should be noted that all of the studies reviewed here have assumed that it is necessary to offer some form of training to parents to produce an improvement in children's reading ability.

The Efficacy of Using Untrained Parent Tutors

This has been investigated in a recent series of studies (Hewisson & Tizzard, 1980; Tizard, Schofield & Hewisson, 1982), which have demonstrated that children's reading can be improved by parents who have had no training as reading tutors, and in some cases, by parents who themselves were unable to read.

The first of the studies (Hewisson & Tizzard, 1980) examined the relationship between a number of home background factors and reading ability of working-class children aged between 7 and 8 years. The home background factors included parents' attitudes to children's play and discipline, the sharing of activities and conversation, reading to the child, hearing the child read, child's leisure time activities, school attended, and aspects of the mother's language. The home background factor that emerged as most strongly related to reading achievement was whether or not the mother regularly heard the child read (Share, Jorm, Maclean, Matthews & Waterman, 1983). No attempt was made in this study to find out whether the amount of time the parents listened to their child's reading was related to the reading attainment score. However, this relationship was explored in a later study (Hewisson & Tizzard, 1980). Using a closed interview schedule, the amount of help parents gave their child was classified into one of the following five categories: (a) regular help in the
junior grades; (b) occasional help in the junior grades; (c) regular help in the infant grades; (d) occasional help in the infant grades; and (e) no help at any time. The data from the 104 subjects revealed that the relationship between amount of help given and reading gains was highly significant. The researchers concluded that reading attainment scores vary in a stepwise fashion with the amount of parental assistance given in reading.

A later study (Tizzard, Schofield, & Hewisson, 1982), which was based on the earlier investigations, set out to determine if there was a causal relationship between active parental help and reading performance. The main task of the researchers was to establish an arrangement whereby all children in certain experimental classes read to parents at home. The effectiveness of this treatment was then measured against three groups: (a) control children within the schools where intervention was to take place; (b) control children within the schools where no intervention was to take place; and (c) control children who were given extra reading tuition by a qualified teacher in the schools rather than by parents at home. By providing one group of children with extra practice given in school, it was planned to obtain information about the relative importance of two possible process factors: first, parental help, which may aid reading performance simply because it represented extra time spent on the learning task; and second, improvement in reading, which might follow primarily from the increased motivation of children whose parents became involved in their reading.

The results of this study directed the researchers to a number of conclusions: (a) it is possible to involve nearly all parents in formal educational activities with children; (b) children who receive parental help are significantly better in reading achievement than comparable children who do not; (c) both parents and teachers expressed great satisfaction in being involved in a joint project; (d) small group instruction in reading, given by a highly competent specialist teacher did not produce improvements in attainment comparable in magnitude with those obtained from the collaboration
with parents; (e) collaboration between teachers and parents is effective for children of all initial levels of performance, including those who at the beginning of the study were failing to learn to read; and (f) the fact that some parents could not read English (or in a few cases couldn't read at all) did not prevent improvement in the reading skills of their children or detract from the willingness of the parents to collaborate with the school.

Summary and Conclusions

The review of reading programmes involving parents as tutors demonstrates that parents can perform a useful function in assisting their children to become more competent readers. In particular, collaboration between parents and the school appears to be superior to approaches where parents and schools work in isolation.

The training of parents to carry out tutoring programmes varies across studies with regard to the amount and type of training provided. Those studies that apply parent training principles to the training of parents as reading tutors are reviewed in Chapter 5.
CHAPTER 5

THE APPLICATION OF PARENT TRAINING PRINCIPLES TO TRAINING PARENTS AS READING TUTORS

A number of studies have attempted to apply the findings from the parent training literature to the training of parents and others as home reading tutors (Biddulph & Tuck, 1983; Elliott & Tyson, 1982; Love & VanBiervliet, 1984; McGovern, 1983; McNaughton, Glynn & Robinson, 1981; O'Connor, 1984; Pickens, 1984; Ritchie, 1984; Scott & Ballard, 1983; Weldall & Metten, 1985; Whitby, 1984). Each of these studies uses the parent tutoring techniques described by McNaughton, Glynn and Robinson (1981). The present research uses a variation of these techniques.

In this chapter, five aspects related to the application of parent training principles to the training of parents as reading tutors are discussed: first, the McNaughton et al. (1981) tutoring techniques; second, extensions of the McNaughton et al. (1981) study; third, related studies; fourth, limitations of the available research and fifth, the research focus of the current project.

McNaughton, Glynn and Robinson's Parent Tutoring Techniques

Consistent with the reading literature, McNaughton et al. (1981) regard proficient reading as the effective use of syntactic, semantic, and graphic clues along with an ability to use self-regulatory skills. These skills incorporate the ability to check what is read and solve errors (self-correcting). The abilities enable the child to shift towards independence in monitoring and correcting errors. The purpose of the parent training is to assist children to become independent readers. Training parents to achieve this is based on the parent training literature which suggests that effective training programmes include (a) some knowledge of the theory behind the techniques, (b) instruction, (c) demonstrations,
(d) feedback from the trainer, and (e) monitoring and personal feedback by the parents themselves (Graziano, 1977; O'Dell, 1974).

The design of the particular tutoring procedures was based on three fundamental learning principles. First, behaviour can be changed or influenced by altering the stimulus conditions or environmental context in which it occurs (Krantz & Risley, 1978). The general aspects of learning environments and learning tasks which can be manipulated to enhance or restrict academic learning have been referred to as "setting events" (McNaughton, 1980). In the case of learning to read, the setting events are (a) opportunity to read meaningful and interesting books so that children will be given enough opportunities in which they can learn to read, (b) appropriateness of books with regard to difficulty level, and (c) the need for individualized instruction.

Second, children are motivated by the consequences of their behaviour. With regard to reading, tutors need to use praise to encourage their child's progress in accuracy, efficiency, flexibility, and the use of self-corrections.

Third, children can extract information from the consequences of the mistakes they make (McNaughton & Delquadri, 1976). When children are learning to read, the feedback that comes from making mistakes can carry important information. In giving this feedback, two factors have been shown to be important: (a) timing (McNaughton & Glynn, 1981), and (b) content of feedback (McNaughton, 1979).

These principles were incorporated into the tutoring procedures taught to the parents in the McNaughton et al. (1981) study. These are summarized in Figure 1.
Figure 1: Home Tutoring Procedures Used by McNaughton et al. (1981)
(reproduced from Parents as Remedial Reading Tutors, p.32)

The subjects in the McNaughton et al. (1981) study comprised eight tutoring pairs consisting of a mother and her child. The eight children were aged between 8 and 12 years and had reading ages below 6.5 years as measured on the Weale (1963) Reading Ability Test. The training of the parent tutors was undertaken individually by the researchers in the parents' home. Following initial training, parents received instruction and feedback twice a week over the twelve week project. In addition, they were encouraged to hear their child read for ten minutes a further three times per week.
A number of pre- and post-treatment measures were taken. First, measures of the parents' tutoring behaviour were obtained: (a) tutor attention to errors (total error attention, percentage of delayed attention, percentage of prompts, percentage of tutor's prompts that resulted in the reader successfully correcting the error); (b) tutor attention to proficient reading (praise for self corrections and prompted corrections, and praise for other responses, for example, whole sentences read correctly. Second, three measures of child behaviour were taken: (a) a measure of the accuracy of oral reading in terms of the percentage of words correctly read in each session; (b) a measure of self-corrected errors; and (c) a measure of the number of book levels through which children progressed (a 90 percent reading accuracy criterion was used). Both the parent and the child measures were taken from tapes of home reading sessions. In addition to these measures, the Neale (1963) Analysis of Reading Ability was administered as a pre- and post-treatment measure of reading accuracy. Follow-up data were collected twelve months after the tutoring programme.

The reported results indicated substantial gains in parent tutoring skills and in children's reading levels following training. Parents increased their delayed responses to errors from 5.9 percent before training to 50 percent after training, and increased their attention to errors with prompts from a pre-test measure of 28 percent to 69.7 percent following training. The number of praise statements also increased from 1.5 to 12.2 per reading sessions.

The measures taken of the children's behaviour showed similar increases. During untrained tutoring, children moved through 0.9 book levels per two months, while after trained tutoring they averaged 3.1 book levels per two months. Word accuracy increased from 84.0 percent to 87.3 percent and the percentage of self-corrected errors increased from 15.0 percent to 34.5 percent.

Follow-up data, twelve months after the programme indicated that on average, children made 12 months gain in reading age (as measured by the Neale Analysis of Reading Accuracy test). Unfortunately no
data were collected to indicate the persistence of tutoring behaviours beyond the training phase.

A related focus of the McNaughton et al. study (1981) was the generalization of reading gains made in the home to those made in the school. Results showed that only two of the eight children in the study showed similar reading gains in school as they did in the home. By way of explanation, the researchers suggest that in order to achieve gains in school, instructional and motivational support in the regular classroom may be necessary.

Extension of the McNaughton et al. Study

A study by Scott and Ballard (1983), using the above tutoring procedures addressed two issues from the McNaughton et al. (1981) study: first, "Do tutoring behaviours persist beyond training?"; and second, "What is the effect on children's reading both in the home and school setting when a co-operative home-school approach is used?" The mothers and teachers of four 11 year old students were trained using the McNaughton et al. (1981) tutoring procedures of delaying attention to child reading errors, providing prompts to help correct errors, and praising specific reading strategies. The period of tutor training varied between five and seven weeks and was followed by a three to five week maintenance period. A multiple baseline design across subjects was used to evaluate the effects of tutor training in both home and school settings.

The results demonstrated maintenance, and in some cases further increase of tutoring behaviours following a three month follow-up. Pre- and post-assessment of children's reading gains was determined from two standardized reading tests: Dunedin Teachers' College Informal Prose Inventory (1972) and the Analytic Reading Inventory (Woods & Moe, 1977). Results indicated a mean increase in reading age of 28 months. Reading gains were also estimated from the reading age levels of the graded books read at the start and completion of the study. On this measure, the mean reading age increase at home was 36 months, and at school 30 months. This later result lends
support to the suggestion (McNaughton et al., 1981) that in order to have reading gains generalize to the school setting, instructional and motivational support needs to be included in the school setting.

However, as Scott and Ballard (1983) point out, the absence of a control group demands caution in attributing the reading gains to the tutoring procedure. Of note also, is the fact that the reading gains reported in this study are considerably greater than those reported in other research where the same tutoring procedures are used (see for example, Glynn, 1980; Glynn, McNaughton, Robinson & Quinn, 1980). As the researchers explain, this difference may be accounted for by the fact that the children received twice as much reading and tutoring than they would if only one tutor had worked with each child (Scott & Ballard, 1983).

