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**PATHWAYS TO LITERACY:  
AN EVALUATION OF TWO PROGRAMMES FOR CHILDREN WITH READING DIFFICULTIES**

**Carole Striker**

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## Abstract

The investigation was concerned with ways of helping children with reading difficulties. One of the main reasons for these children failing in reading seems to be a complete lack of interest in books, stemming from the fact that reading is regarded as unimportant in the children's culture. A teaching approach which attempts to evoke interest and change attitudes through relating reading to interests and culture should therefore be more suitable for these children than an approach which concentrates on the skills involved in reading. If successful, an interest-centred approach should have marked effects, in that it should lead to continued improvement in ability for as long as the interest is sustained.

Pilot studies showed that an interest-centred approach was much enjoyed by poor readers, and improved both reading ability and attitudes to reading. It seemed worthwhile therefore to carry out a more rigorously controlled experiment, to further assess the effectiveness of such an approach.

In the main experiment, eighty primary school children, almost all working-class and all backward in reading, were given extra help with reading for five months. 'Interest sessions' were held with forty of the children, and 'skill sessions' with the other forty. The sessions were conducted by experienced teachers, who were on a university course. Each teacher worked with two groups of four children, holding interest sessions with one group, and skill sessions with the other group.

The expected results were not obtained. Interest sessions turned out to be a comparative failure, in that they had no effect at all upon the children's attitudes to reading. Not only that, but children of average and below average intelligence improved reading ability

significantly less in interest sessions than in skill sessions. Both types of session were successful in accelerating the children's rate of progress in reading, and both types were unsuccessful in changing attitudes.

The children were followed up fourteen months after the sessions had finished. The follow-up showed that there were no differential long-term effects from the sessions. For both groups of children, reading progress had returned to its former poor rate, in contrast to the accelerated progress made during the sessions.

The above results can be best explained as follows. The interest-centred approach was intended to work by changing the children's attitudes to reading. In the event, it did not succeed in creating either temporary or permanent interest in reading. There was less direct teaching of reading in interest sessions than in skill sessions, and the children did not particularly enjoy being able to pursue their own interests. They preferred the rewards available from skill sessions, in the form of feelings of success and mastery. This reward preference may have serious implications for progressive education, which lays such stress on pupil choice and pursuit of individual interests.

As far as long-term effects were concerned, neither approach succeeded in changing attitudes, and therefore, once the sessions stopped, progress for both groups relapsed to its former inferior rate.

Thus, it seems that if children are to leave school with reasonable ability to read, tuition which concentrates on the skills involved in reading rather than upon the children's interests and culture should be given continuously for as long as is necessary. This may mean for the whole of the child's school career. Without this extra help, skill-centred in nature, the child may well leave school semi-literate, with all this implies in terms of life-prospects.

## CHAPTER 1

### THE PROBLEMS OF POOR READING ABILITY

#### A. The Importance of Reading

The present investigation arose from a concern for children who are having difficulty in learning to read, and from an interest in the best ways of helping these children. The concern and interest stemmed from the fact that reading is such an important skill. This is evidenced in the way it is usually referred to as one of the three basic skills.

Reading first becomes important at school. If you cannot read, you can make little progress in most school subjects. Burt (1937, 1950) points out:

A disability in reading operates in a more general way than a disability in arithmetic (or any other subject). From the earliest years the child is heavily handicapped. If he cannot read a word, he is not likely to spell it; and if he cannot spell, he is hopelessly at a loss in written composition. Further, the poor reader will eventually become backward in arithmetic as well, simply because he cannot make out the problems written on the board or printed in his text book. For a similar reason, as time goes on he will fall behind in all other studies that depend upon book-work - geography, history, and even nature study and sciences - indeed wherever reading, note-taking and essay-writing are required.

(The Backward Child, Third Edition, p.462).

Children who cannot read are likely to become estranged from school and bored. They may develop feelings of inferiority and a sense of failure. There is the classic picture of the illiterate boy who sits at the back of the class, plays up and generally makes life hell

for his class-teacher.

The illiterate is likely to have a hard enough time in school; but life may not get any easier for him once he has left school. The range of jobs the illiterate can choose from is limited: even for sorting boxes in a warehouse, he needs to be able to read the labels on the boxes. "You can't hold a job as first or twenty-first cook if you can't read the recipes." (Fader and McNeil, 1969, *Hooked on Books*, p.5). Then, there are all the practical problems of living in a world where it is assumed that, as an adult, the illiterate can read: that he can read road and street signs, fill in unemployment forms, sign cheques and hire purchase agreements, read newspapers and magazines.

Part of the world remains a mystery to the illiterate. He cannot follow the rules of the game in an area where it is assumed by everyone else that he can. The illiterate is often so embarrassed by his lack of ability, that he will go to great lengths to hide the fact that he cannot read and write. Herndon (1970), in "The way it spozed to be", describes how children would faint in class, lip-read or walk out of the classroom, to avoid having to read. "You get cunning. You use other people's brains. If a bloke shows you a newspaper and asks you what you think you ask him what he thinks about it. So he tells you and you know what it's about. You can give an opinion". (The Guardian, 2 Oct. 1975, p.9).

Apart from these shorter-range issues, there are longer-term implications in the prospect of mass illiteracy. If children were given the choice about whether they 'wanted' to learn to read or not, the consequence could well be, over the generations, a division of the population into two: into literates, who make all the key cultural decisions, and illiterates, who are relatively powerless, and whose

children could enter the élite class only by leaving the homes of their illiterate parents. Mass illiteracy could well change the fabric of our culture in a way that would take us backwards rather than forwards.

In spite of the above arguments about the importance of literacy, the view is increasingly often put forward that being able to read is nowadays neither a necessity nor a virtue. McLuhan and Fiore (1967), amongst others, argue that books are out-dated and electronic technology is all-important. "At the high speeds of electric communication, purely visual means of apprehending the world are no longer possible; they are just too slow to be relevant or effective". (The Medium is the Massage, p.63). Recent technology does seem to have made literacy less important than in the past. Nevertheless, once one has become literate, one has the choice of whether or not to use the skill. If one remains illiterate, one has no such choice. And it is for this reason of freedom to choose, if no other, that even if literacy is regarded as a skill in decline, the problem of children who cannot read remains of concern.

#### B. The Incidence of Reading Difficulties

Given that it is a good thing for children to be able to read, the question then arises: is there really a sizeable problem - a large number of children who cannot read well? Much recent educational writing indicates a general concern about reading standards: that there is growing illiteracy in schools, that standards are declining, and that this is linked to the increase in progressive teaching. For example, the various Black Papers (Cox and Dyson,



1969; Cox and Boyson, 1975) and "Education: Threatened Standards" (Boyson, 1972) put forward views along these lines.

The concern here is not with whether standards are rising or falling and the reasons for such changes, but simply with the incidence of reading difficulties: the number of children who have problems with reading.

It is not easy to get a clear idea of the true extent of reading difficulties amongst older British school children. To begin with, it is notoriously difficult to provide adequate criteria for defining literacy and illiteracy. 'Literacy' itself is a global term which sometimes refers to the extent of capability, the body of multi-component skills that make up reading and writing; but sometimes also to the extent to which the person engages in reading and/or writing. For example, the man in the street, who is literate in the sense that he can read perfectly well, is less literate than a bookish, widely-read person. Even if one uses literacy simply to refer to the body of skills that make up reading, a definition of literacy is not clear-cut. Neijs (1961) notes that "literacy may vary from slowly deciphering a line of print and laboriously writing one's name to quickly and efficiently scanning a page, rapidly grasping its content and fluently rendering a message in brief clear writing. Even for census purposes no universally accepted standards have ever been adopted". (Literacy Primers: Construction, Evaluation and Use, p.11). UNESCO's 1967 figures for illiteracy in Britain illustrate this - a queried range of 0 to 11%.

The definition of literacy most commonly used in British surveys in schools is that provided by the Ministry of Education (1950). The Ministry's definition is in terms of reading age:

a reading age represents the average level of performance attained by children of the age in question. The Ministry defines an illiterate person as having a reading age below seven; a semi-literate person as having a reading age of seven or greater but less than nine; and a literate person as having a reading age of nine or more. The lines drawn by the Ministry between literacy, semi-literacy and illiteracy are to some extent arbitrary. In particular, it is often argued that, in our increasingly complex society, a reading age of nine can no longer be taken as an indication of functional literacy. However, in spite of such disadvantages, the above definitions have been used in many of the surveys to be described in this chapter. It is useful to keep the three definitions in mind, as they give some idea of levels of reading ability, and of the extent to which a particular level of ability means a person is literate.

From beginning school onwards, there are children who lag behind and who are in need of extra help with reading. In "11,000 Seven-year-olds" (Pringle et al, 1966) it was found that on transfer to the junior school, 44% of the seven-year-olds were still in need of infant-school-type help. This may be serious, as many junior school teachers have had no training in the teaching of reading and, traditionally, do not regard it as part of their job to teach reading.

Further on in the primary school, a fair proportion of children still remain poor readers. Start and Wells (1972) found that as many as 15.5% of eleven-year-olds in England and Scotland had reading ages below nine. The situation is not quite as bad as it seems, in that most of these children had picked up the rudiments of reading: only 0.42% fell into the 'illiterate' category. Nevertheless, this still means that about five out of every thirty eleven-year-olds are only

semi-literate: and this after six years in school.

Surveys of primary school children carried out in different parts of the country show that there are wide regional variations in the prevalence of reading difficulties, in accordance with the income and class distribution of the area. Thus, Berger et al. (1975) found that reading difficulties in ten-year-old indigenous children were far more common in an Inner London Borough than in the more prosperous Isle of Wight. Specific reading retardation (i.e. taking intelligence into account) was nearly three times higher in the London borough than in the Isle of Wight (9.9% compared to 3.9%), and there was a comparably higher rate of general reading backwardness in the London borough (19% compared to 8.3%). Yet, even in the more prosperous areas, there is a sizeable problem. The Isle of Wight has a slightly higher than average income and class distribution, and is without the social problems occurring with urbanisation. Even so, the general rate of reading difficulties amongst nine- to twelve-year-olds was found to be as high as 6.6%. As Rutter et al comment:

It is clear that the problem of reading backwardness is a large one and that our figure of 6.6 per cent must be regarded as a minimal estimate. Twenty-eight months backwardness in reading is a severe degree of backwardness and there were many more children with lesser problems in reading which, nevertheless, were still great enough to constitute a marked handicap at school.

(Education, Health and Behaviour, p.41)

The problem would not be one to worry about so much, if the children caught up later in their schooling. However, all the evidence indicates that, although reading ability may improve slowly, the children do not catch up with their age-group, and many leave school

without being able to read fluently. Thus, when the children in the Isle of Wight study were re-tested two and a half years later, it was found that only five of the 160 backward readers were less than 28 months behind their chronological age. In line with this result, Start and Wells found that one in thirty of the fifteen-year-olds tested in their national survey were semi-literate (3.18%). The validity of Start's and Wells' figures is somewhat unclear in that a high proportion of Easter leavers, who would probably be worse at reading than the other children, were absent at the time of testing; and, because of a postal strike, only just over half the secondary schools selected finally took part in the survey. However, if the figures are taken at their face-value, they indicate that about 15,000 children leave school every year with reading ages below nine (see Bullock Report, 1975, p.12).

It is hard to compare results from the various surveys, as different tests have been used, with children of different ages, and with different criteria of reading backwardness. In addition, the extent to which the surveys accurately assess the incidence of reading failure is not clear. In spite of these difficulties, all the surveys carried out agree in showing that in every region, including the more prosperous ones, and in every age-group in the school, there are sizeable numbers of children who cannot read fluently. One thing seems evident. There is a problem.

### C. A Portrait of the Poor Reader

Before we consider ways of helping poor readers, we need to think about the type of child who becomes a poor reader, and why he

does so. For teaching cannot be dissociated from the person who is to be taught. The two must fit together, if the teaching is to be maximally effective. In this section, therefore, a portrait of the poor reader will be sketched. The following is not meant to be an exhaustive review of the literature - that could be a book in itself - but simply a sketch of the characteristics of the typical poor reader.

If we take poor readers as a group, we find various associated circumstances. It is, in fact, almost not an exaggeration to say that any circumstances that are normally regarded as disadvantageous are likely to be related to poor reading ability. One can, however, be somewhat more precise than this, and in the following discussion the associated circumstances will be dealt with in more detail, in three groups: first, individual characteristics of the child; then, school variables; and finally, home background.

#### Individual characteristics of the child.

To begin the portrait, the first point to be made is that the poor reader is more likely to be a boy than a girl (Davie et al, 1972; Rutter et al, 1970). Often, two or three times as many boys as girls are found to be poor readers (Cashdan et al, 1971).

Although the poor reader is likely to be below average in intelligence, he still has a fairly good chance of being of average or above average intelligence (Morris, 1966). That is, not all poor readers can be labelled without thought as unintelligent.

A boy who is a poor reader is more likely to be of average intelligence than a girl. A girl is unlikely to be poor at reading unless

she is below average in intelligence. Thus, Clark (1970) found that of the 19 nine-year-old children who were of average intelligence and severely backward in reading in Dunbartonshire, 15 were boys and only 4 were girls.

The poor reader may well suffer from physical disabilities and illness. Rutter et al found that children with physical disorders (e.g. asthma, eczema, heart disease, deafness) were on the whole nine months behind their chronological age on the word accuracy measure of the Neale test (Education, Health and Behaviour, p.299). Defining the handicap somewhat more precisely, Douglas et al (1968) found that children with a heavy burden of illness were behind in school, whereas those with more moderate disabilities were not. It was the general condition of 'chronic illness' that correlated with low attainment, rather than specific illnesses. Speech defects are also likely to be associated with poor reading ability (Morris, 1966; Clark, 1970).

As one would expect from the pressures that must meet the failing child in school, the poor reader is likely to be 'maladjusted'. Both Douglas (1971) and Morris (1966) found that the more adverse signs of maladjustment there were, the poorer the performance of the child.