Review of Related Studies

Since the original study by McNaughton, Glynn and Robinson (1981), further small-scale intra-subject studies and inter-group comparison studies have been reported by independent investigators (Biddulph & Tuck, 1983; Elliottson, 1982; Glynn, 1980; Love & Van Biervliet, 1984; McGovern, 1983; O'Connor, 1984; Pickens, 1984; Ritchie, 1984; Weldall & Mettem, 1985; Whitby, 1984). These studies have been comprehensively reviewed and their findings integrated by Glynn and McNaughton (1985). The results from these studies indicate consistently that the tutoring procedures can be effective in producing major gains in children's reading. Reported gains ranged from 1.5 to 2.0 months in reading age per month of tutoring to 10.0 to 11.0 months gain in reading age per month of tutoring. With regard to the tutors, the studies provided evidence that tutors increased their use of specific praise for children's independent reading and that correct implementation of the tutoring procedures was maintained for several months without the presence of trainers. Similarly, the maintenance of children's reading gains generalized outside of the training sessions.
Limitations of the Available Research

While the studies reviewed clearly demonstrate the efficacy of these tutoring procedures, the amount of time required by both the parents and trainers may be prohibitive in a regular school environment. Where parents were trained individually by a trainer, the estimated time involved was 6 to 9 hours per tutor per parent (Glynn & McNaughton, 1985). Where training was conducted entirely in group settings (O'Connor, 1984; Pickens, 1984; Weldon & Mettem, 1985; Whitby, 1984) tutoring time ranged from 6 to 10 hours per group of 10 parents. Due to the general shortage of qualified tutor trainers, such an investment of time may not be viable in a school setting. In an attempt to make the time spent teaching the tutoring skills more viable in the regular school environment, the present research employed group training for four hours (two sessions of two hours) per 14 parents. Tutors' skills were assessed by analysis of audio-tapes before training and again at the end of the tutoring programme. The efficacy of this reduction in trainer time is one aspect of the present research.

The Research Focus of the Current Study

The studies reviewed above have been grouped into three categories. First, those studies that pay minimal attention to how the parents are trained to apply the tutoring techniques. These studies provide limited and often unstructured parent training that is unrelated to findings from the parent training literature. They are characterized by poor research design and methodological problems. Second, those studies that offer no parent training in remedial techniques. In these studies parents are simply encouraged to listen to their children read usually for 10 minutes, three or four times each week. Third, those studies that combine the findings from both the parent training and the reading literature to develop tutoring procedures and to train parents.

Studies from each category report the successful use of parents in increasing their child's reading skills. This claim raises the important research question that is investigated in the present
study, "Is improvement in children's reading greater when parents are trained in tutoring skills, than when parents are simply encouraged to hear their child read regularly?"

The answer to this question has important practical implications for those professionals involved in the remediation of reading problems. It may be unnecessary to spend valuable time and money training parents as reading tutors when similar results can be obtained by simply encouraging parents to regularly hear their child read. To date no studies can be found that address this issue.

The present research will compare three groups of children and their parents under three experimental conditions. The bases of comparison between children will include (a) reading gain scores, (b) school attitude scores, and (c) general school ability scores. Children will be randomly assigned to one of three experimental conditions: trained tutoring, encouraged reading, and a control group. The trained tutor group will consist of children whose parents have received specific tutor training. The encouraged reading group will consist of children whose parents have been encouraged to hear their child read regularly. The control group will consist of children of parents who have not had any instruction from the researcher.

The study will employ a variation of the tutoring procedures devised by McNaughton et al. (1981). While the content of training is similar, the method of training used will differ. The differences have been introduced in the face of practical constraints existing in regular school environments. The major constraints concern the limited time available for staff members to train and provide feedback to parents, and the limited number of staff qualified or trained to provide this parent training to the level suggested by McNaughton et al. (1981).

To accommodate this reality five changes were made to the original training method: (a) group training is used in preference to individual training, (b) instruction is provided over four weeks
for one hour per week in preference to continued weekly training and/or feedback throughout the entire programme, (c) one trainer will provide training for all parents in preference to one trainer for each parent, (d) no feedback information will be provided after the initial four training sessions compared with weekly feedback throughout the programme, and (e) tapes of reading sessions will be collected and analysed prior to, and following the study, in preference to weekly tape analysis.

These changes represent a substantial reduction in trainer-parent contact time, but more closely approximates what is possible in a regular school environment. The extent to which these variations may have impacted upon the results obtained will be discussed in Chapter 8.
CHAPTER 6

METHOD

This chapter outlines the research design used in the study and describes the sample, the experimental treatments, the child measures and parent measures.

Design

This research employs a pretest-posttest control group design (Campbell & Stanley, 1963) to compare children's reading gains under three experimental conditions: trained tutoring, encouraged reading, and wait control conditions. It also compared parent tutoring skills before and after experimental treatment.

Sample

The sample consisted of 42 parent-child pairs. The child subjects were selected from a large non-government primary school situated in the northern suburbs of Melbourne. The subjects in the research comprised 42 grade four children who had been identified by their teachers as being either average or below average readers. One of the parents of each child was included in the parent sample.

Child Sample

The sample of 42 children contained 26 boys and 16 girls. The ages of the children ranged from eight years and ten months to ten years and ten months with a mean age of nine years and seven months.

Parent Sample

In all instances, the mother was the parent taking responsibility for their child's reading. Three of the mothers were single parents. The majority of mothers were between 31 to 35 years of age and were engaged in home duties. Two mothers had professional
qualifications, 39 had post-primary school qualifications and one had primary school qualifications. Before the program began, 41 parents regularly heard their child read two to three times each week for an average of 15 minutes each time.

**Experimental Treatments**

The parents were randomly allocated to one of three groups. One group was a Wait Control group who were offered training after the completion of the current research. The two experimental groups were designated the Trained Tutoring group and the Encouraged Reading group. Immediately following training and encouragement, experimental conditions continued for 12 weeks after which post-test data were collected. Follow-up data were collected three months after the 12 week treatment phase.

**The Trained Tutoring Group**

This group of parents met once a week for one hour for four weeks. In the first session parents were given information about the skills involved in reading (meaning, grammar, and phonetic clues), ways to introduce a book to their child, and ways of encouraging good reading habits. In addition they were taught how to arrange a time and place for reading at home. This aspect focused upon the need to keep reading sessions short (approximately 10-15 minutes) and frequent (3-4 times each week); select an appropriate time of day that is free from possible distractions; sit beside rather than opposite the child; make the time spent together 'special'; and praise the child for helping.

In the second session parents were taught how to select a book of appropriate difficulty. Specifically, parents were shown how to determine the difficulty level of a book by counting off fifty words, recording the errors, then applying the three formulae: (a) if there are more than ten errors the book is too difficult; (b) if there are fewer than four errors the book is too easy, if there are between four and ten errors, the book is suitable for learning to read.
In the third session the tutoring procedure as described by Glynn, McNaughton, Robinson, and Quinn (1979) was explained and practised. Parents were taught what to do when (a) children read correctly, and (b) when children made errors.

In the fourth session information and practice was provided, focussing on praising the child, and giving positive assistance when the child made an error. During each session printed notes and homework activities were given out. These were reviewed at the following session.

The Encouraged Reading Group

This group met once a week for one hour for two weeks. The content and method of presentation was exactly the same as for sessions one and two of the trained tutoring group.

Measures

In view of the need expressed in the literature for multiple outcome criteria (Atkeson & Forehand, 1978; Forehand, Griest & Wells, 1979) a number of assessments were made of both the child and the parent sample. Assessments made of the child sample were (a) reading gain scores, (b) measures of attitudes towards reading, mathematics, science and social studies, and (c) a measure of general school achievement. Assessments made of the parent sample included a questionnaire and a tutoring skills checklist. A description of these instruments and a rationale for their selection is given for the child sample and then for the parent sample.

Assessment of Child Sample

Assessment of reading gains. Reading involves the use of three cueing systems: contextual, syntactic and graphophonetic (see Chapter 3). Any assessment of reading, therefore, requires information about each of these cueing systems. While a number of reading tests purport to measure each of these systems (e.g. Woodcock Reading Mastery Tests, (Woodcock, 1973); Edwards Reading Tests, (Edwards, 1981), the instrument selected for this research was the Neale (1963)
Analysis of Reading Ability Test. This Test was chosen for five reasons. First, an assessment of the child's use of semantic, syntactic and phonic skills can be made. Second, three equivalent forms are available, allowing for pre-, post, and follow-up assessments. Third, a direct comparison can be made with other studies using the same home tutoring approach (e.g. Glynn, 1980; McGovern, 1983; Weldall & Mattam, 1985). Fourth, statistical features are satisfactory (Yule, 1967). Fifth, the test is simple to administer and takes a relatively short time to complete.

The test consists of six passages of prose forming a continuous reading scale for children aged from 6 to 12 years. The passages have been graded according to vocabulary difficulty, complexity of sentence structure and the length of the passages. There are eight comprehension questions for each passage, except in the case of the first passage, where there are only four questions. In addition to these passages, three separate tests are provided: Test 1 assesses recognition of letters and sounds; Test 2 is a short test of simple spelling; and Test 3 examines blending and recognition of syllables. Correlational data between the three forms of the test is reported in the manual (1963) to be .99 for accuracy and .96 for comprehension. Reliability was determined by the method of parallel form correlation and produced results in the vicinity of .95. Similarly, a validity coefficient of .95 was obtained using the pooling square method.

An additional feature of the Neale Test is the provision of normative data for reading accuracy, comprehension, and rate of reading. It is this final feature, reading ages, that is used as the means of comparison of reading gains for the children in the sample.

Assessment of school attitudes. The inclusion of an assessment of school attitudes is an attempt to meet the need expressed in the literature (Atkeson & Forehand, 1978; Forehand, Crist & Wells, 1979) for multiple outcome criteria. School attitude assessment is based on the premise that attitudes influence learning and that attitudes toward reading are crucial in learning to read (Epstein, 1980). The
most commonly used methods for assessing attitudes can be classified under three headings: self-report, observations, and projective techniques.

Self-report measures represent the most direct and frequently used attitude measure (Edwards & Porter, 1972; Henerson, Morris, & Fitz-Gibbon, 1978; Summers, 1970). Self-report methods include attitude scales (Shaw & Wright, 1967), and questionnaires (Henerson, Morris, & Fitz-Gibbon, 1978; Selltiz, Jahoda, Deutsch & Cook, 1959). Although a popular method of measuring attitudes, all self-report techniques have limitations. For example, there is a tendency for an individual to give answers that are socially acceptable, that present an ideal image, or that impress the investigator (Epstein, 1980). Additionally, there is the question of the ability of poor readers to understand and respond to statements contained in some written self-report instruments (Epstein, 1980). In an attempt to overcome these difficulties observation rating scales have been used.

When using observation rating scales, observers check behaviours against a series of statements descriptive of the attitude being investigated. After observers complete the ratings, their scores are compared and a measure of inter-rater reliability can be obtained. As with self-report methods, observation rating scales also have their shortcomings. These include the possibility of biased reporting, the need for trained observers, the time taken to conduct a number of observations at different times of the day, and the effect that the presence of the observer can have on the subject's behaviour (Gronlund, 1976; Henerson, Morris & Fitz-Gibbon, 1978).

Unlike self-report and observational recording techniques which present subjects with structured stimuli, the projective technique makes use of ambiguous or unstructured stimuli usually in the form of drawings, pictures, and incomplete sentences (Epstein, 1980). Three major problems are associated with this technique: first, they are not suitable for large scale assessment; second, they require time
and expertise in administering and scoring; and third, they rely heavily on a relatively subjective interpretation of results (Lemon, 1973; Anastasi, 1976).

The instrument selected in the present research was the Survey of School Attitudes (Hogan, 1975) which is a self-report, group administered measure. In addition to assessing attitudes towards reading, this instrument also assesses attitudes towards mathematics, science, and social studies. The inclusion of these other curriculum areas is important in terms of the generalizability of changes in reading attitudes to other subjects. As Athey (1976) states:

it seems logical to suppose that when a child finds reading a pleasurable experience, his/her positive attitude will rapidly become generalized to other school subjects (p. 366).

The Survey of School Attitudes (SSA) (Hogan, 1975) requires children to indicate whether they like, dislike, or are indifferent towards a number of specific classroom activities in each of the four school subjects assessed. The fifteen items in each scale are distributed throughout the test booklet to avoid the development of a response set. Two parallel forms of the Survey (Forms A and B) are available allowing for pre- and post-test measures. Statistical data, at an acceptable level, are provided for reliability and validity. In addition to the above features, the SSA meets the criterion of employability (Epstein, 1980). This criterion includes practical matters such as ease of administration, time factors, ease of scoring, clarity of instructions, and layout of items.

**Assessment of school achievement.** The literature (Rutter & Yule, 1975; Yule, 1973) highlights the need for consideration of a child's general level of achievement in relation to reading difficulties. Rutter and Yule (1975) distinguish between 'reading backwardness' and 'reading retardation'. Reading backward children are well below average intelligence, whereas reading retarded children have a mean I.Q. which is similar to that of the general population. Evidence provided by Yule (1973) indicates that while the prognosis for any reading disability is poor, reading retarded
children have a poorer prognosis than reading backward children. A measure of children's general level of achievement has merit in the present research since the sample contains children from each of these categories.

The most frequently used tests of general ability are the Stanford-Binet Intelligence Scale (Terman & Merrill, 1960) and the Wechsler Intelligence Scale for Children (Wechsler, 1974). Although these tests are generally considered to be the best measures of general ability (Sattler, 1983), they are individually administered and very time consuming. Because of these factors, an alternative was needed for the present research. The Otis-Lennon School Ability Test (Otis & Lennon, 1982) was selected for the following features. First, reliability and validity measures are statistically satisfactory. Second, the test can be administered to a group of children in a relatively short time. Third, two parallel forms of the test are available for pre- and posttest comparisons.

Because of the grade level of the children in the sample, the Elementary form of the Otis-Lennon test was used. Tests at this level comprise several types of verbal and non-verbal items intended to sample a wide variety of mental processes. Item content samples verbal, figural, and quantitative reasoning, and verbal comprehension ability. Normative data is provided for performance by age and by grade. Age performance norms were used in this study and reported as age percentiles.

Socio-economic status. The father's paid work was used to determine the family S.E.S. level. Daniel's (1983) seven point scale was used for categorization, where a rating of one is the highest ranking.
Assessment of Parent Sample

Parent questionnaire. A short questionnaire was developed by the researcher and distributed prior to the commencement of the study to all parents in the sample. The questionnaire collected information related to (a) age of parents, (b) occupations, (c) highest educational qualifications, (d) age and sex of children in the family, and (e) extent and nature of parent involvement in their child's reading (see Appendix A).

Tutoring skills. A tape recording of a typical reading session was obtained from all parents prior to the commencement of the research. At the conclusion of the training phase, tapes were collected from the trained tutor group. The parents tutoring skills were assessed from these tapes by two independent scorers who were blind to the experimental conditions. The scorers were trained by the researcher until an inter-scorer agreement of 99% was achieved. A checklist was devised by the researcher to record the parents' attention to their child's errors, and to their child's proficient reading (Appendix B).

Parent attention to errors was assessed using three measures: first, the percentage of attention to errors that was provided either immediately the error was made, or after a delay of five seconds; second, the percentage of prompts given (these prompts were either meaning, context, or graphic clues); and third, a measure of how often the parents prompt resulted in the child successfully correcting the error.

Parent attention to proficient reading was assessed using three measures. First, a tally was made of the number of times the parent praised their child's self-corrections. Second, a tally was made of the number of times the parent praised the child for using a prompt to correct an error. Third, a tally was made each time the parent praised behaviour other than self-corrections or prompted corrections.
Ethics Committee

Permission for the conduct of this research was granted by the Deakin University Ethics Committee. Written parent permission was obtained from parents of all child subjects.

Analysis

All data analyses were completed on the Deakin University DEC-20 computer using SPSSX. Alpha was set at 0.05. Two-tailed tests of significance were used.
CHAPTER 7

RESULTS

The central concern of this investigation is the effect of parent training and encouragement on children's reading, attitudes, and general school achievement, and on parent's tutoring behaviour.

The results will be described under the following three headings as they relate to the child sample and the parent sample: (a) description of the total sample, (b) comparability of the groups, and (c) effects of experimental treatment on the samples.

The Child Sample

Description of the total child sample

The initial nature of the child sample is presented in Table 1 which shows the mean scores, standard deviations, minimum scores, maximum scores and sample size for the background variables, and standardized measures.

The child sample consisted of 42 children from a primary school in a middle class area. The families had one to four children, with an average of 2.5 children. The average age of the child sample was nine years and seven months. Parents listened to their child read on three occasions per week for an average of 19 minutes per session. Seventy-six percent of parents read stories to their children on approximately three occasions.
Table 1  
Initial Nature of the Child Sample

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>S.D.</th>
<th>Min.</th>
<th>Max.</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Background Variables</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age in months</td>
<td>115.5</td>
<td>5.0</td>
<td>106.0</td>
<td>130.0</td>
<td>42</td>
</tr>
<tr>
<td>Standardized Measures</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reading Accuracy (mths)</td>
<td>112.5</td>
<td>14.0</td>
<td>81.0</td>
<td>138.0</td>
<td>42</td>
</tr>
<tr>
<td>Reading Comprehension (mths)</td>
<td>111.3</td>
<td>18.0</td>
<td>81.0</td>
<td>146.0</td>
<td>42</td>
</tr>
<tr>
<td>Attitude to Maths (1 to 5)</td>
<td>3.4</td>
<td>1.1</td>
<td>2.0</td>
<td>5.0</td>
<td>42</td>
</tr>
<tr>
<td>Attitude to Reading (1 to 5)</td>
<td>3.7</td>
<td>0.8</td>
<td>2.0</td>
<td>5.0</td>
<td>42</td>
</tr>
<tr>
<td>Attitude to Soc. Stud. (1 to 5)</td>
<td>3.8</td>
<td>1.0</td>
<td>2.0</td>
<td>5.0</td>
<td>42</td>
</tr>
<tr>
<td>Attitude to Science (1 to 5)</td>
<td>3.5</td>
<td>1.0</td>
<td>2.0</td>
<td>5.0</td>
<td>42</td>
</tr>
<tr>
<td>School Achievement (Age % tile Rank)</td>
<td>25.1</td>
<td>19.4</td>
<td>1.0</td>
<td>71.0</td>
<td>42</td>
</tr>
</tbody>
</table>

The initial standardized reading measures indicated that as a group, the children had an average reading accuracy score which was three months below their chronological age and an average reading comprehension score which was four months below their chronological age. While these deficits are within the normal range and hence would not generally warrant remedial assistance being given to the group as a whole, it is important to note that approximately thirty per cent of the children scored twelve months or more below the group mean for reading accuracy and comprehension. These children would normally be regarded by their teachers as being in need of some form of remedial assistance.

The mean attitude score obtained across the four curriculum areas was at level 3. The Survey of School Attitudes (Hogan, 1975) manual describes level 3 scores as resulting from pupils expressing interest in about one-third of the items, dislike for one-third of the items, and indifference to the remainder of the items. Therefore the students have neither strongly positive nor strongly negative attitudes to any of these curriculum areas.
The school achievement level of the sample was equal to, or better than 25.1 percent of pupils of equivalent age. This represents a general achievement level somewhat below average.

Comparability of Groups

The initial comparability of the trained, encouraged and wait control groups was established by comparing the children’s ages and their scores on each of the standardized tests using one-way analyses of variance (see Table 2).

Table 2
Mean scores of the trained, encouraged and wait control groups on each of the initial measures

<table>
<thead>
<tr>
<th>Measure</th>
<th>Trained</th>
<th>Encouraged</th>
<th>Control</th>
<th>F (2,39)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age (in months)</td>
<td>114.7</td>
<td>115.6</td>
<td>116.1</td>
<td>0.29</td>
</tr>
<tr>
<td>Otis Lennon (Age percentiles)</td>
<td>21.7</td>
<td>22.1</td>
<td>31.5</td>
<td>1.16</td>
</tr>
<tr>
<td>Reading Accuracy Age (months)</td>
<td>110.1</td>
<td>109.9</td>
<td>117.5</td>
<td>1.24</td>
</tr>
<tr>
<td>Reading Comprehension Age (months)</td>
<td>105.3</td>
<td>110.2</td>
<td>118.5</td>
<td>2.02</td>
</tr>
<tr>
<td>SSA Mathematics (1-5 level scores)</td>
<td>3.4</td>
<td>3.1</td>
<td>3.7</td>
<td>1.31</td>
</tr>
<tr>
<td>SSA Reading (1-5 level scores)</td>
<td>3.6</td>
<td>3.6</td>
<td>3.8</td>
<td>0.28</td>
</tr>
<tr>
<td>SSA Social Studies (1-5 level scores)</td>
<td>3.9</td>
<td>3.6</td>
<td>4.0</td>
<td>0.71</td>
</tr>
<tr>
<td>SSA Science (1-5 level scores)</td>
<td>3.6</td>
<td>3.1</td>
<td>3.7</td>
<td>1.67</td>
</tr>
</tbody>
</table>

There were no significant differences between the three groups for chronological age, general school ability, reading accuracy age, reading comprehension age or school attitudes to mathematics, reading, social studies, or science.
Chi-square analyses were used to test for the equivalence of the trained, encouraged, and control groups on each of a number of background variables: distribution across school grade ($X^2(6)=4.82$, n.s.), sex ($X^2(2)=1.41$, n.s.), amount of mother's paid work ($X^2(8)=15.12$, n.s.), mother's highest educational qualifications ($X^2(4)=6.15$, n.s.), amount of father's paid work ($X^2(10)=14.27$, n.s.), and father's highest educational qualifications ($X^2(6)=6.95$, n.s.). Further analyses focused on two relevant family reading experiences: first, whether parents read stories to their child ($X^2(2)=1.83$, n.s.), and second, whether parents regularly heard their child read ($X^2(2)=2.05$, n.s.). There were no significant differences between the three groups on any of these measures.

Therefore, it was concluded that, at the commencement of the study, the three groups were comparable on all of these measures.