There have been attempts to discern whether particular types of maladjustment are associated with reading failure, but the results are inconclusive. Thus, Rutter et al (1970) found an association between anti-social behaviour and reading retardation, rather than between neurotic behaviour and retardation. This would be a very interesting finding, with important implications, if it could be

replicated. However, Varlaam (1974), analysing results from part of the ILEA Follow-Up Survey (1971), found that although neurotic and anti-social children obtained lower scores on reading than normal children, the mean reading scores for the two groups of maladjusted children were about the same.

The discrepancy between the two sets of findings could arise from the fact that Rutter et al considered only retarded readers (i.e. children who are backward in reading when intelligence is taken into account), whereas, in the ILEA Survey, all backward readers were examined, rather than only retarded readers. Even if this is the correct explanation for the disparity in results, the disagreement about types of maladjustment likely to be associated with reading failure is evident, as it is in work by Gregory (1965) and Morris (1966). Both these researchers used Stott's Bristol Social Adjustment Guides. Gregory examined fifty-three children, aged six to ten years, in a small village school, and found a significant connection between reading failure and restlessness in all the age-groups. In contrast, Morris found generally greater signs of unsettledness and maladjustment amongst the poor readers, but not on any specific syndrome.

One talks thus in terms of the label of maladjustment, but what is largely being discussed here is the child's attitude to school: whether he fits in and likes school, or, on the contrary, either withdraws from school or becomes actively anti-social. It is hardly surprising if failing children have negative attitudes towards school. In a Sunday Times interview, one ROSLA<sup>1</sup> child described his lack of interest in school and his conviction that

1. ROSLA stands for Raising of the School-leaving Age.

school had little of value to offer him:

With me, I didn't want to sit in school, because I can go out there and learn and get paid for learnin'! Like when I was in there - I refer to it as 'in there' - there wasn't anything I could do, not anything I wanted to do. Apart from the art. They gave me art every day, they knew I liked it and that it'd be the only thing that'd keep me there.

(Time to Learn or Time to Kill, S. Times Mag. 17 Nov.1975, p.61)

On a somewhat more objective level, Hargreaves' work illustrates how the bottom streams in the secondary school may develop attitudes that are actively hostile towards the school. In "Social Relations in a Secondary School", Hargreaves describes how, in the role of a participant-observer, he studied the fourth year in one secondary modern boys' school. He found that there were two sub-cultures in the year, these corresponding largely to the streams the children were in: top streams or bottom streams. (The bottom stream, of course, would be the home of the poor reader.) Hargreaves noted that "in the low streams informal status is a function of a negative orientation to the school's values ... in the low streams, the boys do not approve of the teacher's definition of his own role and disapprove of pupils who meet the teacher's definition of the pupil role" (p.159). He continues: "Members of the low stream approve cheekiness to the teachers significantly more often than high stream boys ... in the low streams, physical power and fighting ability form a major criterion of informal status ... Low stream boys ... are frequently involved in acts of theft and malicious damage, but this is not true for high stream boys" (pp.167,168). The boys probably devise new norms through which they can achieve status; this was shown to be



very important in Cohen's (1956) description of delinquent boys and the culture of the gang.

Other school-related variables

The way maladjustment relates to attitude to school provides a lead into considering school-related variables rather than individual characteristics of the child. One would assume that some schools would be better than others at teaching children to read. A school such as the one described in the following quotation would hardly be expected to help towards maximum progress in reading.

We (the ROSLA children) had lessons upset all through the year, because they said the teachers weren't there. Very short-staffed. So we had a lot of stoppages. What got up my nose as well, especially when I was in one of the low classes, it was supposed to be a special class, for reading and such; if there was any tables to be moved or chairs carried, we usually got the job. Which I don't think any kid should do, because it cuts off their lessons.

(S. Times Mag. op.cit. p.61)

Although descriptions of schools such as this would suggest that schools play an influential role in determining the child's attainment, a number of studies indicate that schools have only a minor role to play in comparison with the important influence of the home. Jencks's (1972) work in America has recently become well-known in making this point. Peaker and Wiseman, in their studies described in the "Plowden Report" (1967), reached the same conclusion as Jencks. In Peaker's study, the reading attainment of 3,000 children (top infants, and top and bottom juniors) was examined, in relation to school conditions, home circumstances and

parental attitudes. Wiseman studied the attainment of ten-year-old children in Manchester schools. In addition to a general study, the parents of 200 pupils were interviewed, and the results were factor analysed. Reading tests were one of the three criteria for achievement.

Both Peaker's and Wiseman's studies show the lesser importance of the school in relation to attainment in comparison with home background. In Peaker's study, in the analysis between schools for all pupils, school conditions accounted for only 17% of the variance, in contrast to the 48% of the variance accounted for by the conjunction of parental attitudes and home circumstances. Similarly, in Wiseman's analyses, major loadings on the important factors were nearly all 'home' variables and not school variables.

However, the 17% of the variance accounted for by the school in Peaker's study is not that insubstantial an amount. In certain other analyses, school conditions were as important as, or nearly as important as, home background. In addition, as Peaker points out, the lesser importance of the school is partly due to the fact that schools differ less than families: the difference between the best and the worst schools is on the whole less than the difference between the best and the worst families. That school conditions do not account for a considerable proportion of variance in attainment does not mean that schools are having no effect, but that they are having a somewhat similar effect.

Although schools may be less important than the home in determining achievement, a relationship between some school conditions and attainment can be discerned. In Peaker's study, the teacher emerges as the most important school factor: length of teaching

experience, teaching quality (as assessed by an HMI), continuity of teachers, degree of responsibility, and long courses attended, all accounted for part of the variance. (This was in either the between schools or the within schools analyses, when a 'short list' of variables was used.) In the Sunday Times interview already referred to, one boy penetratingly illustrated the importance of the good teacher:

I'd like to see older teachers in charge of older boys, that's another thing I'd like to see. The young ones can't cope. One especially, a nice enough feller, we used to play him up like hell. If he hit us, we'd hit him. He was inexperienced. He grabbed one of the big kids by the throat, the big kid grabbed him, put him up against the blackboard, that sort of thing.

(S. Times Mag. op.cit. p.61)

Wiseman found that the major factor in the analysis of the attainment of the children in the 44 schools studied contained few school variables, but these included attendance (if one can call this a school variable) and homework given. Wiseman also comments: "The less important factors thrown up in the factor analysis provide some interesting results, particularly for the younger children of 7+ and 8+. Teacher turnover rate is shown to be particularly important here, as well as the presence of older teachers, of women teachers, and of married women teachers with children". (Plowden Report, Vol.2, p.371). Again, the importance of the teacher becomes evident. However, the qualification has to be made here that a variable such as teacher turnover rate is probably inextricably bound up with other school variables, and that there are probably no clear-cut cause-effect relationships with respect to this variable.

### Home background

We turn now to consider the set of variables that seem to be most important in distinguishing the poor reader from his peers, namely, the variables that constitute 'home background'. Home background emerges as more closely related to educational attainment than either individual characteristics of the children or school variables.

The index of home background commonly used is that of social class, this being determined from the father's occupation, in accordance with criteria laid down by the Office of Population Censuses and Surveys (1970). Children from the lower social classes are the most likely to be poor readers. Davie et al (1972), in the National Child Development Study of nearly 11,000 children born in Britain in one week, found that as early in the child's school career as seven, "The chances of an unskilled manual worker's child ... being a poor reader are six times greater than those of a professional worker's child ... If the criterion of poor reading is made more stringent, the disparity is much larger. Thus, the chances of a Social Class V child being a non-reader are fifteen times greater than those of a Social Class I child". (From Birth to Seven, p.102)

The close association between social class and attainment arises from the fact that many economic, social and attitudinal variables are related to social class; for, as stated above, classification into social class is based on occupation, which, in its turn, relates to income, education and attitudes.

Given the association between poor reading ability and social class, and between social class and other variables, a number of other associations with poor reading ability would be expected.

Thus, the poor reader would be likely to come from a family below average in income. As an example of the effects of low income, the hard struggle some families have to make ends meet is tellingly described in a Government survey, "The Administration of the Wage Stop" (1967):

Several families said they had difficulty in finding money for food on Wednesday and Thursday (i.e. the last two days before the payment of benefit) ... Lack of variety in food was a factor most frequently commented on, and bread and potatoes were eaten in large quantities ... The standard of clothing was generally poor, and keeping the children in shoes was obviously a difficulty with many of the families ... Similarly, stocks of bedclothes were low and in a few of the families were almost non-existent ... Seventeen of the families said that they had had their gas or electricity cut off at some time in the past and about a quarter said they commonly ran short of fuel during the winter.

(p.5)

To continue with the portrait, the poor reader may well live in grim housing conditions. Overcrowding and lack of basic amenities (e.g. a hot water supply, an indoor lavatory and a bathroom) all relate to social class. In the Plowden Report, a survey of families found that as many as 17% of Social Class V families lived in houses with no hot running water. Rowland (1973), carrying out a survey in a deprived area in London, describes some of the houses he saw in the following way:

The houses suffer from rising damp, woodworm and dry rot. In many cases windows remain broken for years mainly because the landlord, whether private or public, does not consider it worthwhile to repair them. Most houses have an outside toilet, no bath and no hot water.

(Community Decay, p.41)

Even when the social class is allowed for, the poor reader is more likely to live in overcrowded conditions and without the basic amenities detailed above. Thus, Davie et al found that, allowing for social class, "The effect of overcrowding is equivalent to two or three months retardation in reading age in the context of this analysis. The effect of absence - or shared use - of all basic amenities is equivalent to about nine months' retardation in reading age". (From Birth to Seven, pp.55-56)

Hand in hand with overcrowding goes family size. Again, the lower the social class, the more likely the family is to be large, but, even allowing for social class, the poor reader is likely to come from a family that is larger than average. (Davie et al, 1972). Moreover, the poor reader tends to be a younger member of the family (Rutter et al, 1970), and thus to have always had a smaller share of the available resources than the older children.

Somewhat surprisingly, there is no clear-cut relationship between reading ability and broken homes. Rutter et al found no relationship between whether or not the child was living with its natural parents and reading progress. Davie et al found that, although there was a relationship for children in Social Classes III Manual and above, there was no such relationship for children in Social Classes IV and V.

We turn now to parental education, literacy of the home, and parental attitudes. The poor reader is more likely than other children to have parents who left school at the minimum school leaving age (Davie et al). His home is likely to have a low "level of literacy" (Morris, 1966), and his parents may have negative attitudes towards school.

Elaborating somewhat, in the low-literacy home, the parents may read little except for newspapers and magazines, and the child may look only at comics. There will probably be few books in the house, and neither parents nor children will spend much time on reading.

As far as parental attitudes are concerned, Davie et al comment that the "middle-class family is more likely to take a keen interest in the children's formal education and have higher vocational aspirations for them than the working class family". (From Birth to Seven, pp.3-4). Davie et al found that there was a decrease in line with social class in the number of families who approached the school about their child's progress; this in turn related to attainment. There was a similar difference concerning the parents' aspirations for the child, as to whether or not they wanted their child to stay on at school beyond the minimum school leaving age. Some parents view school as useless and a waste of time:

Exams! Johnny, my eldest boy, he never had an O-level, he never had an A-level, but he's a photographer, he's got his own car, he's got a plot of land, probably getting more a year than the headmaster, Mr. Field ...

...He accomplished more in truancy than he accomplished in school. He objected to the system. It's constructive what he's done! Now, in the beginning, I used to give him hell. But gradually I came to his way of thinking. It took a long time, but I could see there was no point in it.

(S. Times Mag. op.cit. p.66)

As a summarising statement of the way all the disadvantageous factors listed above may relate together, a description from Rowland of one of several families he visited, in the course of his deprivation survey in London, is given below.

Case Nine.

Family of ten.

Rehoused in six rooms at density of 1.7 p/r.

Father unskilled and unemployed - existing on social security of £19 per week.

If he were working the most he could hope to earn would be £14 before tax.

Bad conditions, no inside toilet.

Father gets handouts from welfare officers and sells them - this has landed him in court.

Two daughters leaving home, setting themselves up in flat - both have illegitimate children.

Parents will not use contraception or be sterilized.

Children shoplift - no control exercised by parents.

Unable to plan day-to-day situation.

(Community Decay, p.127)

The relative importance of all the different 'home background' variables will now be discussed. The studies by Peaker and Wiseman already referred to form the main source of information on this subject.

Both Peaker and Wiseman concluded that, from amongst the different home variables, parental attitudes are more important than home circumstances. This conclusion initially is surprising, as one would not necessarily expect parental attitudes to emerge as more important than, say, the presence of basic physical amenities. However, the supporting evidence is rather less surprising than the conclusion.

First, it should be noted that, in Peaker's study, parental attitudes do not always emerge as more important than home circumstances. For example, in the analysis for Lower Juniors between schools, home circumstances account for 25% of the variance, parental attitudes for 20%. In the analyses for all children



between schools, the difference in variance accounted for is not very great: parental attitudes account for 28% and home circumstances for 20%. It is true, however, that for the analysis between pupils within schools, parental attitudes account for 20% of the variance compared to only 9% accounted for by home circumstances.

It is not only the interpretation of the above figures that make Peaker's conclusions less clear-cut. The variables that Peaker happily labelled as 'parental attitudes' do not seem to fall so happily into this categorisation. The most important variables regarded as forming part of parental attitudes were: aspirations for the child, parental interest in school work and progress, and literacy of the home. 'Parental aspirations' included the questions of whether a particular type of secondary school was wanted for the child, and whether a grammar school was wanted. As parents are likely to have some degree of realism about how their children are doing at school, it would be surprising if there were no correlation between this variable and attainment. In support of this surmise, parental aspirations were found to become more important as the child neared the top end of the primary school; that is, as his progress in school was presumably becoming the more visible.

'Literacy of the home' was another of the variables included amongst parental attitudes. It was so included on the grounds that it was "less firmly anchored to the past" (Plowden Report, Vol.2, p.183) than such other variables as father's education. Such a reason seems very peculiar; anchorage in the past or present does not normally form a criterion for calling something an attitude.

The validity of Peaker's findings as to the relative importance of parental attitudes and home circumstances has been dealt with at some length, because of the importance of the policies that may result from the conclusions drawn. For example, from the conclusion that parental attitudes are more important in relation to progress than home circumstances Peaker suggests that, rather than doing anything about the 17% of families in Social Class V who have no hot, running water in their homes, parent-teacher associations should be formed by means of which parents' attitudes can be changed - a nice, easy, non-radical step to take.

To continue with the discussion of the relative importance of the various home variables, an important point to be drawn, from both Peaker's and Wiseman's studies, is that 'literacy of the home' emerges as more closely related to reading ability than any other variable. Wiseman, for example, carried out three factor analyses from the parental interviews; one on attainment in general, one on brightness (defined as a standard score on attainment of 115 and above), and one on backwardness (defined as a standard score of 85 or below). Four of the seven variables that were important in all three analyses were literacy variables: membership of library, parents' reading, books in the house and child's reading.

Bearing this in mind, we move on to the next section; to formulate the variety of facts that have been given in this section into a clearer picture of the poor reader.

#### D. The Poor Reader in Context

A picture has been drawn of the typical poor reader. He is likely to be a boy, perhaps of below average intelligence, perhaps

below par physically, and perhaps maladjusted. The school he attends may well have inadequate facilities and poor teachers. Above all, however, the child is likely to come from the manual classes, to be a younger member of a large family, living in fairly poor surroundings. His parents are unlikely to value school, and he himself may be apathetic or hostile towards school. His home is low in literacy and he spends little time reading.

It is important to consider how all these different factors combine together to produce the poor reader. Why is it that the poor reader's portrait should have these distinguishing characteristics? Booth et al (1973) comments on "the case of the typical poor reader" as follows:

The causation of learning difficulties and of behaviour problems has been the subject of a great deal of research. In some cases there is a physical disability, and in others a deep emotional problem; but no combination of physical, developmental and psychiatric factors could possibly account for the overwhelming preponderance of learning and behaviour problems among children (especially the boys) from working-class families.

(Learning to Communicate, p.1)

If an explanation is to be given of the preponderance of certain features amongst poor readers, then consideration has to be given to the process of learning to read, and of the factors that are most important in this process.

Smith (1973) proposes that learning to read is a similar process to learning to talk. In learning to talk, the child is not directly taught rules about speech. Rather, he listens to people talking and himself attempts to talk. Practice is all important; and direct teaching may play almost no part in learning.

In the same way as with talking, "All proficient readers have acquired an implicit knowledge of how to read, but this knowledge has been developed through the practice of reading, not through anything that is taught at school ... Learning to read is not a matter of mastering rules. Children learn to read by reading". (Psycholinguistics and Reading, p.184).

In support of his argument that children cannot be directly taught to read, Smith cites results from an experiment which shows how complicated our system of phoneme-grapheme correspondences is. Only a limited situation was being dealt with: establishing correspondence rules for the 6,000 or so one- and two- syllable words in the comprehension vocabularies of six- to nine-year-old children. The 6,000 words were found to involve as many as 211 distinct spelling-sound correspondences. 166 rules were formulated, and 45 "exceptions". (Understanding Reading, pp.169-171).

The implication is that reading is such a complicated process that it would be impossible to teach such a skill. Smith offers a useful analogy:

The skill of riding a bicycle comes with riding a bicycle. We do not offer a child lectures, diagrams and drills on the component skills of bicycle riding - we sit him on the saddle and use a guiding hand or training wheels to make sure he does not fall off while he teaches himself the precarious art of keeping balance. Forcing him to worry about laws of motion and centers of gravity would obviously confuse him.

(Psycholinguistics and Reading, p.195)

Blair argues in the same vein as Smith:

There is no way that a person can become a good pianist without practicing on a piano; likewise an individual never becomes a good bowler without bowling, or a good basketball player without playing basketball ... John Cotton Dana had twelve famous rules for the improvement of reading. They were as follows:

- |                          |                                      |
|--------------------------|--------------------------------------|
| 1. Read                  | 7. Read things you yourself enjoy    |
| 2. Read                  | 8. Read, and talk about it           |
| 3. Read some more        | 9. Read very carefully - some things |
| 4. Read anything         | 10. Read on the run - most things    |
| 5. Read about everything | 11. Don't think about reading, but   |
| 6. Read enjoyable things | 12. Just read.                       |

(Diagnostic & Remedial Teaching, p.73)

The point has now probably been sufficiently well made. It is but a short step from the above argument to conclude, as Blair does, that the main cause of reading backwardness is lack of reading experience. "Unless a pupil has read considerably, it is inevitable that he will be deficient in reading. Poor readers invariably are individuals who read little". (op.cit. p.73)

There is an obvious corollary to the importance of practice in learning to read, and that is that little practice will take place if the child has no interest in reading. As Blair remarks: "for pupils to follow these (Dana's) rules ... they must develop a permanent and absorbing interest in reading". (op.cit. p.74) The only time when a child will have to read, if he has no interest in doing so, is when reading aloud to the teacher. Even when he is instructed to read to himself during a lesson, he may well not do so if he is bored. Blair notes further: "If a pupil is interested in an activity, he is likely to spend time on it. Pupils who are interested in reading, read many books ... The fundamental reason why many pupils do not acquire greater proficiency in reading is because of the lack of interest which would lead them to do considerable reading". (op.cit. p.70)

Given this view of learning to read (of interest leading to practice leading to perfection), the various correlates of reading ability can be seen to fit together into an integrated picture. Literacy of the home emerges as so important because it is likely to be the prime determinant of the amount the child reads. This is partly because it is likely to fashion the child's attitude to reading: his view of reading as important or unimportant, enjoyable or unenjoyable. Literacy of the home is also the index of whether resources for the child to read from are readily available.

Burt (1950) points out that, "Two months in every year, two days in every week, and all except five hours out of every twenty-four, are spent by the child not at school but somewhere else - at home, in the street, or wherever he takes his recreation. Hence much that is done in the classroom during the working day may be undone during the evenings and weekends when the child is at large". (The Backward Child, Third Edition, p.118). And when the typical poor reader is at large in his home, or in the streets, he lives in a predominantly non-literate environment, and adapts himself to this environment most successfully. He has no need or incentive to learn to read in his out-of-school environment.

Thus, Labov et al (1969), in their study of street-gangs in New York, found that reading was rarely used outside school, and ability to read gave no prestige within street-groups. The conclusion reached was that "the major problem responsible for reading failure is a cultural conflict. The school environment and school values are plainly not influencing the boys firmly grounded in street culture". (The Relation of Reading Failure to Peer-Group Status, Teacher's College Record, 70, p.402).

Brown and Herrnstein (1975) describe an analogous situation in relation to moral reasoning. The level of moral reasoning of 20 women prisoners was at Kohlberg's preconventional stages 1 and 2, and not at the conventional stages, 3 and 4. That is, there was concern only about the self rather than about any general social rules. Brown and Herrnstein comment on this:

What should one say of people who reason at stages 1 and 2 when the realities of the world they live in are also at stages 1 and 2? Have they not abstracted the principles it is intelligent to abstract in this situation? ... has the preconventional world many of them grew up in caused them to form the only intelligently realistic theories about the way the world works?

(Psychology, p.325)

The school presumably does attempt to mitigate the non-literate environment that the child lives in out of school. It cannot force the child to be interested in reading, but it can attempt to ensure that the child gets sufficient practice in reading. However, as we have already seen, the poor reader's attendance is likely to be poor (Wiseman); he may have inferior teachers who are unable to ensure that the child gets down to the task at hand of reading; he may be condemned to spending a substantial amount of time moving furniture rather than having reading lessons (Sunday Times Mag.); and he is less likely than other children to be given homework to rectify the predominant non-literacy of his environment out of school (Wiseman).

In addition, the child's apathetic or hostile attitudes towards school may ensure that he does the minimum amount of reading possible in school. That boys are more likely than girls to be poor readers fits in with this theory. Girls seem more prepared to sit and do as they are told - to read, even if the book in front of them is boring,

and hence to obtain sufficient reading practice not to be poor at reading. In contrast, a boy confronted with a book that bores him is more likely to refuse to read it, either overtly or covertly, and hence to become a poor reader. Thus, girls are unlikely to be poor readers, if they are of average intelligence, whereas boys may be poor at reading, even if they are of average or above average intelligence.

The poor reader then out of school adapts to a predominantly non-literate environment, and in school manages, in spite of the efforts of his teacher, to recreate this environment, so that further (perhaps painful) adaptation will be unnecessary.

The evidence given in this chapter is in many ways congruent with the following assertions made by Paul Goodman (1969, 1970):

Most people who have learned to read and write fluently have done so on their own, with their own material, whether library books, newspapers, comic books, or street signs. They may, or may not, have picked up the ABC's in school, but they acquired skill, and preserved what they had learned, on their own. This self-learning is important, for it is not at the mechanical level of ABC's that reading retardation drastically occurs, but in the subsequent years when the good readers are going it alone, and the others are either signing off and forgetting, or settling for a vestigial skill that makes it impossible for them ever to read an authentic book.

3. According to some neurophysiologists, given the exposure to written code in modern urban and suburban conditions, any emotionally normal child in middle-class surroundings will spontaneously learn to read by age nine, just as he learned to speak by age three. It is impossible for him not to pick up the code unless he is systematically interrupted and discouraged, for instance by trying to teach him in school.



But of course our problem has to do with children in the culture of poverty, which does not have the ordinary middle-class need for literacy and the premium put on it. Such children are not exposed to reading and writing in important relations with their parents and peers; the code does not constantly occur in every kind of sequence or behaviour.

(New Reformation: Notes of a Neolithic Conservative,  
Vintage Books Edition, 1971, pp.95,96)

To summarise the points being made, it was noted earlier in the chapter that the term 'literacy' can refer to both reading ability and the extent to which the skill of reading is used. In line with this dual meaning of the term, ability and use tend to go hand in hand, and the cultural context is the thing that provides the opportunity and incentive for use, and hence ability. The child brought up in a non-literate culture may be contrasted with one brought up in a bookish household. The former will never become literate; the latter can avoid literacy only by being in some way abnormal. How, then, can one best help children brought up in our literate society, but in only a 'semi-literate' culture?

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## CHAPTER 2

### HELP WITH READING DIFFICULTIES

#### A. Normal Remedial Provision

There is a great deal of concern amongst parents, teachers and the general public about children with reading difficulties: that these children should be helped to catch up with their peers and to be able to read and write easily. The main approach to the problem is to classify the children as 'remedial' and give them special 'treatment'. The very language used is redolent of what Baratz and Baratz (1970) criticise as the 'social pathological' model of cognitive development - rejection by classification. This is perhaps harsh, but examination will be made to see how successful remedial treatment turns out to be in practice. The various forms remedial provision can take will first, however, be briefly outlined.

Nearly every school makes some provision for its failing children. For example, the ILEA, in 1969, investigating remedial provision in junior schools, found that 95% of the schools surveyed gave extra help to children failing in reading. Similar results were obtained by Sampson (1969) in her national survey of remedial provision in primary schools, so this widespread provision is not just specific to the Inner London area. Of course, that most schools provide some extra help does not mean that all children in school who need such help are given it.

In the primary school the most common way of helping children is by means of withdrawal groups. As the name implies, the children are drawn out of the class for two or three hours a week and given extra teaching for an hour or so at a time, in a small group;

on average each such group has about six children in it (Sampson, 1969). In the ILEA survey, for example, it was found that withdrawal groups were used in 87% of the primary schools. Less important ways of helping poor readers in these schools included special classes for failing children (11% of schools) and individual tuition (37% of schools).

In the secondary school, the picture is rather different, in that far more use is made of full-time segregation and remedial classes, rather than small withdrawal groups. Sampson and Pumfrey (1970) studied remedial provision in 270 secondary modern and comprehensive schools. Only 40% of pupils given extra help were taught in withdrawal groups. 40% were taught in remedial classes which had an average number of 19 pupils in them. 52% of the schools had full-time remedial arrangements.

The schools also have the help of various outside agencies: the Schools Psychological Service, Child Guidance clinics, and, in some places, remedial reading centres which children may attend once or twice a week. Many education authorities employ remedial advisers, who visit the schools. However, notwithstanding all this outside help, remedial provision is most commonly arranged by the school to take place within the school.

Given that remedial provision is so widespread, the question arises of how effective such help is. As should be clear from the outline already given, remedial provision varies widely in nature. In line with this variation, the effectiveness of a range of different paradigms has been evaluated: for example, remedial provision provided by the local authority as a matter of course, and remedial teaching specially arranged for the purposes of the experiment; remedial

teaching given once a week, twice a week or full-time; remedial teaching given for varying durations - for six months, for a year, or for different periods of time with different children.

In spite of the different paradigms within which remedial teaching has been evaluated, remarkably similar results have been obtained. Generally, it seems that remedial teaching accelerates progress so that for every month of real time, two to three months' progress in reading age is made (Cashdan et al, 1971; Collins, 1961). One of the few organisational factors which seem to make a difference is that of group size. Cashdan et al (1971) found that groups of any size up to seven made about the same amount of progress, but once there were seven children or more in the group, less progress was made. It is surprising that, as long as the group is fairly small, the exact number of children does not matter. One would imagine that children taught individually would make more progress than children taught in groups, but this does not seem to be the case (Lovell et al, 1962; Cashdan et al, 1971). Observational studies would have to be carried out to understand why this is so.

As one would expect, the longer the period for which remedial teaching is given, the greater the progress made. Lovell et al (1962 and 1963) obtained correlations of about .28 and .29 respectively, between length of remedial teaching and progress made. Similarly, Cashdan et al (1971) found that the more sessions the children attended, the greater the progress made: children who attended 50 or more sessions made a mean of 35 months' progress compared to those who attended 1 to 9 sessions, who made a mean of 12½ months' progress. However, the length of time for which remedial teaching is given has no effect on

subsequent rate of progress.

Disappointingly enough, it has been found that although remedial teaching is successful in the short term, as soon as the teaching is discontinued, progress slows down. At follow-ups, say a year later, the group given extra help does not have a higher reading age than the control untreated group (Collins, 1961; Lovell et al, 1962, 1963). Because of its long-term lack of effectiveness, remedial education has been widely regarded in research circles as unsuccessful; this has not prevented it being increasingly provided for failing children.