Effects of Experimental Treatments

To assess the impact of parental training and encouragement on children's reading, attitudes, and school achievement, change scores were computed comparing (a) pre-test and post-test scores on each measure, (b) post-test and follow-up test scores for reading measures and (c) pre-test and follow-up test scores for reading measures. The mean change scores for the trained, encouraged and control groups are presented in Table 3. Differences between the groups were tested using one-way analyses of variance. Where the differences were significant, post hoc Neuman-Keuls tests were used to determine which groups were in fact different.
Table 3
Mean change scores for trained, encouraged and control groups

<table>
<thead>
<tr>
<th>Measure</th>
<th>Trained</th>
<th>Encouraged</th>
<th>Control</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(2,39)</td>
</tr>
<tr>
<td>Pre-test/Post-test Comparison</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reading Accuracy</td>
<td>-7.9</td>
<td>-3.6</td>
<td>-6.7</td>
<td>0.36</td>
</tr>
<tr>
<td>Reading Comprehension</td>
<td>-3.0</td>
<td>-3.9</td>
<td>-7.7</td>
<td>0.39</td>
</tr>
<tr>
<td>SSA Mathematics</td>
<td>0.6</td>
<td>0.1</td>
<td>0.1</td>
<td>1.33</td>
</tr>
<tr>
<td>SSA Reading</td>
<td>0.4</td>
<td>0.1</td>
<td>0.2</td>
<td>0.65</td>
</tr>
<tr>
<td>SSA Social Studies</td>
<td>0.6</td>
<td>0.8</td>
<td>0.3</td>
<td>0.74</td>
</tr>
<tr>
<td>SSA Science</td>
<td>0.2</td>
<td>0.3</td>
<td>0.0</td>
<td>0.24</td>
</tr>
<tr>
<td>Otis-Lennon</td>
<td>13.3</td>
<td>8.4</td>
<td>10.4</td>
<td>0.31</td>
</tr>
<tr>
<td>Post-test/Follow-up Test Comparison</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reading Accuracy</td>
<td>7.7</td>
<td>5.4</td>
<td>5.4</td>
<td>0.25</td>
</tr>
<tr>
<td>Reading Comprehension</td>
<td>15.0</td>
<td>4.5</td>
<td>1.5</td>
<td>6.56**</td>
</tr>
<tr>
<td>Pre-test/Follow-up Test Comparison</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reading Accuracy</td>
<td>9.1</td>
<td>6.4</td>
<td>2.9</td>
<td>0.29</td>
</tr>
<tr>
<td>Reading Comprehension</td>
<td>13.0</td>
<td>0.6</td>
<td>-6.2</td>
<td>9.61***</td>
</tr>
</tbody>
</table>

**p < 0.01   ***p < 0.001

These results indicate that there were no statistically significant differences between pre- and post-test scores on any of the dependent measures. While the mean attitude and achievement change scores for each group showed a positive change, the same cannot be said for the reading change scores. In each instance, post-test scores were lower than pre-test scores suggesting a decline in reading skills over the experimental phase. This outcome is discussed in Chapter 8.

When a comparison of post-test and follow-up scores was made for reading accuracy and comprehension, gains in a positive direction were observed. While there was no statistically significant difference between groups on reading accuracy, the mean change scores for reading comprehension did indicate a statistically significant
between-group difference. The Neuman-Keuls test indicates that this significant difference can be attributed to the difference between the trained group and the other two groups. There was no significant difference between the encouraged group and the control group.

A comparison of pre-test and follow-up test means revealed no statistically significant differences in reading accuracy scores. There was however a statistically significant difference in reading comprehension scores.

The Parent Sample

Description of the Total Parent Sample

The initial nature of the parent sample is detailed in Table 4 which shows the mean scores, standard deviations, minimum scores, maximum scores and sample size for the background variables and the tutoring behaviour variables.

In all instances, it was the mother who played the dominant role in tutoring their child. The average age of the parent sample was between 31 and 35 years with the mothers being slightly younger than the fathers. Of the 47.5% of mothers who worked, most were involved in full-time day or full-time shift work. The mean highest academic qualifications of the mothers was obtained at high school level.

An audio-tape analysis of a typical reading session was made prior to the commencement of the research to determine parents' current tutoring styles. An interpretation of the data suggests that parents tutoring behaviours were characterized by immediate attention to errors by providing a word prompt. No praise was provided when the child self-corrected or corrected after a prompt. Only occasionally did parents provide meaning, context, or phonics prompts.
Table 4
Initial Nature of the Parent Sample

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>S.D.</th>
<th>Min</th>
<th>Max</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Background Variables</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>S.E.S. level (1 to 7)</td>
<td>4.5</td>
<td>1.6</td>
<td>1.0</td>
<td>7.0</td>
<td>42</td>
</tr>
<tr>
<td>Mother's Age (1-5)</td>
<td>3.2</td>
<td>0.7</td>
<td>2.0</td>
<td>5.0</td>
<td>42</td>
</tr>
<tr>
<td>Father's Age (1-5)</td>
<td>3.9</td>
<td>0.9</td>
<td>1.0</td>
<td>5.0</td>
<td>42</td>
</tr>
<tr>
<td>Number of Children in family</td>
<td>2.5</td>
<td>0.8</td>
<td>1.0</td>
<td>4.0</td>
<td>42</td>
</tr>
<tr>
<td>Mother's Qualifications (1-4)</td>
<td>3.0</td>
<td>0.3</td>
<td>2.0</td>
<td>4.0</td>
<td>42</td>
</tr>
<tr>
<td>Mother's Paid Work (1-8)</td>
<td>2.3</td>
<td>1.6</td>
<td>1.0</td>
<td>7.0</td>
<td>42</td>
</tr>
<tr>
<td>Father's Paid Work (1-8)</td>
<td>2.3</td>
<td>0.9</td>
<td>1.0</td>
<td>6.0</td>
<td>42</td>
</tr>
<tr>
<td>Times per week hear rdg.</td>
<td>2.8</td>
<td>1.3</td>
<td>0.0</td>
<td>5.0</td>
<td>42</td>
</tr>
<tr>
<td>Duration hear reading (minutes)</td>
<td>19.0</td>
<td>10.0</td>
<td>0.0</td>
<td>40.0</td>
<td>42</td>
</tr>
<tr>
<td><strong>Tutoring Behaviour Variables</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attention to errors</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Immediate (%)</td>
<td>49.3</td>
<td>48.6</td>
<td>0.0</td>
<td>100.0</td>
<td>42</td>
</tr>
<tr>
<td>Delayed (%)</td>
<td>14.9</td>
<td>33.2</td>
<td>0.0</td>
<td>100.0</td>
<td>42</td>
</tr>
<tr>
<td>Prompt with meaning (%)</td>
<td>1.2</td>
<td>7.7</td>
<td>0.0</td>
<td>50.0</td>
<td>42</td>
</tr>
<tr>
<td>Prompt with content (%)</td>
<td>3.7</td>
<td>11.6</td>
<td>0.0</td>
<td>50.0</td>
<td>42</td>
</tr>
<tr>
<td>Prompt with phonics (%)</td>
<td>2.4</td>
<td>15.4</td>
<td>0.0</td>
<td>100.0</td>
<td>42</td>
</tr>
<tr>
<td>Prompt with word (%)</td>
<td>47.5</td>
<td>47.6</td>
<td>0.0</td>
<td>100.0</td>
<td>42</td>
</tr>
<tr>
<td>Praise Self-Correction (n)</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>42</td>
</tr>
<tr>
<td>Praise after prompt correct (n)</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>42</td>
</tr>
<tr>
<td>Other responses praised (n)</td>
<td>0.5</td>
<td>0.3</td>
<td>0.0</td>
<td>2.0</td>
<td>42</td>
</tr>
</tbody>
</table>

Conclusion

The sample of parents were, at the commencement of the research, already involved in hearing their children read three times per week for up to fifteen minutes per session. Their tutoring behaviours, however, were such that independent reading skills in their children
would be unlikely to develop (McNaughton, Glynn, Robinson, 1981) as they only assisted their children by providing whole word prompts immediately an error was made.

Comparability of Parent Groups

Initial comparability of the parent sample's tutoring techniques was established by comparing the mean percentage scores on attention to errors, prompts with meaning, context or phonetic clues, and prompts with word clues. Comparisons were also made of the number of times parents praised self corrections, corrections after a prompt, or any other response. Differences between the three groups were tested using one-way analysis of variance. These results are presented in Table 5.

Table 5
Mean scores of parent behaviours for the trained, encouraged and control groups

<table>
<thead>
<tr>
<th>Parent Behaviour</th>
<th>Trained</th>
<th>Encouraged</th>
<th>Control</th>
<th>F</th>
<th>df</th>
</tr>
</thead>
<tbody>
<tr>
<td>Immediate (%)</td>
<td>61.1</td>
<td>53.6</td>
<td>33.3</td>
<td>1.24</td>
<td>2 39</td>
</tr>
<tr>
<td>Delayed (%)</td>
<td>31.8</td>
<td>3.6</td>
<td>9.5</td>
<td>3.10</td>
<td></td>
</tr>
<tr>
<td>Prompt with Meaning (%)</td>
<td>0.0</td>
<td>3.5</td>
<td>0.0</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>Prompt with Context (%)</td>
<td>3.2</td>
<td>7.9</td>
<td>0.0</td>
<td>1.66</td>
<td></td>
</tr>
<tr>
<td>Prompt with Phonics (%)</td>
<td>0.0</td>
<td>0.0</td>
<td>7.1</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>Prompt with Word (%)</td>
<td>61.1</td>
<td>45.7</td>
<td>35.7</td>
<td>1.01</td>
<td></td>
</tr>
<tr>
<td>Praise Self-Correction (N)</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Praise after prompt correct (N)</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Other responses praised (N)</td>
<td>0.0</td>
<td>0.0</td>
<td>0.1</td>
<td>1.00</td>
<td></td>
</tr>
</tbody>
</table>
There were no statistically significant differences between the three groups on any of the dependent measures. Therefore, it was concluded that, at the beginning of the study, the three groups were comparable on each of these measures.

**Effects of Experimental Treatment on the Trained Parent Group**

The effectiveness of the parent training procedures were assessed by comparing the pre-test and the post-test scores on each of the measures of parent behaviours for the parents in the trained group. These mean scores and the associated t values are presented in Table 6.

<table>
<thead>
<tr>
<th>Parent Behaviour</th>
<th>Pre-Test</th>
<th>Post-Test</th>
<th>t(13 d.f.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attention to errors</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Immediate (%)</td>
<td>61.1</td>
<td>0.0</td>
<td>4.77***</td>
</tr>
<tr>
<td>Delayed (%)</td>
<td>31.8</td>
<td>78.6</td>
<td>3.56**</td>
</tr>
<tr>
<td>Prompt with meaning (%)</td>
<td>0.0</td>
<td>35.7</td>
<td>2.92**</td>
</tr>
<tr>
<td>Prompt with context (%)</td>
<td>3.2</td>
<td>30.4</td>
<td>2.16*</td>
</tr>
<tr>
<td>Prompt with phonics (%)</td>
<td>0.0</td>
<td>8.9</td>
<td>1.24</td>
</tr>
<tr>
<td>Prompt with word (%)</td>
<td>61.1</td>
<td>3.6</td>
<td>4.46***</td>
</tr>
<tr>
<td>Praise self-correction (N)</td>
<td>0.0</td>
<td>1.3</td>
<td>3.99***</td>
</tr>
<tr>
<td>Praise after prompt correct (N)</td>
<td>0.0</td>
<td>1.2</td>
<td>5.67***</td>
</tr>
<tr>
<td>Other responses praised</td>
<td>0.0</td>
<td>2.5</td>
<td>8.57***</td>
</tr>
</tbody>
</table>

* p < 0.05 ** p < 0.01 *** p < 0.001

As a result of training, statistically significant changes have been produced in all except one of the tutoring behaviours measured (prompt with phonics). Parents have been successfully trained to delay their attention to errors and to respond with other than word
prompts. Additionally they have been trained to praise their child for self-corrections, corrections after a prompt, and for "other" responses.