Even more disappointing results have been found in relation to attitudes to reading. With attitudes, remedial teaching is not only unsuccessful in the long-term; it does not even have any noticeable short-term effects. Experiments which examine changes in attitudes to reading during remedial teaching provide uniformly negative results. Dunham (1960) found that, although the group given remedial help improved their reading ability significantly more than the control group, attitude to reading did not change significantly. Cashdan and Pumfrey (1969) carried out a long-term study of children given remedial help, and found no significant differences in attitudes in the long-term between children given remedial help and the control group. As Dunham found no improvement in the short-term, it is hardly surprising that no differences between groups were found in the long-term. Claims that remedial teaching is valuable in improving the child's social adjustment and attitude to reading come only from clinical studies of selected children.

The negative results from experiments could be due to real changes in attitudes not being discerned by the attitude scales used.

It is notoriously difficult to construct sensitive instruments for measuring attitudes. However, apart from the possibility of insensitive measurement, it is highly likely that the children's attitudes did not change for the better. The research literature on attitude change shows how hard it is, in real-life situations as opposed to the laboratory, to alter a person's attitudes. One must remember that the poor reader has grown up in a home where reading is not valued; he has received inferior tuition in class for a number of years, and all his memories of reading are ones of failure. Such a child is not likely to have a negative attitude to reading altered by a couple of hours of remedial teaching each week.

The lack of change in attitudes goes a long way towards explaining the ineffectiveness of remedial teaching in the long-term. It seems that remedial lessons do not have a fundamental effect on most children participating in them. They do not change the child's attitude to work or reading, and hence they do not affect his life-style at all. For, as was pointed out in Chapter 1, reading ability and educational attainment are generally deeply rooted in, or at any rate highly correlated with, basic elements of the child's life-style. Unless the child's life-style is altered, his attainment will only be superficially altered.

Why is it that remedial teaching does not succeed in altering the child's life-style? The explanation could well lie in the disparity that is evident between the children who are poor readers - predominantly working-class; and the methods used with the children - formal, subject-centred teaching, employing middle-class books. This statement needs amplification and, to begin with, the methods commonly employed in remedial teaching will be discussed in more detail.

The scanty evidence available on methods used in remedial work indicates that, despite great variation, in general there is an emphasis upon the teaching of specific skills involved in reading. Teachers presumably encourage the children to have positive attitudes towards reading, but hard work on phonic rules, or similar tasks, tends to come before "having a break, because I don't feel like reading today". Thus, Sampson (1969) in a survey of methods used in primary schools in remedial lessons, found that the majority of teachers (65%) saw methods in terms of the techniques used to develop reading skill, rather than in terms of motivational approaches. Only 7% of teachers used an approach based on the aim of bringing about a new attitude on the part of the pupil; and only 13% felt that above all the approach must have pupil-appeal. 15% of the teachers asked said that "the approach is entirely dependent on the needs of the individual", but, as Sampson comments, "Admirable as is the ideal of suiting the method to the child, and excellently as it is sometimes achieved, there is a clear possibility that some of the respondents were deceiving themselves". (Remedial Education Services, Remedial Education 4, p.62).

The direct subject-centred teaching described may be unlikely to change children's attitudes. As Booth et al (1973) comment, in their evidence to the Bullock Committee: "It may be that too great a reliance on formal instruction in remedial work can help to explain some of the disappointing results found in follow-up studies of children who have 'received' remedial teaching". (Learning to Communicate, p.8). This formal instruction may be especially unsuitable for disinterested, perhaps hostile, working-class children.

The type of book commonly used in remedial lessons may do nothing to help. Sampson found in her survey that reading series were widely

used in teaching reading. Many reading series seem very unsuitable for working-class children, and unlikely to change the child's attitude to reading, except for the worse. The 'Ladybird Key Words' scheme was the one most mentioned by the remedial teachers. This scheme is eminently middle-class in nature, and includes the children flying off in private aeroplanes, visiting daddy's friends, who live in vast mansions in the country with spacious and plentiful grounds (Book 8b, 'The Big House'). 'Ladybird' books in general conjure up the complacent air of a garden suburb. The Plowden Report noted that "the middle-class world represented by the text and illustrations is often alien to the children". (Vol.1, p.213) 'Janet and John', 'Kathy and Mark' follow the same pattern. Admittedly, there are now exceptions - 'Nippers' have a working-class context, while 'Dr. Seuss' books are in a fantasy world of their own. But these books are far less widely used than reading primers such as 'Ladybird'.

Much of the basic vocabulary is alien to the working-class child: 'Mummy and Daddy' instead of 'Me man and dad'. For children in larger urban areas, any rural context may be strange. Poverty denies the chance of family travel. As Creber says: "The middle-class life-mode and the range of experience with which many 'readers' deal ensure that the impoverished child has to struggle with unpicturable things as well as hard-to-read words". (Lost for Words, p.17).

This problem is aggravated in the 'remedial' situation with older children, who may find themselves forced to read in alien, infantile language about the life of very young middle-class children. (Lost for Words, p.17). 'Nippers', 'Inner Ring', 'Manxman', 'Crown Street Kings', the 'Les' series, are attempts to alleviate this situation, and are becoming more widely used.



Although in the rather different context of adult illiteracy in Brazil, Freire (1970,1972) scathingly comments in a similar vein to the above remarks: "As object his (the learner's) task is to 'study' the so-called reading lessons, which in fact are almost completely alienating and alienated, having so little, if anything, to do with the student's socio-cultural reality". (Cultural Action for Freedom, p.24).

#### B. Alternative Approaches

One is led to suspect that remedial teaching might have a greater impact if there was less concentration in lessons on short-sighted teaching of reading skills, and more concentration on motivational aspects, on the pupil's attitude to learning and to reading. In this way, a more fundamental change might be made in the child's approach to the situation. In line with this suggestion, Dunham (1960), after obtaining the disappointing results already detailed on lack of change in the children's attitudes, suggested that more attention needed to be paid "to the problem of getting the retarded reader to approach the reading situation in a wholesome way, particularly when his home and environmental conditions seem very unfavourable". (The Effects of Remedial Education, Brit.J.Ed. Psych. 30, p.175).

It could be argued that it is almost impossible to alter the retarded reader's attitudes; as already pointed out, in real life rather than in the laboratory, it is notoriously difficult to bring about attitude change. However, there is evidence from case-studies that poor readers' attitudes can be successfully altered. Thus,

Monroe (1932) in "Children who Cannot Read", details nine 'typical' case-studies, in almost every one of which attitudinal change was noted. For example, it was said of one boy, Dick, that by the end of remedial teaching: "His emotional reaction toward reading had changed from dislike to enjoyment. He showed pride in his accomplishment and an unusual perseverance in attack on hard words". (p.83) Comments in a similar vein were made about educationally subnormal girls described in "My Book My Friend" as, for example: "She has become highly motivated, has read a great deal, and, above all, has found that books can bring great pleasure". (p.66) Fernald (1943), in her classic work "Remedial techniques in Basic School Subjects", describes reactions of children to remedial teaching, such as: "He began to read incessantly ... His parents reported that he wanted to read all the time and that it was often necessary to turn his light out to keep him from reading too long after he had gone to bed". (p.280)

Given the right circumstances, it is evident that attitudes to reading can be changed. The major question that remains to be answered is what, for the majority of poor readers, will prove to be the right circumstances? There have been remarkably few attempts at evaluating different ways of changing poor readers' attitudes, especially in the context of the normal British school. However, some of the studies that have been carried out will be discussed in turn.

The first set of studies that will be briefly considered are those which pay attention first and foremost to the child's social adjustment. These studies are based on the premiss that if one helps

the child with social adjustment, then, as a spin-off, the child's attitude to learning and to reading will change, and reading ability will improve. To this end, play therapy sessions have been held with poor readers. However, Pumfrey and Elliott (1970), reviewing the evidence on the effectiveness of such sessions, concluded that experimental design has been so poor and definition of terms so vague that results are entirely inconclusive as to whether or not play therapy is effective with poor readers.

Whilst on the subject of social adjustment, two experiments by Lawrence (1971, 1972), both much cited recently, will be discussed. Both experiments dealt with the effectiveness of counselling with poor readers. Lawrence advocated counselling because he felt that poor readers were likely to have poor self-concepts and that a period of non-directive counselling might be helpful in improving self-concepts, and, from this, reading ability.

In the first experiment, four groups were compared, each containing twelve children. One group was given remedial reading teaching, one remedial teaching and counselling, one counselling and the control group was left alone. The emphasis in Lawrence's paper is on the fact that the group given counselling alone improved more than the other groups. However this difference was not significant in the comparison of remedial teaching and counselling with counselling alone.

Moreover, consideration of the experimental design leads one to graver misgivings. A comparison of counselling given by one person (the experimenter) and remedial teaching given by only one teacher does not provide a convincing test of the hypothesis. There is no way of knowing how far results can be generalised to other

teachers, and, more seriously, of how far the results may have been distorted by experimenter bias. In addition, numerous studies have shown remedial teaching is satisfactory in the short-term; therefore, unless counselling has better long-term effects than remedial teaching, there is little justification for replacing remedial teaching with counselling.

In a further paper, which also emphasises the successful results obtained from counselling, Lawrence examined the effects of counselling carried out by non-professionals rather than by professionals. The experiment was carried out in four schools, with 6 children from each school given counselling, and 6 children left untreated. In three out of four schools, the counselled children improved in reading significantly more than the untreated children. However, the comparison here was not between counselling and remedial teaching, but rather between counselling and nothing. As evidence on the relative merits of counselling and remedial teaching, this experiment is unrevealing.

Although Lawrence's ideas are interesting, his experiments, carried out in only a few country schools, do not provide convincing evidence in support of his ideas. Indeed, this whole line of investigation, placing the child's social adjustment first and foremost, as epitomised in play therapy and counselling sessions, may be taking the wrong line of attack. It would seem that a better way to deal with reading problems would be to aim at root causes. As was suggested in Chapter 1, the root causes seem to reside in the effects of low-literacy homes and inadequate schooling on the child's enthusiasm (or rather lack of it) for reading.

Details were given in Chapter 1 about the characteristics of

poor readers: the attitudes of parents and children to school, the low level of literacy of the home, the lack of interest in books and reading. Details have been given in the present chapter about the characteristics of normal reading lessons: how these are predominantly skill-centred, and use predominantly middle-class reading books. Putting these two sets of information together, it would seem that the best way of changing poor readers' attitudes to reading might well be by the use of books and materials that relate to the children's lives, culture and experience, and are therefore the more likely to be of direct and immediate interest to the children. As Bernstein (1970) says:

...if the contexts of learning, the examples, the reading books, are not triggers for the child's imaginings, are not triggers on the child's curiosity and explorations in his family and community, then the child is not at home in the educational world ... If the culture of the teacher is to become part of the consciousness of the child, then the culture of the child must first be in the consciousness of the teacher.

(Class, Codes and Control, Paladin Edition, 1973, pp.224,225)

This type of approach to teaching reading will be referred to from now on as the "interest-centred" approach. It will be contrasted with the more traditional approach which emphasises the teaching of reading skills. The more traditional approach will be referred to as the "skill-centred" approach.<sup>1</sup>

The interest-centred approach fits in with the general child-centred movement in education which has taken place in recent years. The Plowden Report, in 1967, endorsed the primary school, which "sets out deliberately to devise the right environment for children, to allow them to be themselves, and to develop in the way and at the

1. This nomenclature is discussed further in Chapter 4.

pace appropriate for them ... It lays special stress on individual ... opportunities for creative work. It insists that knowledge does not fall into neatly separate compartments, and that work and play are not opposite but complementary". (Vol.1, p.187).

Other educationalists have commented on the changes in primary schools: "The abandoning of a rigid time-table, the development of syllabuses geared to the interests of teachers and children, and an informally organized classroom". (O'Reilly, 1975, in Matthews (ed.), Trends in Primary Education, p.18).

Although there has been less change in secondary schools, the ideas of child-centred education are embedded in many of the newer curriculum projects, such as the Schools Council Humanities Curriculum Project, the Schools Council integrated Studies Project and Nuffield Science.

There has been a strong backlash against such progressive child-centred approaches, as evidenced in the various Black Paper writings. Assertions are made such as: "there is an obvious connection between the admitted slowing-down of the reading process and the general adoption of informal methods in British primary schools ... Children of low ability respond most enthusiastically to formal didactic methods which set out to instruct them, not to cajole them into learning". (Froome, 1975, in Cox and Dyson (eds.), Black Paper 1975, pp.10,11).

In spite of the Black Paper denunciations, it is questionable how far 'Plowden methods' have actually been adopted in schools. Bennett and Jordan (1975) categorised only about 7% of the primary school teachers they studied as Plowden exponents. However, the

question we shall move on to examine here is not how far Plowden methods are followed in schools, but rather how Plowden methods have been used in the teaching of reading. In what ways have teachers and researchers attempted to make reading relevant to children? A number of different approaches are considered below.

An obvious place to begin at is to make the content of the reading books used relevant to the children. The content may be made relevant in that the language may be that used by the children rather than a more standard version. Thus, in America, readers have been produced for black children specially written in their dialect. Baratz and Stewart "have produced several readers in parallel Black and standard versions". (Times Ed. Suppl. 25.5.73, p.32). An example of the text runs: "It is a boy live down the street from Ollie. He six year old, and his name Lester. He in first grade. Lester supposed to go to school every day. He always running away from school. When he hook school, Lester need some money to buy candy". (Times Ed. Suppl. op.cit.)

Such attempts are not confined only to America. The Pitea district of Sweden has a "distinctive, archaic and still vital" dialect (Downing, 1973, Comparative Reading, p.189). It has no literature, and teachers and public opinion frown on it. Osterberg (cited in Downing, 1973, op.cit. pp.189,190) translated Swedish readers into dialect, but left them identical in content. After ten weeks of instruction, the group taught with dialect readers was greatly superior in oral reading, reading rate and comprehension.

Apart from the language the readers are written in, the story-lines and the context of the books can be made relevant to the

children. To this end, as has already been mentioned, books such as 'Nippers' have been produced with working-class contexts. Other books have been produced with working-class adolescents in mind (the 'Les' series, 'Inner Ring', the 'Manxman').

The books can relate even more closely to the children's world, if they describe the neighbourhood the children live in. Fairman (1972), working with older infant-school children who were virtual non-readers, used specially prepared books about the neighbourhood. Three basic books were prepared, using some of the most common names in the area and with illustrations also based on the locality. Along the same lines, Centreprise, a bookshop in Hackney that is developing community-based publishing activities, has produced a simple reading book centred on three boys who live in the area. The book has many photographs of the boys and the neighbourhood in it, and has apparently been received enthusiastically in most of the local schools.

Apart from using books on the local neighbourhood, the learner can produce his own reading material. Sylvia Ashton-Warner (1963), describing her work with Maori children, outlines how she used this technique of 'organic writing' with the children, both because there were no suitable books for the children and because of the tremendous response of the children to such organic writing.

In 'My Book My Friend' a description is given of work along similar lines to Ashton-Warner's, this time with a class of twelve-year-old educationally subnormal (ESN) girls. The girls' writings on subjects of interest to them were typed out and bound into impressive-looking books; these the girls read and re-read, and showed proudly to visitors.

Apart from specially-prepared books, ordinary books that cater to



the various interests of the children can be used. These provide an attractive alternative to using books from reading schemes. Thus, the class of twelve-year-old ESN girls described in 'My Book My Friend', to begin with, were stolidly working through the Beacon reading scheme. Lessons were changed to individualised reading: a variety of simple reading books were provided on such subjects as folk tales, animal stories, adventure stories. The books were graded with different coloured tapes, according to level of difficulty, and the girls could choose freely from the appropriate level.

Use has been made of material that has not been specially prepared for poor readers, but rather forms part of everyday culture. Fader and McNeil (1969), in "Hooked on Books", enthusiastically report on the success of flooding a school for delinquent boys in America with popular material that related to the boys' interests and culture: newspapers, magazines and paperback books. As Fader points out, "publishers, editors and writers know that survival depends on producing words that people will read". (p.22) The boys apparently responded with enormous enthusiasm and many of them became 'hooked on books'.

There can also be an emphasis away from the teaching of reading towards changing attitudes through more practical activities. Ablewhite (1967) describes how lessons in one secondary modern school were changed from formal reading to a concentration on attitudes to learning; this involved visits outside school to watch men building roads and working machinery. Class activities included movement and mime sessions.

Thus, in numerous ways, teachers have attempted to make "the contexts of learning, the examples, the reading books ... triggers for the child's imaginings ...", to make the child "at home in the

educational world". (Bernstein, 1970, op.cit.) How successful, however, have these ventures been?

The teachers involved usually report optimistically on the results. Fader had no doubt that, because of his saturation of the delinquent school with popular reading material, many of the boys had become hooked on books. The writer in 'My Book My Friend' felt that the individualised reading and organic writing had been most effective in improving the attitudes of the girls to reading, in the way they related reading to their experiences and back again, and in the enjoyment they obtained from lessons. However, there is a need for more objective evidence on the success or failure of these various interest-centred approaches.

The experimental work that has been carried out on the preferences of children for books with middle-class and working-class contexts, at first sight, seems to mitigate against the arguments that have been put forward here for using books relevant to the children. For working-class children have been found to prefer middle-class books rather than, as expected, working-class books.

Ellison and Williams (1971) studied preferences for 'Ladybird', 'Griffin' and 'Nipper' books amongst 28 working-class and 28 middle-class children, matched for age and reading ability. 'Nipper' books, as already pointed out, have a working-class context. ('Uncle Norman' and 'Lost Money' were used.) Yet the working-class children preferred the 'Ladybird' books. This study has been criticised on the grounds that no information was given on the context of the research: the working-class children may have come from a mainly middle-class area and internalised middle-class values, or they may have given the answer 'expected' by the teacher.

In "What Children Like to Read", Hanson (1973) claims that his study "showed that nine year old working class children prefer conventional middle class settings for stories". (New Society, 17 May 1973, p.363). Hanson's study can be criticised on several grounds. However, the main point against it is that two pictures of houses and the opening passages of three books for remedial readers were used as condensed representations of highly diverse sub-cultures (middle/working class); then national class differences in story preference were inferred. Any conclusions drawn in this manner must be regarded as highly suspect.

Even if these studies are correct in showing that reading primers with working-class contexts were not preferred by working-class children, then the conclusion that can be drawn is not to condemn all books with working-class themes. Rather, it seems that so far reading primers specially produced with the interests of working-class children in mind have not managed to meet this interest. The majority of such books as 'Nippers' produced with working-class themes seem to consist mostly of trivial, everyday, fictional stories. As Ellison and Williams remark about 'Nippers': "Perhaps the themes of working class life were unrelieved by somewhat inadequate and pedestrian story lines". (Social Class and Children's Reading Preferences, Reading 5, p.9). Children may be more interested in particular individual themes in books, such as those on football or fantasy. Consequently these studies only reflect on one type of book used with poor readers.

What of the other studies mentioned? What do they show of the effectiveness of interest-centred approaches? In "My Book My Friend", encouraging results in terms of reading ability, attitude to reading

and general attitude to learning were enthused about by the writer. This study was, however, essentially a case-study rather than a well-controlled experiment. There was, for example, no control group against which results could be evaluated.

Fader claimed that his study was a great success in turning the boys on to reading, not only according to subjective impressions, but also on objective tests. According to the tests given, the children's attitudes to reading improved more than those of children in a control school. However, no information is given about changes in reading ages and, indeed, many of the children seemed to be reluctant readers, rather than poor readers. In addition, it is not possible to tell how far changes in the boys were due to the relevance of the material, and how far they were due to the extra attention being paid to the school, the provision of a great deal of reading material, and so on.

Ablewhite (1967) cites improvement in reading in support of his claim that the secondary school boys given formal reading lessons progressed less than the children with whom more emphasis was placed upon attitudes to learning. The head of the school commented: "Not only is there a clear improvement in standards of work but there has also been only one case of delinquency out of both classes this year and, for the first time I can remember, the children from those classes are actually talking about what they do in school". (The Slow Reader, p.20). However, the comparison being made here is between different year-groups. No information is given on the extent to which the year-groups were similar, in terms of intelligence or social class. That a greater amount of time had elapsed since the

Second World War may have been responsible for the greater improvement of the later-year groups; and besides, the study may well be outdated now, as it was carried out before 1950, when there was presumably rather a different educational climate.

About the only well-controlled study seems to be that already mentioned by Fairman (1972) in which books specially prepared about the neighbourhood were used with infant school children. 120 children in their second year in twelve infant schools in London were studied. The children were divided into matched experimental and control groups (the EGs and the CGs). Most of the children in the EGs did not score at all on the Holborn Reading Scale. The Control Groups had mean reading ages at least ten months below average. The EGs improved far more than the CGs: in the year during which the experiment was carried out, the EGs made an average gain in reading of about 1.2 years, whereas the CGs, who initially were the better readers, made an average gain of only about 0.4 of a year. Of course, the EGs may have had more attention paid to them than the CGs, albeit unintentionally; moreover, no information is given on what happened in lessons with the CGs. However, the groups were matched and had the same teachers, and therefore, it would seem reasonable to assume that the specially prepared books played some part in the much greater improvement of the EGs.

Thus, a picture has been drawn of poor readers: of working-class children from low-literacy homes, who fail to learn to read because of insufficient motivation and hence lack of practice in the actual task of reading. These children are labelled remedial and given extra help. The help varies widely in nature but in the majority of instances

concentrates on teaching reading skills, rather than on changing the children's attitudes to learning and reading. Remedial help is effective in the short term, but in the long term children not given such help make as much progress as those given it. This is a great indictment of remedial provision: if it does not enable children to make more progress than would otherwise be expected, there seems little point in providing it.

The lack of efficacy of remedial teaching may lie in a short-sighted concentration upon teaching reading skills, rather than upon aiming at more fundamental motivational variables. A number of experimental studies suggest that such an emphasis upon attitudes and motivation may be highly successful in 'hooking the children upon books!'. Yet the research studies, as far as design is concerned, are on the whole poorly conceived and executed, or else are carried out in setting atypical of normal remedial provision. Although theoretically it seems that an interest-centred approach may be highly successful with the bulk of poor readers, yet the experimental evidence is not sufficient to <sup>split infinitive!</sup> convincingly support or counter this supposition.

In the search for further evidence for or against interest-centred approaches and, at the same time, groping towards a more precise research problem and a suitable experimental design, I decided to carry out observations in schools of remedial provision. This further genesis of the research question is described in the next chapter.

CHAPTER 3  
TOWARDS THE EXPERIMENT

In the autumn term 1972 and the spring term 1973, I visited various educational institutions, in order to examine remedial organization in these institutions, and to observe remedial lessons. The aim of this empirical work was to enable me to see for myself the situation described in the last two chapters in action, and hence to help towards formulating a suitable research problem. Thus, from the observations of remedial lessons, I wanted to see for myself whether teachers mainly concentrated on the teaching of reading skills, rather than on changing the children's attitudes to learning; if traditional material, middle-class in nature, was used; if the children sometimes seemed bored with this material; if an interest-centred approach seemed likely to be a more successful way of helping the children.

Familiarisation with remedial provision was also necessary for a suitable experimental design to be worked out. For example, the observations could help in narrowing the field of investigation - in deciding what age the children involved in the experiment should be, and whether the experiment should be carried out in primary or secondary schools, or in other educational institutions.

A number of primary and secondary schools were visited as well as remedial reading centres and one 'diagnostic unit'. The places visited were chosen because they all had groups of older children being given help with reading, and because they were easy to gain access to, in that they were near geographically and they welcomed visitors. Most of the places visited were in Staffordshire and Cheshire.

### Remedial Organisation

To set the scene, a brief description of the way remedial provision was organised in the different institutions is given here. As one would expect from the surveys on remedial organisation described in the last chapter, the remedial teaching in the primary schools was on the whole given in small withdrawal groups, whereas in the secondary schools, larger remedial classes were more common. With the remedial reading centres, children in need of remedial help came from the local primary schools to the centres once or twice a week, often being brought by taxi, and were taught in groups of about eight. The diagnostic unit was rather different from the other institutions visited: children with behavioural or educational problems visited the unit once a week, for either half a day or for the whole day. The visits usually continued for about two terms. Only three or four children were present at any one time, and there were usually at least two teachers working with these children, so that the children received a great deal of individual attention. The many different ways in which remedial teaching can be organised is evident, even from this brief description.

### Materials and Methods

The remedial teaching observed varied widely in nature, but the majority seemed to be predominantly skill-centred, and to make use of traditional reading materials. This was especially the case in the primary schools. The reading schemes used in the primary schools included 'Beacon' (first published in 1922), 'Happy Venture' (first published in 1959, revised 1963), 'Gay Way' and the outstandingly



middle-class 'Ladybird' series. Slightly more go-ahead schemes were available, such as the 'Pirate' reading scheme, and a few more fascinating books along 'Dr. Seuss' lines were also occasionally viewed in use. Few books purpose-designed for working-class children, such as 'Nippers', were in evidence.

The methods used in remedial lessons in the primary schools were as 'traditional' as the materials available. The lessons usually consisted of some reading from a primer and some work on phonics. Thus, with one teacher, one child read a few pages aloud to the teacher for about five minutes, whilst the other children read to themselves from their current reading book. The teacher corrected and helped the child reading aloud, and usually explained one or two phonic rules encountered in the reading, either to the child alone or to the group as a whole. With another teacher, the group was taught as a whole. The children, all roughly at the same level of reading ability, read the same book, one child reading aloud, whilst the others followed. Sometimes, if the child could not read a word, other children supplied the answer. The story was discussed, and phonic rules were taught to the group as a whole. With another teacher, the children at the time were reading from the 'Ladybird Key Words' scheme, and also answering comprehension questions from these books. They drew and wrote, according to the instructions in the books.

In the diagnostic unit, the children seemed to divide their time between play and reading activities. On visits to the unit, I saw the children making collages, riding around on tricycles, playing with balls, water and with other toys. They seemed to be having fun. As far as reading was concerned, the teacher in charge of the unit

believed strongly in a phonic approach to the teaching of reading. A varied selection of reading books and reading games were available, and a 'Language Master' machine was also used to help in the teaching of phonic rules.

In the secondary schools, there was a rather wider range of material available. The Science Research Associates (SRA) 'Reading Laboratories', with their carefully graded approach, were popular. In one school, the lessons were structured round the SRA 'Reading Laboratories' and emphasis was also placed on phonic work. To this end, Stott's 'Programmed Reading Kit', Southgate's 'Sounds and Words', Ridout's 'Reading to Some Purpose' and Tansley's 'Sound Sense' were all much used. These series are all very formal in nature, consisting predominantly of phonic exercises. However, more interesting reading books, suitable for teenagers, were also available and were displayed round the room. These books included 'Inner Ring', 'Trend', 'Tempo', and the 'Pirate' series. The children could choose from these books after they had done some work from the 'Reading Laboratory', and they could also borrow these books to take home, if they wanted to do so.

The secondary school teachers seemed to try and provide a very structured approach. One of these teachers asserted that what his children needed above all was 'regular systematic teaching'; no mention was made of the children's attitudes.

In one of the remedial reading centres, a predominantly interest-centred approach was used. In one lesson, the teacher first read a story about a lighthouse to the children; they then drew a lighthouse, and wrote a sentence or two about the lighthouse. This provided a good opportunity for the teacher to talk about the pronunciation of

'ight', and to give examples of other words which have 'ight' in them. The children were then given plasticine with which to make light-houses. The teacher commented tellingly that these children, most of whom came from schools designated educational priority, seemed to have little idea how to play with plasticine, let alone how to read.

Another group with this teacher spent most of a lesson reading the Ladybird Well-Loved Tale "Chicken-Licken", rehearsing it as a play, tape-recording the play and following the playback. The lesson ended with the children singing. The songs were written in large letters on big cardboard sheets, and the children read the words as they sang.