Effectiveness of Parental Performance on Children's Reading Performance

The impact of parental behaviour on the child's reading accuracy and reading comprehension can be crudely estimated by correlating the scores on the post-test parental reading behaviour measures with the child's post-test scores on reading accuracy and reading comprehension. These relationships were tested using Pearson r correlation coefficients which are presented in Table 7.

Table 7

Correlation of scores on the post-test parental reading behaviour measures with the child's post-test scores on reading accuracy and comprehension (N=14)

<table>
<thead>
<tr>
<th>Parental Measure</th>
<th>Child Measure</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Reading Accuracy</td>
<td>Reading Comprehension</td>
</tr>
<tr>
<td>Attention to Errors</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Immediate</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Delayed</td>
<td>0.63*</td>
<td>0.55*</td>
</tr>
<tr>
<td>Prompt with Meaning</td>
<td>0.33</td>
<td>0.20</td>
</tr>
<tr>
<td>Prompt with Context</td>
<td>0.99***</td>
<td>0.45</td>
</tr>
<tr>
<td>Prompt with Phonics</td>
<td>0.63*</td>
<td>0.54*</td>
</tr>
<tr>
<td>Prompt with Word</td>
<td>0.02</td>
<td>0.22</td>
</tr>
<tr>
<td>Praise Self-Corrections</td>
<td>0.90***</td>
<td>0.56*</td>
</tr>
<tr>
<td>Praise after prompt correct</td>
<td>0.46</td>
<td>0.65***</td>
</tr>
<tr>
<td>Other responses praised</td>
<td>0.29</td>
<td>0.55*</td>
</tr>
</tbody>
</table>

* p < 0.05  ** p < 0.01  *** p < 0.001

*: coefficients could not be computed due to the high proportion of zeros.
The coefficients suggest that a number of post-test parent behaviours are positively correlated with both reading accuracy and reading comprehension. These behaviours are delayed attention to errors, phonic prompts, and praise for self corrections.

Contextual prompting is strongly correlated with reading accuracy while praising corrections made after a prompt and praising "other" reading responses, correlated positively with reading comprehension.

In an attempt to determine the long term effect of parent tutoring on children's reading, correlations of the scores on the post-test parental tutoring behaviour measures with the child's follow-up reading scores was undertaken. These correlations are presented in Table 8.

Table 8

<table>
<thead>
<tr>
<th>Parental Measure</th>
<th>Child Measure</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Reading Accuracy</td>
<td>Reading Comprehension</td>
</tr>
<tr>
<td>Attention to Errors</td>
<td>a</td>
<td>a</td>
<td></td>
</tr>
<tr>
<td>Immediate</td>
<td>0.49</td>
<td>0.20</td>
<td></td>
</tr>
<tr>
<td>Delayed</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prompt with meaning</td>
<td>0.40</td>
<td>0.93***</td>
<td></td>
</tr>
<tr>
<td>Prompt with context</td>
<td>0.60*</td>
<td>0.52*</td>
<td></td>
</tr>
<tr>
<td>Prompt with phonics</td>
<td>0.20</td>
<td>0.08</td>
<td></td>
</tr>
<tr>
<td>Prompt with word</td>
<td>0.12</td>
<td>0.20</td>
<td></td>
</tr>
<tr>
<td>Praise self-corrections</td>
<td>0.76**</td>
<td>0.30</td>
<td></td>
</tr>
<tr>
<td>Praise other prompt correct</td>
<td>0.52*</td>
<td>0.80***</td>
<td></td>
</tr>
<tr>
<td>Other responses praised</td>
<td>0.40</td>
<td>0.51*</td>
<td></td>
</tr>
</tbody>
</table>

* p < 0.05  ** p < 0.01  *** p < 0.001

a: coefficients could not be computed due to the high proportion of zeros.
Statistically significant correlations were found between a number of post-test parent measures and follow-up test reading accuracy and comprehension scores.

Both reading accuracy and reading comprehension scores are positively correlated with the parent's use of contextual clues, and praise following corrections from a prompt. In addition, reading accuracy was positively correlated with praise that followed a child's self-correction. Reading comprehension was positively correlated with meaning prompts ($p < 0.001$) and to a lesser extent with praise for non-specified responses ($p < 0.05$).

**Summary of Results**

An examination of the initial comparability of the samples demonstrated that there were no statistically significant differences between the Trained, Encouraged or Control group of children or parents on a number of background, and standardized measures.

An assessment of the impact of parental training and encouragement on children's reading, attitudes to school subjects and school achievement was made using a post-test. Although no statistically significant changes were evident, on any variable, attitude and achievement measures showed an increase over the three month time period. Reading Accuracy and Comprehension measures on the other hand showed a surprising decrease for each group of children.

The results obtained when post-test and follow-up reading test scores were compared, demonstrated the expected increase in reading age across groups. Mean reading comprehension change scores were statistically significant. The Neuman-Keuls test indicated that this result could be attributed to the difference between the trained group and the other two groups. There was no significant difference between the encouraged group and the control group.
When pre-test and follow-up test scores were compared a statistically significant result was obtained for the reading comprehension measure. No statistically significant result was obtained for the reading accuracy measure.

Parent tutoring skills were analysed and found to be comparable across groups at the commencement of the study. The effects of training on the trained parent group revealed highly significant changes in their tutoring behaviour. In particular, parents were taught to delay their attention to errors, and provide a variety of prompts, including meaning, context and phonetic prompts. In addition, the parents showed a statistically significant increase in the number of times they praised their child for self-corrections, corrections after a prompt, and for other appropriate responses.

Correlations were computed to examine the effectiveness of parents' tutoring performance on children's reading performance.

Post-test measures of both reading accuracy and comprehension positively correlated with the parent's ability to delay attention to errors, provide phonetic prompts, and praise the child's self-corrections. In addition, strong correlations were found between reading accuracy and parent's use of contextual clues. Strong correlations were also found between reading comprehension and parent praise following prompted corrections and other non-specified responses.

Follow-up measures of both reading accuracy and reading comprehension correlated positively with parent use of contextual clues and praise following prompted corrections. Reading accuracy was also correlated positively with praise given following self-corrections, while reading comprehension correlated positively with the provision of meaning clues, and praise following any other unspecified response.
CHAPTER 8

DISCUSSION

This study compared the effects of parent training and parent encouragement on measures of children’s reading comprehension and reading accuracy as well as on two related outcome variables: (a) attitudes to school curriculum, and (b) school achievement. In addition, the study investigated the effect of the training programme on parents’ tutoring behaviour.

In discussing the results of the research, four aspects will be considered: first, the characteristics and comparability of the samples; second, the effects of the experimental conditions on children’s behaviour; third, the effect of tutor training on parent tutoring behaviour; and, fourth, the effect of parent tutoring on children’s reading.

Finally, a number of criticisms of this research will be discussed and some suggestions for future research will be identified.

Characteristics and Comparability of Samples

The characteristics of the child sample were drawn from data obtained from the parent questionnaire, and a number of standardized measures including reading accuracy and comprehension, attitudes to mathematics, reading, social studies, and science, as well as school achievement. Children in the sample had an average age of nine years and seven months and came from middle class families consisting of both parents and two children. Reading accuracy and comprehension scores were generally three to four months lower than chronological age.

Individual scores within each group however, ranged from 32 months above chronological age to 30 months below chronological age with approximately 30 per cent of the children being 12 months or
more below their expected reading age. For these children in particular, a reading intervention programme would seem justified.

Attitudes to mathematics, reading, social studies, and science indicated a somewhat indifferent attitude to the subject areas. There were no strong feelings for or against these school subjects.

The school achievement level of the sample was equal to, or better than, 25.1 percent of pupils of equivalent age. This represents a general achievement level somewhat below average.

Two sources of information provided data on the characteristics of the parent sample. First, there were data obtained from the completed parent questionnaires, and second, there were data obtained from an analysis of audio-tapes of the reading sessions. An interpretation of this information suggests the typical parent in the sample to be middle class, aged between 31 and 35 years, with two children. The mother, who was the major parent involved in the child’s reading, heard her child read approximately three times per week, for an average of 19 minutes per session. Forty seven per cent of the mothers were employed in either full-time day or full-time shift work.

When the mother listened to her child read her tutoring behaviours were characterized by immediate attention to errors, a heavy reliance upon word prompts rather than meaning, context, or phonic prompts, and a minimum of praise for correct reading, and correction after a prompt or for any other deserving response.

These characteristics are consistent with findings from a number of other studies reviewed by Glynn and McNaughton (1983). Their findings are compared with the results of the present study in Table 9.
Table 9
Comparison of Pre-test Parent Tutoring
Behaviours for Seven Independent Studies

<table>
<thead>
<tr>
<th>Study</th>
<th>N</th>
<th>Age</th>
<th>Delay %</th>
<th>Prompts %</th>
<th>Praise Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Intra-Subject Research Designs</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>McNaughton et al. (198)</td>
<td>8</td>
<td>8-11</td>
<td>16.0</td>
<td>28.0</td>
<td>1.5</td>
</tr>
<tr>
<td>Glynn (1980)</td>
<td>4</td>
<td>10</td>
<td>22.0</td>
<td>36.0</td>
<td>3.7</td>
</tr>
<tr>
<td>Love &amp; Van Biervliet</td>
<td>4</td>
<td>8-10</td>
<td>&lt;20.0</td>
<td>&lt;25.0</td>
<td>&lt;5.0</td>
</tr>
<tr>
<td>(1984)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ritchie (1984)</td>
<td>4</td>
<td>7-8</td>
<td>20.0</td>
<td>46.0</td>
<td>5.3</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Comparison-Group Research Design</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Whitby (1984)</td>
<td>10</td>
<td>8-12</td>
<td>32.0</td>
<td>9.0</td>
<td>a</td>
</tr>
<tr>
<td>O'Connor (1984)</td>
<td>18</td>
<td>6-12</td>
<td>59.0</td>
<td>40.0</td>
<td>3.0</td>
</tr>
<tr>
<td>Wilks (1987)</td>
<td>14</td>
<td>8-11</td>
<td>31.8</td>
<td>2.3</td>
<td>0.0</td>
</tr>
</tbody>
</table>

**NOTE:** Figures refer to percentages per 15 minute session
a = data not available

Several conclusions can be drawn from the data presented in Table 9. First, the average age of children in the other studies is comparable with those in the present study, with the exception of two studies which include children of a slightly younger age (O'Connor, 1984; Ritchie, 1984). Second, all studies except one (O'Connor, 1984), report low rates of tutor delay, the range being from 16.0 percent (McNaughton et al. 1981) to 32 percent (Whitby, 1984). Third, the percentage of prompts, other than word prompts, is also very low. Except for two studies (O'Connor, 1984; Ritchie, 1984), all others report the percentage of prompts to be below 36 percent. Fourth, rate of praise was below 5.3 per 15-minute session in all studies.