In another lesson, the children first wrote their names and learned how to write the date. Then they chose from a variety of simple reading books (e.g. 'Breakthrough to Literacy'). The teacher either heard the children read or questioned them about the story. One boy had brought a microscope to show his teacher, and the lesson ended with a discussion of microscopes, and with the children looking at hair and thread through the microscope. The boy who had brought the microscope said that the next week he would bring a go-kart. The teacher said that she would bring her guitar, so that the children could sing as she played. As homework, the children were asked to find ten words with 'ou', 'ee', and 'oo' in them.

It can be seen that far less emphasis was placed in these lessons on straightforward teaching of reading skills, and far more on incorporating such teaching into work on topics of interest to the children. The teaching differed greatly from the lessons previously

described in which children sat and read from an old-fashioned reading scheme and learned phonic rules.

### The Children's Reactions

The range of methods used in the remedial teaching observed has been described. What, then, were the children's reaction to the various methods? Some instances were seen of the children enjoying skill-centred lessons. They would sit and read quite happily from old-fashioned reading primers, or work with concentration through lists of phonic exercises. This enjoyment depended in part on the personality of the teacher: if the children liked the teacher, they usually enjoyed her lessons. More consumable rewards could also be helpful: one teacher, using the unenthralling 'Ladybird Key Words' scheme, obtained great success by ending each lesson with presents of Smarties for the children.

However, often the children seemed bored in skill-centred lessons. Sometimes, this was because they were bored with the books they were reading. Two examples of this boredom are given below. Both examples are taken from interviews with children in a diagnostic unit.

Phil, an eleven-year-old, came to work with me for half an hour, bringing his reading primer with him. To see how much he was enjoying reading the book, I asked him whether he would prefer to read from the book or to do something else connected with reading and writing. He immediately said, "do something else", thus showing no desire whatsoever to read his primer; we spent the rest of the time writing a story about the time Phil fell off a wall and broke his leg. It is true that "a change is as good as a rest", but even so it was obvious that the

story Phil was reading in his book was not exactly gripping his attention.

Steve, an eight-and-a-half-year-old, also brought along his reading primer, a book from the 'Gay Way' series. He read about a page but, when asked if he would prefer to read another book, immediately went to the display of books and chose one from the 'Dr. Seuss' series. I was very struck by the complete lack of interest Steve displayed in his reading primer, and the immediate quick reaction in choosing the 'Dr. Seuss' book. Again, "a change is as good as a rest", and in addition the 'Dr. Seuss' book has few words on each page, and so may be easier to read. Moreover, it could be argued that dullness is a virtue when the aim is analytic. This, of course, forms part of what is being investigated in the present study: whether with these unmotivated failing children, interest comes first, or whether analysis and learning of sub-skills is the more important.

Moving now onto remedial lessons in general, the children's concentration in lessons was often very poor. Even though these children were being given extra help, a lot of time was successfully spent by them in the lessons not reading. Thus, in "reading-round-the-group", it was noticeable how, when a child's turn was coming up to read, he started concentrating and following in the reading book. However, as soon as he had finished reading, his attention might flag and he might well stop following. Thus, at any one time, only two children in the group might be paying attention: the child reading aloud, and the child whose turn to read came next.

In one teacher's lesson, the children spent a great deal of time

looking out the window or talking to each other. Almost the only time they concentrated on reading was when reading aloud to the teacher. Even then they were often interrupted by the teacher telling the other children to concentrate on their work. Thus, although the children were being given extra help with reading, they might do no more than five or ten minutes' reading in a thirty minute lesson, if that much.

On this point of the children only paying attention when it is strategically necessary, Chall (1967), on her tour of schools in the United States, noted: "In reading programs of all types, I often observed apathy among the children who were not working with the teacher. In most classrooms, such children were assigned tasks in workbooks or teacher-made worksheets. Generally, pupils working on these materials were listless and bored". (Learning to Read, Paperback Edition, p.272).

Similarly, Southgate and Lewis (1973), who observed infants during their reading lessons, found that only 54% of the time during the lesson was likely to be spent on activities associated with reading. This was the case even with the best-behaved infants and with those learning to read at a normal rate.

The remaining 46% of the time was used by the children for what might be termed 'diversionary activities'; for example, walking about the room, searching for lost or supposedly lost objects such as pencils, distracting other children by talking to them or by more aggressive acts ... whenever the child under observation noticed that the teacher was either glancing or walking in his direction, he invariably switched from diversionary activities to those activities in which he was supposed to be engaged.

(How Important is the Infant Reading Scheme?  
Reading 7, pp. 9-10)

One point to make is that if the poor readers observed can so successfully avoid reading within lessons, one imagines that they are even more likely to avoid it outside of lessons. Secondly and tautologically, if material is used in lessons that grips the attention, the children will not avoid reading. The children's lack of concentration points again to the importance of motivation, of trying to use reading material that will interest the children so much that they will want to concentrate.

Few examples of interest-centred teaching were observed, but in those cases where such an approach was used, the children seemed to be enthusiastic and lively: to enjoy making plays, singing, following the words to songs. The lessons seemed to catch the children's interest in a way not apparent with the skill-centred approach. Although the children would sometimes become too lively and talk too much, on the whole they threw themselves into the lessons.

### Quality of Teaching

Poor teaching of reading skills was noticed several times. For example, one teacher 'taught' a child a new word, by getting the child to repeat the word ten times; in between each repetition, the teacher commanded, 'Say it again'. The child repeated the word quite mechanically, without even looking at the printed word in the book. He was obviously not learning anything except how to repeat a word aloud ten times in succession. The teacher used this technique a number of times in one lesson.

In addition, the same teacher covered the phonic rules

concerning 'sh' and 'th' in a rather confused way. The teacher asked for the sounds of the letters, and the children gave the names; or the teacher asked for the names, and the children gave whole words in which 'sh' and 'th' occurred. There seemed to be an unreadiness on the part of the teacher to accept anything other than the answer she had thought of. Thus, when the children gave such words as 'ship' and 'thing', she did not say, "Yes, good, they have the sound we're talking about in them", but "No, I want the sound 's' and 'h' together make, not words they appear in".

A similar instance was observed in another school: the children had the requisite knowledge, but the teacher was dissatisfied because his question was not answered in precisely the way he wanted. On this occasion, the teacher presented a card with a picture of a tower on it. Underneath the picture was written 't..er'. The teacher asked, "What sounds are missing from the word?" A child answered, "It should say 'tower'". The teacher replied that he did not want to know what the word was, but what sounds were missing. Another child said, "the 'o' and the 'w' are missing", giving the names of the letters, not their sounds. Although the child had quite correctly stated which letters were missing, the teacher remained dissatisfied. The children had still not correctly read the answer in his mind; he wanted to know the sounds of the letters, not their names. The children thereupon embarked upon twenty minutes of work on giving the missing sounds from words. After the first few minutes, they understood the rules of the game and after that performed fairly well.

There are two points that must be made about this 'read-my-mind' syndrome. The first is that it is in a way perfectly under-



standable that the teacher, who has one answer to a question in his mind, does not realise that the children are supplying an acceptable alternative answer. This is a trap everybody falls into at times.

Secondly, it could be argued that the teacher is justified in what he is doing, in that he is aiming at attention to the question and word analysis. However, it seems inappropriate to provide negative reinforcement for these children; they have failed so much already that they do not need yet further failures to remind them of their inadequacy. This sort of teaching may be part of a skill-centred approach, but not part of an interest-centred approach. Again, a 'reading skills/'interest' opposition is evident, along with the question of which of the opposing sides will help the children more.

To summarise, the teaching observed varied from interest-centred to skill-centred, but the majority fell within the skill-centred camp; few teachers paid attention first and foremost to the children's attitudes. Many children seemed bored with their reading books, and did not concentrate well in reading lessons. This problem might well be overcome by the use of material which is better suited to the children's culture and interests. Much poor teaching occurred in lessons, and this seemed to result from emphasising the learning of skills rather than putting the children and their interest in reading first.

Generally, in these observations of remedial provision, nothing had been seen to counter the advocacy of the interest-centred approach, as outlined in the previous chapter. More than this, there were a number of signs that an interest-centred approach was precisely what many of the children observed were in need of.

The observations also enabled the area most suitable for further investigation to be decided upon. The area that seemed most undeveloped, and where research could most usefully be carried out, was that of withdrawal groups in the primary school. In these groups in the primary schools, there was widespread use of traditional reading schemes, especially 'Ladybird Key Words'. The children were reading such schemes even when there were newer and, on the face of it, more interesting books available in the school. In the secondary schools visited, a wider range of books was available and a variety of different activities were catered for.

In addition, research carried out in primary schools would be more useful than research carried out in remedial centres and diagnostic units, in that these other centres cater for relatively few children, and are much hampered by the organisational difficulties of getting children to and from the centres. The bulk of children in primary schools who have reading problems are given extra help in small withdrawal groups inside the school. Research carried out in this setting would therefore be applicable to a greater number of children.

Given these initial go-ahead signs from empirical observations, further theoretical analysis of the research problem was then needed; it is this that is described in the next chapter.

## CHAPTER 4

### A THEORETICAL COMPARISON OF THE INTEREST-CENTRED AND SKILL-CENTRED APPROACHES

#### A. The Distinction between the Two Approaches

The question under examination was whether an interest-centred approach to teaching reading would improve poor readers' reading ability and attitudes more than a skill-centred approach, both in the short-term and in the long-term. In more detail, the situation to be looked at was where the child who is a poor reader comes in a small group to a teacher whose aim is to advance the child's knowledge of reading. The teacher has different ways of achieving this aim. At one extreme, he may focus on the skill of reading itself and concentrate on teaching letter and word identification. At the other extreme, the teacher may focus on the child and his interests. Reading is incidentally involved in lesson activities, just as it is an incidental involvement for the fluent reader. The aim is to get the child to appreciate the role of reading as a means to developing his interests, and thus, possibly, to overcome the child's distaste, fear or passivity towards reading. Attitude to reading is regarded as being of value, both in itself and as a means to the end of improving reading skill.

The theoretical evidence, as detailed in Chapters 1 and 2, and the observations in schools, as detailed in Chapter 3, both led to the conclusion that an interest-centred approach has a good chance of improving poor readers' attitudes and hence their reading ability. Before more empirical work was carried out, however, further theoretical analysis was necessary. In particular, the distinction between the two approaches had to be carefully considered. For several

powerful objections can be made against making such a distinction, and against assessing the effectiveness of the approaches so delineated.

One objection centres round the impossibility of making prescriptions about teaching reading and hence the futility of evaluating different methods. Thus, the Bullock Report (1975) states that "there is no one method, medium, approach, device, or philosophy that holds the key to the process of learning to read". (p.xxxii) Such a statement may well be true, in that mass prescriptions applying to all children cannot be made. However, it may still be possible and useful to formulate prescriptions for particular groups of children, as, for example, backward readers with specific characteristics. It is this formulation of prescriptions for particular groups of children that is attempted in the present investigation.

In another attack on mass prescriptions, some teachers argue that each child must be treated as an individual, especially at the remedial stage. Poor readers should have individually formulated reading programmes. Whilst this is a most laudable aim, teachers who put forward this 'treat-each-child-as-an-individual' argument seem to be rather idealistic. It is often impossible, simply because of insufficient time and energy, to treat each child as an individual (however that vague phrase may be defined). Thus, teachers adopt recognisable teaching styles, irrespective of the children they are working with. (Sampson, 1969; Bennett and Jordan, 1975). Apart from the practical impossibility of treating each child as an individual, there is also the point that, if prescriptions for particular groups of children can be made, then it would be inefficient not to make and not to adhere to these prescriptions.

The second objection, or set of objections, centres round the distinction between the two approaches. A common rejoinder to a description of the interest-centred and skill-centred approaches is the comment: "But why don't you mix the two approaches? What is the point of keeping the two approaches separate? Why not take the best elements out of each?" One point that must be made in reply to this comment is that some mixing does take place. The difference between the two approaches is one of emphasis rather than of exclusion or inclusion. In the interest approach, there will be some teaching of reading skills, and, in the skill approach, there will be some relating of reading to the children's interests. A complete exclusion of the alternative emphasis would be very artificial. But mixing the approaches completely might be just as artificial; for in practice teachers usually emphasise one approach or the other (Sampson, 1969). Also, in further reply to the 'mix-them' argument, it must be pointed out that there is no clear reason why a 'mixed' approach should be better than either one of the other two in isolation. To assert that a mixed approach should be better is to raise yet another question that can only be answered by empirical investigation.

This question of whether the two methods should be mixed leads on to a more detailed consideration of the distinction between the two methods. A major criticism that can be made is that the distinction drawn between the two methods lacks precision. As the analysis to be made will reveal, it seems that this criticism has to be accepted; the distinction is imprecise. Yet, even so, it seems worthwhile to evaluate the effectiveness of the two methods.

The essential distinction between the two methods as outlined

at the beginning of the chapter was said to be a focus on the child and his interests rather than a focus on the skill of reading itself. The distinction between interests and skills links in with other distinctions commonly drawn in education. Working from children's interests falls into the progressive, informal, pupil-centred camp of teaching. Working on skills falls into the formal, traditional, subject-centred camp. However, what do such labels as these mean? How does what goes on in the classroom relate to these labels? And what light is thereby thrown on the interest/skills dichotomy?

Bennett and Jordan (1975) attempt to formulate "A Typology of Teaching Styles in Primary Schools" (Brit.J.Ed.Psych.45, pp.20-28). There seems to have been little empirical work on the subject in Britain apart from this recent paper. Junior school teachers were asked to fill in questionnaires on their teaching styles. The results reported were based on answers from 468 fourth year teachers. Bennett and Jordan identified seven factors constituting teaching styles. From a cluster analysis, twelve teaching styles, consisting of different combinations of the seven factors, were then identified. The authors concluded that there was no simple dichotomy in teaching styles, as is implied by such commonly used labels as formal/informal, progressive/traditional. Factors commonly regarded as progressive were combined as often as not with factors commonly regarded as traditional. For example, 'progressive' integrated teaching could be combined with the more traditional teacher-choice of work and restriction of movement and talk. The authors did not simply conclude that there was no straightforward dichotomy but went a step further in asserting that to talk even of a continuum, ranging from progressive

to traditional, was an over-simplification. For, apart from the styles at the extremes, each style had different combinations of progressive and traditional elements.

Equating the interest/skills dichotomy with the progressive/traditional one, then Bennett's research seems to suggest that such a distinction must be simplistic in the extreme. However, there are other possible viewpoints.

Teaching is multi-dimensional. Essentially the skills/interest distinction could be regarded as a distinction along one dimension only - that of lesson content. Now, other dimensions might be expected to vary in line with differences in lesson content. For example, organisational factors might vary, in that the skill-centred approach might lead to more formally organised teaching than the interest-centred approach. As long as the variation is constant between approaches, a perfectly reasonable distinction is being drawn between interest and skill teaching.

On the other hand, if Bennett and Jordan's work is taken at its face-value, it indicates that the different factors which constitute teaching styles are independent. Therefore, differences in lesson content should not lead to constant differences along other dimensions. In other words, lessons should only differ in whether the emphasis is on the child's interests or on reading skills, and other factors should vary independently of the method used. Once again, there is no problem. A perfectly reasonable and clear distinction is being drawn.

The question remains as to which of these diametrically opposed views of the interest/skills distinction is the correct one. The

answer is that we do not know. The final conclusion that must be drawn is as follows. The interest/skills distinction does seem to be a simplified way of categorising remedial methods. However, the distinction is still worth making, because the problem seems one worth examining. For the question remains: how successful will working from interests and culture turn out to be with poor readers? Will it be more or less successful than concentrating on reading skills? Will the children become hooked on books, as intended? The interest/skills distinction serves as a way of somewhat simplifying an extremely complex situation in an attempt to provide answers to the above questions.

The point may also be made that, even if the theoretical distinction is regarded as unsatisfactory, the distinction could still hold at an operational level. It is a fairly common procedure in psychological work to make distinctions and definitions at an operational level only. In any case, an operational definition is necessary, to make as certain as possible that the two methods are correctly implemented. In the next two sections, therefore, moves will be made towards defining each approach operationally. Teaching periods spent in the two different ways will be termed respectively from now on 'interest sessions' and 'skill sessions'.

Before we move on to define the two approaches operationally, brief consideration will be given to the way the two approaches fit into current theories of learning, reinforcement and motivation. Such theories could shed further light on the differences between the two approaches, and might also be useful later in explaining the effects obtained from the two approaches.

One of the most famous learning theorists, Skinner, will be discussed first, albeit very briefly. Skinner (1968) emphasises how



the knowledge that an answer is the correct one may act as positive reinforcement. Skinner stresses that reinforcement should be efficiently related to learning responses. Reinforcement should be positive rather than negative, and should be given at the time the correct learning response occurs. This should lead to a progressive shaping of the desired behaviour. According to Skinner, it is important to have appropriate schedules of reinforcement. At first, every correct response may need to be reinforced. Then, gradually, reinforcement could become intermittent, on a ratio or interval schedule.

As far as Skinner's theory applies to the two approaches outlined, one would expect more learning to take place in the skill-centred approach than in the interest-centred approach. For, in the skill-centred approach, there will be an emphasis on right and wrong answers, and hence the child will receive more of the reinforcement of knowing an answer is correct. Skinner's theory only has a rough application to either of the approaches. However, in spite of the looseness of fit, from his theory one would predict that the skill-centred approach would produce better results than the interest-centred approach.

Skinner's theory is based on the view that the knowledge that an answer is the correct one acts as a reward. This is an extrinsic reward. There may be other extrinsic rewards, which may be found by the child to be more reinforcing than that simply of knowing an answer is correct. Thus, in devising the interest-centred approach, it was assumed that comics, interest books and generally use of interests in the classroom would be extrinsically rewarding and, moreover, more so than knowing an answer is correct. Skinner would view the skill-centred approach as providing the greater extrinsic rewards, whereas others may view the interest-centred approach as so doing.

Then there is the question of intrinsic motivation as opposed to extrinsic motivation. Bruner (1966) identified three different forms of intrinsic motivation: curiosity, competence and reciprocity. Curiosity satisfies the need for novelty. Competence is the motive to control the environment. Reciprocity is the need to behave as a situation demands. J. McV. Hunt (1971) postulates that intrinsic motivation is inherent in our information processing systems. The complexity of the situation acts as a motivating force. The basic motivation for older children arises from incongruity between newly encountered events and past experience. Hunt puts forward the idea of the problem of the match. This is the problem for the teacher of finding the right level of incongruity for the individual child; that is, to structure a learning situation so that it will be sufficiently incongruous with past experience to be interesting but not so incongruous with past experience as to be frustrating or otherwise distressing.

Both Bruner's and Hunt's theories stress the importance of intrinsic motivation in learning. The interest-centred approach was devised with the intention that it should arouse intrinsic motivation in relation to reading. If intrinsic motivation is important, then the interest approach could lead to far better results than the skills approach.

An interesting analysis of the two approaches is in terms of the different rewards they may be supplying to children, within the framework of different reward preferences outlined by Dunn-Rankin, Shimizu and King (1969). These authors designed a questionnaire to assess children's reward preferences. In so doing, they classified rewards into five general categories: Adult Approval, Competitive Approval, Peer Approval, Independence Rewards and Consumable Rewards. From a number of pilot

studies with different sets of reward items derived from an original pool of over eighty items, four items were finally selected to represent each reward category.<sup>1</sup>

Within this framework of rewards, one would predict that the two approaches would provide different sorts of rewards. The interest-centred approach would be likely to provide mainly Independence Rewards, and the skill-centred approach would be likely to provide Competitive Approval and Adult Approval. The usefulness of this type of breakdown and the extent to which the approaches provide different sorts of rewards are discussed again in Chapter 14.

Now that these various motivational theories have been outlined, a return will be made to the main theme, that is, of giving operational definitions of the two approaches.

#### B. Defining the Interest-centred Approach

In interest sessions, the teacher focuses upon the child himself, his interests and experiences. If sessions are to be conducted that centre on the child and his interests, then an attempt has to be made to understand and appreciate the life of the child, both in and out of school. As Cole et al (1971) say: "The problem of transferring skills applied on the streets to the classroom is not solved by demonstration of the existence of the skill on the streets. The child must be taught how to apply those skills in the classroom. But before we can do this, we must understand the nature of street activity." (The Cultural Context of Learning and Thinking, p.233). Therefore, to begin with, consideration will be given to children's interests.

1. These items are given in Appendix E.

### Poor Readers' Interests

Often, the interests of failing children are dismissed in a few words. One may discuss with a teacher the possibility of using such children's interests in lessons, only for the teacher to brusquely say: "But these children have no interests. All they do is watch television and play out on the streets."

A number of research studies, in fact, support this dismal picture. For example, Morris (1966) questioned 100 good readers and 100 poor readers in junior schools about their leisure activities. She found that for the good readers:

...reading was only one ... of several activities with which they occupied themselves when not in school. Music practice, handicrafts and sports of various kinds were frequently mentioned... In contrast, only a small proportion of the poor readers engaged in these types of leisure activities. The majority said that they 'played' and gave no further explanation beyond such phrases as 'in the streets', 'with my pals', or 'with my toys'.

(Standards and Progress in Reading, p.218)

Barker-Lunn (1970) obtained similar findings. She asked boys and girls to choose from a list of activities those they liked doing best. She noted, for example:

Whereas the girls of above average ability chose 'reading adventure stories', 'doing crossword puzzles' and 'reading comics', all demanding a certain amount of concentrated mental activity, the girls of below average ability seemed to prefer the essentially 'play' activities of 'hide and seek' and 'hopscotch', and 'painting pictures'.

(Streaming in the Primary School, p.109)

Whitehead, Capey and Maddren (1975), in their research into

"Children's Reading Interests", make similar comments about a group of children "with few discernible interests and a tendency to spend much of their spare time in apparently aimless and unstructured 'mucking about' in the streets or 'on the rec'." (p.18)

These studies show that poor readers are less likely than other children to have firmly held key interests, such as in handicraft, ballet-dancing or ice-skating. Nevertheless, it is important to note that some poor readers will have such key interests, and that these interests could be used in sessions.

In addition, the reports referred to point to the existence of a vigorous street culture. It is true that there is an implicit condemnation of this culture in the reports: a condemnation of children playing out on the streets at no recognised or organised activity. In contrast to this point of view, the Opies (1969), in "Children's Games in Street and Playground", point out the history and culture involved in playing out on the street. The Opies comment:

When children play in the street they not only avail themselves of one of the oldest play-places in the world, they engage in some of the oldest and most interesting of games, for they are games tested and confirmed by centuries of children, who have played them and passed them on, as children continue to do, without reference to print, parliament or adult propriety.

(p.2)

Throughout their book, the Opies stress the antiquity of many of the street games and the way such games have been handed down through generations of schoolchildren.

Parties of schoolchildren, at the entrance to the British Museum, secretly playing 'Five-stones' behind one of the columns as they wait to go in, little think that their pursuits may be as great antiquities as the exhibits they have been brought to see.

(p.6)

There is a culture of the street. The value of this to the children concerned is unknown. However, it cannot simply be dismissed as necessarily less valuable than more organised activities. Furthermore, the children's culture extends beyond the street and beyond street games. There is a popular culture, centring round pop music, pop stars, television and football. For example, children aged between 5 and 14 watch nearly 25 hours of television a week on average. (Social Trends No.4. 1973, Govt. Statistical Service, HMSO).

Moreover, the popular culture, even for poor readers, includes reading material: comics and magazines about pop stars, love-stories, football, fishing and so on. Alderson (1968) attacks a Guardian author who said, "Let us take it that eventually the C-streamer has been taught to read. But let us also face that he doesn't read for pleasure and probably never will". Alderson's study "Magazines Teenagers Read" entirely disproves this. She concludes that "if the writer means that less-able children in a secondary modern or comprehensive school do not read for their own pleasure she is quite wrong". (p.78)

However, the use of such popular culture in the classroom is often frowned upon. The culture is regarded as trashy and of no value to the children, existing only for purposes of commercial and social exploitation. Thus, according to Mitchison, Holbrook suggests that "the devil is in our 'pop' culture", of which the "attitude to people is inseparable from the concern to deceive, distract and exploit". (The Secret Places, 1964, p.xi). This view is also held by Alderson who refers to

"magazines of the cheapest and most trivial kind". The feelings the use of popular culture in school can arouse is sometimes evidenced by vigorous correspondence in newspapers and periodicals. Thus, in the Times Educational Supplement (25-5-1973), one letter-writer asserted that schools which run discotheques "actively encourage children to become docile victims to the mindless machine-culture which has already destroyed so much of our true culture". (p.19)

The view which condemns popular culture in schools as a way of getting through to the children must be briefly discussed. First, it is not clear that all popular culture can be condemned out-of-hand as 'trash'. The criteria used to evaluate artistic merit are notoriously subjective. New art forms are often accepted only slowly. Stravinsky's masterpiece, "The Firebird", was booed off the stage the first time it was performed, being viewed as scandalous. It is true that there is a strong commercial element in pop music, but this does not mean the music itself is valueless. In addition, much art has been created in an environment of exchange, and on some kind of commercial basis (court patronage of eighteenth century composers, for example).

Secondly, even if pop culture is regarded as being poor art, this does not mean that it should not be used in schools. Fader argues that it is necessary to start from where the child is, with trashy magazines or whatever else may be useful, if there is to be any hope of getting the child to where we want him to be. In similar vein, Johnson and Johnson (1972) comment: "If Jimmy will only read detailed descriptions of World War III or IV then grit your teeth and hope for better things in the future". (The Use of Comics in Remedial Reading, Remedial Education, 7, p.34).

If, by using pop culture, the problem of illiteracy could be virtually abolished, then it would seem fully justified to use such culture.

In line with this argument, Scarborough (1973) found that non-educational television could be of educational value, sometimes outstandingly so. "In talking about a five-minute extract from 'Dad's Army' children were able to explore character in a way that 'teachers might hope for from a written passage, but might rarely secure from children of this age' ... children of a wide range of abilities were at ease in expressing their understanding and appreciation of what they had viewed". (Times Ed. Suppl. 14-11-1975, p.19).

This is not to say that all items should be used indiscriminately. Wertham (1955) shows the evil nature of some comics, and such items should be avoided. The teacher has to exercise a certain amount of discretion, whilst making sure that in so doing, he does not reject too much of what interests the child.

So it is claimed here that in spite of all the attacks made on poor readers' interests and culture, "if the culture of the child (is) ... in the consciousness of the teacher", the teacher will find elements that he can use. Once the elements have been found, what then?

### Relating Reading to Interests

An outline has been given of the interests poor readers are likely to have. Ways now have to be considered of relating reading to these interests. From the ideas put forward in Chapter 2, from the other literature available, and from the pilot studies described in Chapter 3, it was decided that interest sessions could include the following activities.