These pre-test similarities make it possible to compare the outcome measures following tutor training.
**Effect of Experimental Conditions on Children's Behaviour**

The effect of experimental conditions on each child group was determined by computing mean change scores for each variable. Comparison of reading scores was made between pre-test and post-test measures, post-test and follow-up test measures, and pre-test and follow-up test measures.

One-way analyses of variance identified two statistically significant results. The first was between post-test and follow-up test scores for reading comprehension. Mean change scores for this variable indicated an increase over the three months between post- and follow-up assessment of 16 months for the trained group, 4.5 months for the encouraged group and 1.5 months for the control group. Having established the initial comparability of the samples, it is reasonable to assume these differences in mean change scores reflect the experimental treatments.

The second was between pre-test and follow-up test scores for reading comprehension. Over this six months period, the Trained group increased by 13 months, the Encouraged group increased by 0.6 of a month and the Control group regressed by 6.2 months.

A surprising result was obtained from a comparison of pre-test and post-test mean scores for reading accuracy and reading comprehension. In all instances, post-test scores were lower than pre-test scores. The extent of this deficit ranged from 3.0 months to 7.9 months.

In attempting to account for this result, three explanations would initially seem plausible. First, the scores could reflect the effect of experimental conditions, second, the scores could reflect the inadequacies of the testing instruments, and third, the scores could be accounted for by the regression effect.

If the first explanation were true, one would expect that differences would occur between groups under different experimental conditions. This however was not the case. All groups scored lower at post-testing with there being little variability between groups with regard to the magnitude of the scores.
Considering the second explanation, the results could reflect an inadequacy in the reliability of the parallel forms of the Neale Analysis of Reading Ability Test (Neale, 1963). However, as described in Chapter 6, available reliability data (Neale, 1966; Yule, 1967) indicates that there are adequate correlations between the forms.

A consideration of the test regression effect as discussed in Chapter 4, would also seem inadequate in explaining these results. This effect refers to the tendency of any group to perform more like the average when tested a second time, irrespective of the events that have taken place between the first and second test. The fact that each group in the present study consisted of average and poorer readers (12 months below chronological age) would counter the regression effect argument that people who are selected because they get extreme scores on a test will tend to appear more like the average if tested a second time.

It appears that these results are not easily explained and are inconsistent with those obtained in other studies (McGovern, 1983; McNaughton et al., 1981; Wheldall & Mettam, 1985).

Comparisons of the mean change scores for attitudes to school subjects and school achievement were made between pre-test and post-test scores. However, no significant changes were found. Given the negative direction of the pre-test and post-test mean reading change scores, the notion that improvement in reading is likely to bring about an improvement in attitudes to other school subjects, is not supported in this study.

**Effect of Tutor Training on Tutoring Behaviour**

A comparison of pre-test and post-test scores of tutoring behaviours of the trained parent group indicated a number of significant results. Statistically significant changes in tutoring behaviour were produced in all measures except prompts with phonics. These results are consistent with other studies and are compared in Table 10.
Table 10
Comparison of Post-test Parent Tutoring Behaviours for Seven Independent Studies

<table>
<thead>
<tr>
<th>Study</th>
<th>N</th>
<th>Age</th>
<th>Delay %</th>
<th>Prompt %</th>
<th>Praise Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Intra Subject Research Designs</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>McNaughton et al. (1981)</td>
<td>8</td>
<td>8-11</td>
<td>50.0</td>
<td>69.0</td>
<td>11.2</td>
</tr>
<tr>
<td>Glynn (1980)</td>
<td>4</td>
<td>10</td>
<td>64.0</td>
<td>65.0</td>
<td>29.7</td>
</tr>
<tr>
<td>Love &amp; Van Biervliet (1984)</td>
<td>4</td>
<td>8-10</td>
<td>&lt;70.0</td>
<td>&lt;50.0</td>
<td>&gt;10.0</td>
</tr>
<tr>
<td>Ritchie (1984)</td>
<td>4</td>
<td>7-8</td>
<td>61.0</td>
<td>56.0</td>
<td>13.0</td>
</tr>
<tr>
<td><strong>Comparison-Group Research Designs</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Whitby (1984)</td>
<td>10</td>
<td>8-12</td>
<td>97.0</td>
<td>59.0</td>
<td>Increase</td>
</tr>
<tr>
<td>O'Connor (1984)</td>
<td>18</td>
<td>6-12</td>
<td>85.0</td>
<td>49.0</td>
<td>18.0</td>
</tr>
<tr>
<td>Wilks (1987)</td>
<td>14</td>
<td>8-11</td>
<td>78.5</td>
<td>75.0</td>
<td>1.6</td>
</tr>
</tbody>
</table>

**NOTE:** Figures refer to percentage per 15 minute session

With regard to tutoring behaviour following training, the results of the present study compare favourably with the six previous studies. In particular, substantial changes were brought about in tutor's delay in prompting and in their use of meaning, context, and phonetic prompts. Delayed attention to errors increased from 31.8 percent to 78.6 percent, percentage of meaning prompts increased from zero to 35.7 percent, percentage of context prompts increased from 3.2 percent to 30.4 percent and percentage of word prompts decreased from 61.1 percent to 3.6 percent.

Of importance to the present study is the fact that parents' tutoring behaviour has been changed to an extent that is comparable with that reported in other studies which have provided considerably greater tutor training and feedback. Of the comparative studies using group training procedures, only two provided data on the time spent training tutors (O'Connor, 1984; Whitby, 1984). O'Connor (1984) spent nine hours, and Whitby (1984) spent seven hours. This represents almost twice as much time in tutor training as occurred in
the present study. Importantly the extent of changes in tutor behaviour are similar.

The essential practical consideration is the degree to which the new tutoring skills reflect upon children's reading gains.

Effect of Parent Tutoring on Children's Reading

In determining the effect of parent tutoring on children's reading, two issues need to be considered. First, the effect of component tutoring skills on reading accuracy and comprehension, and second, the gains in reading under varying experimental conditions.

The first of these issues related to a component analysis of the tutoring programme and address the question, "What, if any, individual aspects of the tutor's behaviour contributes significantly to improved reading skills?"

An examination of the correlations between reading accuracy and comprehension scores and parent tutoring behaviours showed significant results at both post-testing and follow-up testing.

At post-testing, reading accuracy scores correlated significantly with the parents' ability to delay attention to errors, provide phonic clues and contextual clues, and praise the child after self-correction. Post-test reading comprehension scores correlated positively with the parents' ability, and praise self-corrections, correcting after a prompt and any other appropriate reading behaviour.

The parents' ability to use contextual clues, and provide praise after self-correction and after the child has corrected an error following a prompt, were found to correlate significantly with reading accuracy scores at follow-up assessments. Follow-up comprehension scores, on the other hand, correlated at a statistically significant level with the parent's use of meaning and contextual clues, use of praise following correction after a prompt, and following other appropriate reading behaviours.
An interpretation of these results suggests that it is the use of the tutoring components in combination that is important in bringing about changes to reading accuracy and comprehension scores.

Mean reading change scores between post-test and follow-up test, and between pre-test and follow-up test have been computed to examine the degree of change that took place.

Mean change scores between post-test and follow-up test show an increase in reading accuracy of 7.7 months, 5.4 months, and 5.4 months over 3 months for the trained, encouraged, and control groups respectively. An increase during the same period for reading comprehension was demonstrated for each group, the magnitude of which was 16.0 months, 4.5 months and 1.5 months for the trained, encouraged, and control group respectively. This result was statistically significant ($p < 0.01$). The Neuman-Keuls test indicated that this significant difference could be attributed to the difference between the trained group and the other two groups. There was no significant difference between the encouraged group and the control group.

Mean change scores between the pre-test and follow-up test revealed an increase in reading accuracy of 9.1 months for the trained group, 6.4 months for the encouraged group, and 2.9 months for the control group. A comparison of mean reading comprehension change scores demonstrated an increase of 13 months for the trained group, 0.6 months for the encouraged group, and a decrease of 6.2 months for the control group. This result was statistically significant. These changes took place over a six month period.

An interpretation of these results leads to two possible conclusions: first, the trained and encouraged groups showed an improvement in reading skills; second, the trained group showed a substantially greater increase than the encouraged group which showed a greater increase than the control group.
Of the studies reviewed by Glynn and McNaughton (1985), three involved parents tutoring at home and report gains on standardized measures (Biddulph & Tuck, 1983; Glynn, 1980; Whitby, 1984). Glynn (1980) reports gains on the Neale Accuracy measure of 6.25 months over 3.5 months, Whitby (1984) reports gains on a battery of tests of 7.02 months for the trained subjects and 3.92 months for the control subjects over 4.0 months of trained tutoring, and Biddulph and Tuck (1983), report gains for the trained group on the GAP Reading Comprehension Test (McLeod, 1967) that were between two and three times as great as those of the control group. Although at a 12 month follow-up test, these gains had diminished, Biddulph et al. (1983) report that the trained group were still in advance of the control group.

**Criticisms of the Present Research**

A number of criticisms of the present research seem justified. In particular, the following six will be discussed: sample size, age and extent of child sample, reading deficits, time of parent training, consistency of parent tutoring, time taken for parents to develop the tutoring skills, and the effect of independent silent reading and extra time spent hearing their child read.

*Sample size* is an important issue in that it is one factor that determines the confidence with which one can generalize the results to the general population. Clearly the sample size in the present study places restrictions on generalizing the results to a wider population. It is worth noting, however, that this sample size is larger than that in most comparable studies reviewed.

The intent of the present research was not to be able to generalize to the wider population, but rather, to evaluate the effect of using a particular set of tutoring behaviours on children's reading, attitudes and school achievement levels.
The age and extent of reading deficits of the child sample would seem to have relevance when attempting to remediate children's reading problems. While it can be argued that remedial programmes should be introduced as early as possible, most programmes are introduced to children aged between 7 and 12 years (Love, & Van Biervliet, 1984; McNaughton et al., 1981; O'Connor, 1984; Whitby, 1984). In fact, the critical consideration does not appear to be the age of intervention, but rather, the extent of reading deficit. The literature reporting remedial intervention generally considers children who are 12 months or more reading retarded to be in need of remedial assistance (Yule, 1973). When both of these factors are considered, the chronological ages and reading deficits of the children in the present sample are consistent with those in other studies (Glynn, 1980; Love & Van Biervliet, 1984; McNaughton et al., 1981; O'Connor, 1984; Ritchie, 1984; Whitby, 1984). There is no evidence to suggest that the tutoring procedures used in this present study are more effective with children of a particular age or reading deficit level.

The time of the year at which parents are trained could also be considered an important variable. No studies could be found where this data are reported. In the present study, parents were trained early in the school year. This time was selected for two reasons. First, parents' enthusiasm and commitment to assisting their children appear greater at the commencement of a new school year. Second, training parents early in the year enables evaluation of reading gains to be made without the confounding variables of a change in grade level, teacher or curriculum during the study.

Consistency of parent tutoring is a significant variable that has been controlled for in a number of studies using home tutoring procedures (Glynn, 1980; McNaughton et al., 1981; Whitby, 1984). These studies ensured consistency of parent tutoring by providing regular weekly, and in most cases, twice weekly checks of parents. As has been argued in this study, such a large input of time is not viable as part of a teacher's regular work. This study has demonstrated significant changes in parent tutoring behaviour with a
minimal amount of researcher involvement and more closely approximates what could be provided by teachers in regular schools. Although no attempt has been made to determine the consistancy with which parents tutored their child, anecdotal evidence suggests that they maintained three, weekly tutoring sessions, at least during the 12 week experimental phase of this investigation.

The time taken for parents to develop the tutoring skills taught to them, has not been investigated. This has, however, been monitored in other similar studies by the researchers having regular and frequent face-to-face contact with the parent tutors. A measure of this variable would have been important in the present study particularly since there was a step-wise progression in children's reading gains between post and follow-up stages. Such a progression may have been accounted for by the increased skill of the parents as tutors. It may also be that the impact of the parent's tutoring skills is greater over a longer period of time.

The effect of independent silent reading or additional amounts of time hearing the child read are other considerations that may have accounted for children's reading gains. Some studies have recorded the book levels read by children during untrained and trained tutoring conditions (Love & Van Biervliet, 1984; McNaughton et al., 1981; Ritchie, 1984). However, no data are reported as to the number of books read, rather, book levels read have been converted to reading gain scores.

While it could be argued that children's reading change scores reflect additional amounts of time hearing children read, consistent evidence indicates the additional effectiveness of the tutoring procedures over and above that of extra time spent hearing children read (Elliottyson, 1982; McNaughton et al., 1981; O'Connor, 1984; Ritchie, 1984; Wheldall & Mettem, 1985).
In the present study, data were collected from parents at pre-test concerning the time spent listening to their children read. On average, parents reported regularly hearing their child read three to four times per week. Since the advice given to both the trained and encouraged parent groups was to hear their child read three to four times per week, it seems reasonable to assume that the pre-test data would not change throughout the programme. However, no post-test or follow-up test data were collected on this variable.

Further Research

The present investigation serves as a pilot study and highlights a number of areas for future research. These include across school differences, effectiveness of teachers training parents, follow-up data on all variables, consistency of parent implementation of procedures, and the need to measure the time taken for parents to develop the tutoring skills.

Across school differences concerns the need to conduct the research in a variety of schools. The effect of different S.E.S. levels, school organizations, school based reading programmes, level of parent involvement, needs to be considered before more generalized conclusions can be drawn.

The effectiveness of teachers training parents in the use of the tutoring procedures needs to be evaluated. While this research has indicated that the procedures can be effectively taught to parents in less time than was originally suggested by McNaughton, Glynn and Robertson (1981), it still remains to be demonstrated that regular classroom teachers can accommodate this extra task into their present role.

The need for follow-up data on each of the variables measured in this present study is essential to determine the longer term effects of home tutoring on children's attitudes to other school subjects, and on their general school achievement level.
The time taken for parents to develop the tutoring skills also needs to be investigated more systematically. This will enable further refinement of the training procedures and make clear the advantages and disadvantages of regular on-going contact with each of the parent tutors.

Conclusion

Using a pretest, posttest control group research design, this study has investigated the effects of parent training and encouragement on children's reading achievement, attitudes to reading, mathematics, science and social studies, and general school achievement. In addition, it has focused on the effects of training on parent tutoring behaviour.

Three significant findings have been made. First, parent training has produced statistically significant changes in the Trained group's reading comprehension scores between post-testing and follow-up testing, and between pre-testing and follow-up testing.

Second, following only 4 hours of training, the trained parent group made statistically significant gains in all tutoring behaviour measures except one: prompts with phonic clues.

Third, statistically significant correlations were found between both reading accuracy and comprehension and parent tutoring behaviours of delaying attention to errors, providing phonic prompts, and praising self-corrections. Reading accuracy also correlated with the provision of context clues while reading comprehension correlated with the provision of praise following correction after a prompt, and praise for any 'other' response. To determine the long term effect of parent behaviour on children's reading achievement, correlations of post-test parental tutoring behaviour measures with children's follow-up reading scores were computed. Both reading accuracy and
comprehension correlated strongly with the provision of contextual clues, and praise following corrections after a prompt. Furthermore, accuracy of reading correlated positively with praise following self corrections, while comprehension correlated with meaning clues and praise following any 'other' responses made by the child.

The weaknesses of the study were considered and suggestions for further research were discussed.
APPENDIX A. PARENT QUESTIONNAIRE

To assist in the evaluation of the Tutoring Programme please complete this questionnaire. All information is strictly confidential and will only be used to assist in evaluating the programme.

1. NAME:   Mother: ____________________
             Father: ____________________

2. AGE GROUP: (Please tick the appropriate box)

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Mother</th>
<th>Father</th>
</tr>
</thead>
<tbody>
<tr>
<td>20 - 25 years</td>
<td></td>
<td></td>
</tr>
<tr>
<td>26 - 30 years</td>
<td></td>
<td></td>
</tr>
<tr>
<td>31 - 35 years</td>
<td></td>
<td></td>
</tr>
<tr>
<td>36 - 40 years</td>
<td></td>
<td></td>
</tr>
<tr>
<td>41+ years</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3. OCCUPATION

   (a) What is your main occupation?
       Mother: ____________________
       Father: ____________________

   (b) What are your hours of work? (Please tick the appropriate box)

<table>
<thead>
<tr>
<th>Hours of Work</th>
<th>Mother</th>
<th>Father</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Full time day</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Full time shift work</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Full time night</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mornings only</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Afternoons only</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Evenings only</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Other hours

Mother: __________________________
Father: __________________________

4. EDUCATION:

What is your highest educational qualification?

Mother: __________________________
Father: __________________________

5. FAMILY:

Please indicate the age and sex of your children.

<table>
<thead>
<tr>
<th>AGE</th>
<th>MALE</th>
<th>FEMALE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Child 1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Child 2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Child 3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Child 4</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

6. INVOLVEMENT WITH YOUR CHILD’S READING

(a) Do you read stories to your child?

Yes [ ]
No [ ]

If "yes", about how many times per week do you read to your child?
(b) Do you hear your child read to you?

Yes [ ]
No [ ]

If "yes", about how often do you hear your child read in a week?

________________________

(c) For how long do you hear your child read at any one time (e.g. 10 minutes, 20 minutes etc.).

________________________

Thank you for taking time to complete this questionnaire.
APPENDIX B. TUTORING BEHAVIOUR CHECKLIST

INSTRUCTIONS FOR SCORING TUTORING BEHAVIOUR CHECKLIST

You are asked to score two major types of tutoring behaviour:

1. ATTENTION TO ERRORS

2. ATTENTION TO PROFICIENT READING

1. TUTOR'S ATTENTION TO ERRORS

Three types of ATTENTION TO ERRORS are possible -

(a) DELAY BEFORE ATTENDING TO ERROR. Score each instance of tutor attention to an error as either:

'I' - IMMEDIATE - if attention occurred within 5 seconds of the error.

'D' - DELAYED - if attention occurred at the end of a sentence or after 5 seconds of the child making an error.

(b) PROMPTS GIVEN FOR ERRORS. There are 3 types of prompts:

'M' - prompts about the meaning of the word

'C' - prompts about the context

'Cg' - graphic clues

(c) CORRECTION AFTER PROMPT. Tick (√) if the tutor's prompt results in the child successfully correcting the error.
2. **TUTOR’S ATTENTION TO PROFICIENT READING**

Three types of attention to proficient reading are possible.

(a) **PRAISE FOR SELF-CORRECTION**

Indicate with a tick (✓) each time the tutor praises a child’s self-correction.

(b) **PRAISE FOR PROMPTED CORRECTION**

Indicate with a tick (✓) each time the tutor praises a child’s correction after a prompt.

(c) **PRAISE FOR OTHER RESPONSES**

Indicate with a tick (✓) each time the tutor praises other responses e.g. error-free reading of a whole sentence, page, or when the tutor makes a general statement referring to the whole reading session.
## Tutoring Behaviour Checklist

**Tutor:** __________________  **Child:** __________________  **Pre-Test:**  **Post-Test:**

<table>
<thead>
<tr>
<th>Attention to Errors</th>
<th>Delay</th>
<th>&quot;I&quot; - Immediate</th>
<th>&quot;D&quot; - Delayed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prompt</td>
<td>&quot;M&quot; - Meaning</td>
<td>&quot;C&quot; - Context</td>
<td>&quot;G&quot; - Graphic</td>
</tr>
<tr>
<td>Correction After Prompt</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Error Attention</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Errors Missed</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Attention to Proficient Reading | Praise Self Corrections |  |
|                                | Praise Prompted Corrections |  |
|                                | Praise Other Responses |  |

**Recorder:** __________________
APPENDIX C. NOTES FOR TRAINED TUTOR GROUP

SKILLS INVOLVED IN READING

Children become independent readers by making use of:

(1) Meaning clues

- Often unknown words can be worked out (predicted) by the meaning of the sentence.

(2) Grammar clues

- Unknown words can often be worked out because the child knows the way the sentence structure should be.

  e.g. We have (done) our work (properly)
       (did) (proper).

(3) Phonic clues

- i.e. Sounding out words.
INTRODUCING THE BOOK

TALK ABOUT THE BOOK

(1) The cover

(2) The pictures

(3) Possible words the child may meet in the book.

WHEN YOUR CHILD IS READING REMEMBER

(1) If you are OVER-CRITICAL, your child may become too afraid to try to work things out.

(2) If you tell your child all the correct words, without helping them to try by themselves, they may learn to depend on you completely.

NOTE: When you help your child to learn independent reading skills, your task is to help him/her solve problems and work things out by themselves.
ENCOURAGING YOUR CHILD TO READ:

1. Praise lets your child know when he/she is doing the right things.

2. Praise motivates your child to keep on trying.

3. It is important when praising your child to tell him/her why you are pleased.

4. Praise often (even for small beginnings).
1. Arranging a time and place for reading at home.

   (i) Keep the sessions SHORT and FREQUENT.

       It is better to set aside ten minutes three or four times a week than to arrange one 30-40 minute session per week.

   (ii) Choose a time when children are NOT already engaged in a favourite activity e.g. playing with friends, watching T.V.

   (iii) Try to anticipate and avoid possible interruptions to the reading sessions

       - ask another child to answer the phone for you
       - give the other children something to do
       - ask others in the family not to interrupt you or listen in
       - turn the T.V. volume down etc.

   (iv) Sit BESIDE your child at a table or on the couch. Place the book between you.

   (v) Let your child see you are pleased to be alone with him/her. Make this a "special" time together.

       Remember to praise when your child comes when you call, or volunteers to come - even when you are not quite ready.

   (vi) Stop the session ON TIME. It is better to stop, when you are both enjoying it and wanting more, than to carry on beyond the set time until you are both tired or bored or frustrated.
2. Selecting suitable books for your child to learn from

(i) Before you ask your child to start reading, count off 50 words from the selected book and note this point in the book. Have a pencil and paper ready to record your child's errors.

(ii) Ask you child to begin reading. Put a mark on your paper for each mistake your child makes.

Mistakes may be -
(a) different words read from those in text,
(b) words left out,
(c) words added.

If your child corrects the incorrect word without any help from you, do not count this as a mistake. Don't criticise children for making mistakes. Offer encouragement for trying, and when they pause and seem to be stuck on a word, ask them to try the next word - and to keep on going.

(iii) When the 50 words have been read, stop and thank your child for reading to you, and for trying hard.

(iv) Count the number of mistakes you have recorded, from the 50 words read. Take away this number from 50, to show the number of words read correctly.

What does this tell you?

If there are more than 10 mistakes, the book is too difficult for the child. Select another book and make another check.

If there are fewer than four mistakes, the book is too easy. Select another book and make another check.

If there are between four and ten mistakes, the book is suitable for learning to read. At this level, children will make enough mistakes for you to be able to see what their problems are, but not so many mistakes that they cannot follow the story.
3. **Helping your child to be an independent reader**

**Remember:**

If you are over-critical, your child may become too afraid to try to work things out.
If you tell your child all the correct words, without helping them to try by themselves, they may learn to depend on you completely.
When you help children to learn independent reading skills, your task is to help them to solve problems and work things out by themselves.

**What to do when children read correctly**

You should praise your child when they -

(i) get some words correct without any help from you.
(ii) discover, without your telling them, that they have made a mistake, and
(iii) get a word right after you have given them a clue, or prompt.
(Giving them a clue or a prompt is more helpful to their learning than simply telling them the word, because it encourages them to try to solve for themselves what the word is).

**What to do when children make mistakes**

It is very important that you wait after your child makes a mistake (about 5 seconds). When you wait, there is a better chance that your child will notice the mistake and then correct it.

Your child may make any of three mistakes -

(i) they may make a mistake that does not make sense.
(ii) they may make a mistake that does make sense, or
(iii) they may simply say nothing.
Where the mistake does not make sense you should prompt with clues about the meaning of the story e.g. you should ask a question. Where the mistake does make sense you should prompt with clues about the way the word looks e.g. you should ask about one part that is wrong.

Where the child stops and says nothing you should ask the child to read on to the end of the sentence or, you should ask the child to go back to the beginning of the sentence again.

Regardless of the error, if the word is not correct after two prompts we should say, "The word is ................."

Figure I illustrates the home tutoring procedure.

Figure I. Home Tutoring Procedure

For Correct Reading

1. We should praise when children read a sentence correctly.

2. We should praise when children correct themselves after a mistake.

3. We should praise when children get a word correct after we have prompted them.

For Problem Reading

4. We should wait to give children a chance to solve the problem.

5. If the mistake does not make sense we should prompt with clues about the meaning of the story e.g. we should ask a question.

6. If the mistake does make sense we should prompt with clues about the way the word looks e.g. we should ask about one part that is wrong.

7. If the child says nothing we should ask the child to read on to the end of the sentence or, we should ask the child to go back to the beginning of the sentence again.

8. If the word is not correct after two prompts we should say, "The word is ................."
Home Tutoring Procedure

For Correct Reading

1. We should praise when children read a sentence correctly.

2. We should praise when children correct themselves after a mistake.

3. We should praise when children get a word correct after we have prompted them.

For Problem Reading

4. We should wait to give children a chance to solve the problem.

If The Mistake Does Not Make Sense

5. We should prompt with clues about the meaning of the story. E.g., we should ask a question.

If The Mistake Makes Sense

6. We should prompt with clues about the way the word looks. E.g., we should ask about one part that is wrong.

If The Child Says Nothing

7. We should ask the child to read on to the end of the sentence. Or, we should ask the child to go back to the beginning of the sentence again.

If The Word is not Correct After Two Prompts

8. We should say: "The word is ___."
4. **Some Points on Praising Your Child**

Praise lets children know when they are doing the right things in learning to read. Praise also motivates them to keep on trying. When you praise children, it is important to tell them why you are pleased with them. Then they can see for themselves what they are doing is right. When children are just beginning to read, and when they have been used to a lot of embarrassment and criticism about their mistakes, you should praise often, even for quite small beginnings.

**Example**

**Book:** Bob and Sally carried the cups out to the garden.

**Child:** Bob and Sally carried the cups out to the garden.

**Parent:** "That's a whole sentence right. Good!"

To encourage children to be independent readers and to work things out for themselves, you should try always to notice and praise their self-corrections. Tell them you are pleased that they corrected an error without your help.

**Example**

**Book:** You make the tea while I finish the garden.

**Child:** You make the tea while I fix - finish the garden.

**Parent:** "That was fine. You noticed 'fix' wasn't quite right, and you corrected yourself. Good!"

Even when children have made a mistake, it is likely that their mistake will make good sense, and really fit the story. You should praise these features, so children will be encouraged to use the story to make an intelligence guess when they don't know a word.
Example

**Book:**  Mother is planting seeds in the garden.

**Child:**  Mother is putting seeds in the garden.

**Parent:**  "Yes, you are nearly right.  She could be putting seeds in the garden.  That is a very good try".

In this example, the parent has let the child know there is a mistake.  But the parent has been positive about it.  This child would not be embarrassed about being wrong, and would learn that it is worthwhile to try to work out the word from the story.  Following this praise, you might then give the child a prompt to help solve the word.  If the prompt is helpful and the child then corrects the word, you can give further praise.

Example

**Parent:** (cont.):  "The word is a bit like 'putting'.  Look carefully at the beginning (points).  See, it starts with two letters 'pl'.  What could this word be, it starts with 'pl.  It's what you do with seeds".

**Child:**  "Planting".

**Parent:**  "Yes, that's right.  You figured it out without me telling you the word.  Good".

Notice that the parent has praised the child for doing some of the work in correcting the mistake.  This is one step better than just telling the word.
5. **Some Points on Correcting Mistakes**

1. The first thing to remember when you hear a child make a mistake is to wait. If the child seems to stop or hesitate at a word try to wait for five seconds. If the child makes a mistake but continues reading on, try to wait until the end of the sentence. When you wait, you are allowing the child time to notice the mistake and the chance to self correct.

2. After five seconds, or at the end of the sentence, if the child has not corrected the mistake, you can then point out the mistake. Try to do this as pleasantly and positively as you can.

Suppose your child has stopped at a difficult word, and you have waited five seconds, but there is no self-correction. Ask your child to read on to the end of the sentence, or if the error is close to the end of the sentence, ask your child to go back to the beginning of the sentence. This may help the child to correct the mistake, or to try a word that seems to make sense. Then you will be able to praise for self-correction or for being nearly correct. If the mistake is still not corrected after the child has read on or has read the sentence again or even after you have given the second prompt tell them what the word is.

**Example**

**Book:** They go for a picnic by the river

**Child:** They go for a _________ (5 seconds wait)

**Parent:** Try reading on to the end (points at 'by').

**Child:** .......... by the river.

**Parent:** So, what's this word? (points at 'picnic'). What would they be doing by the river?

**Child:** (No response).

**Parent:** They are having a picnic. Now read the sentence again.
Suppose your child makes a mistake but continues reading on. You wait until the end of the sentence, and then study the mistake. If you notice that the mistake is one which makes sense, you praise the good features of the mistake, and then prompt your child to consider more closely what the word looks and sounds like. Then if the child gets the word correct you can praise this.

Example
Book: They packed all the food into a big red picnic basket.
Child: They packed all the food into a big red picnic bag.
Parent: "That makes sense. Good. It is like a big picnic bag, but the word isn't bag. Have a good look at it", (points at 'basket').
Child: Basket. Picnic basket.
Parent: Good.

Suppose your child makes another mistake, but this time the word doesn't make sense at all. Again, you wait until the end of the sentence, then praise the good features of the mistake. But this time, since the word doesn't make sense, you do not bother to prompt about what the word looks or sounds like. Instead, you prompt with a clue about the meaning of the story. Then, if your child gets the word correct with the help of your prompt, you can praise this.

Example
Book: The fruit salad had apples, oranges, bananas and pears.
Child: The fruit said had apples, oranges, bananas and pears.
Parent: "Well, that word looks a bit like said. Something with all that fruit in it for pudding, would be fruit said?"
Child: They make a fruit salad.
Parent: "That's right, good. Now you've got it".
When the mistake makes sense, try to prompt about what the word looks or sounds like. When the mistake doesn't make sense, try to prompt about the meaning of the story, or sentence. Don't expect to get this right straight away. You'll probably need quite a lot of practice. Keep the diagram of suggestions handy, to remind you what to do.

Remember, tell the child the word if the mistake hasn't been solved after two prompts.
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Children become independent readers by making use of:

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- often unknown words can be worked out (predicted) by the meaning of the sentence.

(2) Grammar clues

- unknown words can often be worked out because the child knows the way the sentence structure should be

  e.g. We have (done) our work (properly) (did) (proper).

(3) Phonic clues

- i.e. sounding out words.
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TALK ABOUT THE BOOK

(1) The cover

(2) The pictures

(3) Possible words the child may meet in the book.

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(iii) Try to anticipate and avoid possible interruptions to the reading session

- ask another child to answer the phone for you
- give the other children something to do
- ask others in the family not to interrupt you or listen in
- turn the T.V. volume down etc.

(iv) Sit BESIDE your child at a table or on the couch. Place the book between you.

(v) Let your child see you are pleased to be alone with him/her. Make this a "special" time together.

(vi) Stop the session ON TIME. It is better to stop, when you are both enjoying it and wanting more, than to carry on beyond the set time until you are both tired or bored or frustrated.
2. Selecting suitable books for your child to learn from

(i) Before you ask your child to start reading, count off 50 words from the selected book and note this point in the book. Have a pencil and paper ready to record your child's errors.

(ii) Ask your child to begin reading. Put a mark on your paper for each mistake your child makes. Mistakes may be:
   (a) different words read from those in the text,
   (b) words left out,
   (c) words added.

If your child corrects the incorrect word without any help from you, do not count this as a mistake. Don't criticise children for making mistakes. Offer encouragement for trying, and when they pause and seem to be stuck on a word, ask them to try the next word - and to keep on going.

(iii) When the 50 words have been read, stop and thank your child for reading to you, and for trying hard.

(iv) Count the number of mistakes you have recorded, from the 50 words read. Take away this number from 50, to show the number of words read correctly.

What does this tell you?
If there are more than 10 mistakes, the book is too difficult for the child. Select another book and make another check.
If there are fewer than four mistakes, the book is too easy. Select another book and make another check.
If there are between four and ten mistakes, the book is suitable for learning to read. At this level, children will make enough mistakes for you to be able to see what their problems are, but not so many mistakes that they cannot follow the story.
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