1. The use of simple reading books, relating to the child's general or key interests. For example, if the child is interested in cowboys, simple fictional and non-fictional books about cowboys can be used. In "My Book My Friend" a description is given of such individualised reading. "The books are arranged in sections in various parts of the room, according to the interest about which they are written. In September we began with five sections only. They were 'Fairy Tales', 'Animal Stories', 'Scripture Stories', books about everyday things, and 'Children and Animals of other lands'. Gradually, more sections were introduced". (p.15) The reactions of the children to this arrangement were described: "Margaret began enthusiastically with 'Hansel and Gretel'. She thoroughly enjoyed being able to choose the book and then to read it for as long as she liked. "Miss, I can't leave it" was her comment." (p.80)
2. The use of picture books and books with photographs. Hildick (1970) describes such books as "The books designed to be read (and looked at) with children, as distinct from those to be read to them or by them ... Skilfully done, as so many of them are, they form an excellent introduction to the feel of books, to their power to delight". (Children and Fiction, First Edition, p.82).
3. Writing and drawing. The children can write about subjects of interest to them, and draw and paint on these topics also. Often, children who say they hate reading are willing to write pages and pages on themes of interest to them.
4. The children's writings can be typed out and made into books. In 'My Book My Friend', the writer noted the girls' enthusiastic reactions to reading, in book form, their own writings: "all girls

seemed ready to read and re-read many times these home-made accounts of vivid incidents from their own cultural environment told in language that was truly their own". (p.42) In similar vein, Holbrook (1964), in "English for the Rejected", describes using duplicated copies of pupils' writing. "It always worked - there was always the naturally engaged concentrated silence, and acute critical interest". Other teachers confirmed this: "It was as though we had failed to make our reading matter until then, anything that captured the children's natural capacity for efforts which yield satisfaction". (p.237)

5. Use of comics and magazines. Johnson and Johnson (1972) point out that: "The untutored use of comics in the classroom usually results in a pile of tattered paper which represents a serious visual pollution problem". (The Use of Comics in Remedial Reading, Remedial Education, 7, pp. 33, 34). The comics are often too hard for the children to read, and the story can often be worked out from the pictures, without the necessity of reading. Johnson and Johnson suggest that these difficulties can be avoided and comics put to good use, by getting the pupil to make books from the comics. Comic strips are cut out, and captions written underneath. The finished product can be made into a book and then read by the child. Johnson and Johnson suggest further that: "Extended motivation can be maintained by the use of serials. Children seem to be suckers for the cliff-hanger technique and we have had children poised with scissors and paste in hand waiting for next week's issue". (op.cit.p.35)

6. Story-reading by the teacher. Hildick comments:

...fiction written to be read to young children is every bit as important as that which is written to be read by them ... Thus, as the skill (of reading) is being mastered an experience of the delights ... to which that skill is the key is being offered ... (Reading-to is more often regarded as an intellectual indulgence ... than as the basic necessity it is ... While most teachers would automatically allocate time for regular primer-using periods, few would give an equal, let alone a greater, amount of time for reading stories to their classes.

(op.cit. pp.78.80)

In support of the importance of story-reading, Cohen (1968), working in the United States, found that reading stories aloud to poor readers had beneficial effects on reading ability.

7. Use of pop records, as described for remedial lessons in a Borstal: "the teacher spends hours in a record shop, selecting cassettes of pop songs with good diction, and this has proved a great success. With her help, one fifteen-year-old was carefully following the words of the New Seekers' song My life's a circle. 'If I'd been taught like this at school', he said, 'I wouldn't be here now'." (Borstal-cum-Loo, New Society, 12 April 1973, pp.63-64).

8. Use of practical interests, e.g. cooking. In "No one to laugh at you", a report on home-based teaching with poor readers from London secondary schools, Jay (1973) notes: "One teacher described the multiplicity of skills which could be developed once the child's interest was aroused, in such things as cooking. Writing recipes, weighing, measuring, temperature testing and timing were all involved, and all demanded some reading and number work. One teacher used "treasure hunts" with clues and a sweet as the "treasure"." (p.5)

9. Outside visits. Reading and writing can take place in preparation for, and as a follow-up to, outside visits. In "No one to laugh at you",

Jay notes: "Some of the most rewarding sessions were when outside visits were undertaken. A half day at the top of the Shell Tower, at the Greenwich Observatory, at Kenwood or at the Natural History Museum brought a sensitive response and interest from hitherto withdrawn children". (p.5)

10. Encouraging the children to bring their own reading material to the lessons. If the children are to become independent readers, they have to be able to find their own material to independently read from. The last two sets of activities described below also contribute to the same purpose.

11. Visits to local libraries and bookshops.

12. Lending material to the children, e.g. books and comics.

Interest sessions could run along the lines described above, or could consist of any other activities which involve a focus on the child's interests and the relating of reading to these.<sup>1</sup> Difficulties may be encountered in holding such sessions. For example, a child may dislike books so much that he may refuse to do any reading. In this case, he may be willing to write and draw instead of reading. On the other hand, he may also hate writing. All that can be done then is to work on the child's interests, until such time as he is willing to read and write. Difficulties like these would each have to be considered separately, as they arose in the course of implementing the interest-centred approach.

For sessions to be regarded as a correct implementation of the interest-centred approach, some but not all of the activities outlined above would be included in each session. The aim of relating reading to interests would be adhered to. Even so, some deviations from the

1. Examples of, and information on, additional activities that can be included in interest sessions, are given in the descriptions of interest sessions in Chapters 5 and 9, and in Appendix C.

approach would be expected - days when no reading was done, or when more formal teaching was necessary. Provided the deviations in any one session did not take up too substantial a proportion of the time, the interest-centred approach would still be regarded as being correctly implemented.

### C. Defining the Skill-centred Approach

Cashdan (1970) outlined the alternative to interest sessions as those lessons in which teacher and pupil:

...work systematically through the basic reading skills, with the expressed aim of progressively advancing the pupil's mastery of the elements involved in translating the spoken into the written code, followed by their integration into the complex skills of efficient reading.

(Reading: Problems & Practices, p.167)

Sampson (1969) found that the most common techniques for imparting reading skills included using reading series, teaching phonics, and playing reading games to consolidate phonic knowledge and word recognition. Skill sessions will be defined here as sessions in which reading skills are taught according to the techniques used by those teachers who have the intention of directly imparting such skills.

The sessions will not be defined at a more theoretical level, as there seems to be little theoretical agreement about the reading skills that it is necessary to teach, and about the best ways of teaching these. For example, we know that reading involves knowledge of phoneme-grapheme relationships, but we do not know how many of such relationships it is necessary to teach and the best ways of teaching them. As one of the studies described in Chapter 2 showed, 166 rules were needed to account for the grapheme-phoneme relationships of only 6000 common one- and two-

syllable English words, and, even with all these rules, 10% of the words still had to be counted as exceptions (Smith, 1973). It would be impossible to teach all such phoneme-grapheme relationships. Children can be taught a few, but will have to pick up most on their own, without being explicitly taught them. Bearing the above in mind, the very term 'skill' session could be taken to be a misnomer. Misnomer or not, the content of such sessions can be outlined.

From examination of the literature and observations in schools, as described in Chapters 2 and 3, it was decided that skill sessions could include the following activities.

1. Use of one or more reading series. A reading series was defined as a simple set of reading books of gradually increasing difficulty, intended for children learning to read. In these books, there will be control over one or more of word introduction, word repetition, phonic difficulty, print size and spacing. The use of these books should enable the child to read material more exactly tailored to his level of reading ability than would be the case if the child were reading from a miscellaneous collection of simple books.
2. Phonic work: direct teaching of phoneme-grapheme relationships.
3. Written work, to help consolidate reading skills.
4. Dictations.
5. Comprehension work.
6. Spellings.
7. Use of workbooks. These might be based on a reading series, and could include comprehension exercises, word recognition exercises, phonic work, and reading games.

8. Use of workcards. These might be professional or teacher-made. As with the workbooks, they could consist of a variety of activities, all designed to consolidate reading skills.
9. Word recognition exercises, e.g. flashcards, word and picture matching.
10. Reading games, designed to teach phonic rules or word recognition, e.g. word lotto, crossword puzzles.

The above activities and the reasons why these activities should constitute skill sessions will now be discussed more fully.

The reading schemes that could be used were considered carefully, as it was likely that a great deal of time in skill sessions would be spent on activities connected with the scheme. The only criterion laid down for a scheme to be regarded as acceptable was that there should be a controlled gradient in the difficulty of the material. Stauffer (1969), examining a number of reading schemes and series, found that the only factor all the schemes had in common was that of control, in one form or another, over the difficulty of the material. Basing the definition of a reading scheme on Stauffer's work, it did not seem possible to define a scheme other than in terms of this common factor.

It was decided for a number of reasons not to restrict the choice of reading series simply to one or two schemes that fitted the definition given above. Although restricting the choice would have made the different skill sessions more similar, a number of reasons militated against such a restriction. These reasons are listed below.

- a. Theoretically, we do not know which reading schemes are best as far as organisation towards reading skills is concerned. For example, we do not know whether the 'Royal Road Readers', which emphasise phonics, are

more or less effective in improving reading ability than the 'Pirate' series, which has little emphasis on phonics.

b. As far as motivation is concerned, we do not know which reading schemes have the most appeal for children. For example, 'Nippers' and the 'Pirate' series were especially written to be of more interest to children than the run-of-the-mill reading scheme. However, the available evidence indicates that these two schemes are, if anything, of less interest to children.

c. Given that the material used in interest sessions was likely to be new to the children, then, for a fair comparison between approaches to be made, the material used in skill sessions should also be new. Different series would therefore have to be used in different schools, depending on the schemes previously used in the schools.

d. It would not have been fair to force a teacher to use a series he disliked, and therefore choice of reading scheme could not be unduly restricted. In normal teaching, remedial teachers use the reading schemes they prefer. Allowing the teachers in the investigation to do so would mean that the investigation would be kept the closer to real life.

e. If only one series were used in skill sessions, results might be specific to that series, and would therefore be of far less interest as far as everyday teaching was concerned.

f. The final reasons for allowing more than one reading series to be used in the experiment were that a child might need to read more material at a particular level of reading ability than is provided in one scheme. Also, the child might become bored using only one reading series, and he could then be moved on to another reading series. Again, this is the practice that is likely to be followed in normal remedial teaching.



The activities of written work, phonics, word recognition and comprehension exercises all form an important part of skill sessions. Often children need consolidatory work in order to remember information given in the course of reading from a scheme. Morris (1966) criticised teachers for not giving the children back-up work. She describes how the retarded readers she saw in Kent "were prompted whilst trying to read unknown words and shown how to build up those which happened to be regular from their component parts" but that "beyond being told to practise the passages recently gone over, they were not set follow-up activities to help reinforce what had been learned". Morris found that: "Not surprisingly, the children asked to re-read these passages made the same errors and omissions as they had done during the lesson and so had gained virtually nothing from it". (Standards and Progress in Reading, p.330). Clearly, consolidatory back-up activities should form an important part of any approach aimed at the imparting of reading skills.

Some, but not necessarily all, of the above activities would be included in skill sessions. For example, a teacher might not believe in teaching phonics and so might spend more time on the other activities. Also, additional activities not directly concerned with the teaching of reading skills, such as drawing, would probably be included in sessions. Deviations from activities concerned with reading skills would occur in normal remedial teaching, and, provided there were not too many of them, the operational definition would still be regarded as being adequately fulfilled. One deviation that would be unlikely to occur normally could arise if interest sessions and skill sessions were held with different children in the same school. Then the children in skill sessions might

demand similar 'treats' to the children in interest sessions. The number of such treats given in skill sessions would obviously have to be minimised.

#### D. Operational Definitions of the Two Approaches

The interest-centred approach. Reading is related to the children's interests through such means as using books related to interests, writing on interests, using comics, magazines, pop records, and so on. Although there may be some deviations within a session, a session in which the majority of time is spent on 'interest-reading' activities is regarded as falling within the definition of the interest-centred approach.

The skill-centred approach. Reading is taught by means of the techniques used by the majority of teachers to directly impart reading skills; for example, use of reading series, phonic work, word games, and so on. Although there may be some deviations within a session, a session in which the majority of the time is spent on skill-centred activities is regarded as falling within the definition of the skill-centred approach.

## CHAPTER 5

### INTEREST SESSIONS IN ACTION

Before a full-scale experiment was embarked upon, it was necessary to try out interest sessions, to see if they worked as well in practice as in theory. Sessions were therefore held with a number of children, in both primary and secondary schools. This took place during the course of two terms, the spring and summer term in 1973. The sessions were all conducted by myself, and the children were not chosen randomly. The results therefore have to be treated with caution. This was, clearly, a feasibility study, rather than a well-controlled experiment. As with the observations of remedial lessons described in Chapter 3, the comments made below on the interest sessions are essentially impressionistic, and they may well reflect the preconceptions and biases I had at that time.

A number of different facets of the situation were studied, whilst the interest sessions were being held. The children with whom the sessions were held were examined to see if they fitted the portrait of the poor reader drawn in Chapter 1. The children's behaviour was observed to see if the children were more involved than the bored boys and girls described in Chapter 3, who were being taught reading skills more formally. Changes in reading ability and reading habits were assessed to see if these indicated that sessions were being effective. Many of the activities listed in the definition of interest sessions were tried out, to see if they were satisfactory. Finally, with the full-scale experiment in mind, various tests were given in order to assess their suitability. Also, the construction of an attitude scale was begun, as all of the available scales were unsatisfactory.

The description of work with the children should give the reader a clearer idea of what interest sessions can be like in action. The

general idea of the sessions was described in the last chapter. Summarising briefly, the aim in such sessions is to change the child's attitudes to reading: to get him to like reading, so that he will read more on his own outside of sessions and after sessions have been discontinued. To this end, work is based on the child's interests and experiences, and reading and writing are related to these.

### The Children

Interest sessions were held with a number of primary and secondary school children, as well as with one young school-leaver. The sessions that will be described here are those that were held with primary school children and the school-leaver.

It had been decided from the initial observations in schools that the experiment would probably be carried out with primary school children. Consequently most attention was paid to this age-group. A few sessions were held with other age-groups, in case the results from these sessions would alter the decision to carry out the main investigation with primary school children. As the decision remained unaltered, these subsidiary investigations will not be further described, except for that with the young school-leaver. The sessions with the school-leaver will be described, as the child is the end-product of the school system, and also in view of the increasing attention being paid these days to the teaching of adult illiterates.

The following descriptions of sessions should give more idea of what is going on in the experiment outlined in the next few chapters. In the outline of the experiment, 'subjects' and statistics tend to take the place of people. The descriptions given in this chapter go some way towards redressing the balance.

We begin with the school-leaver, Michael.

1. Michael, an Illiterate School-leaver

Michael was a fifteen-year-old boy, who had left school eight months previously. (He was in the last year of fifteen-year-old leavers.) Michael's mother had approached a local community centre to obtain help for Michael with his reading. His parents were the driving force behind his 'wanting' to read. The mother was described by the Community Centre leader as a 'fussy, domineering woman'. The father had a small car-repair garage. Michael was the only child. He was quite a good-looking boy, always dressed in the latest fashions, with brightly coloured trousers and socks, and big boots.

He seems similar to the typical adolescent poor reader described in the BBC "Adult Literacy Handbook" (Longley, 1975): "Thin and small, he wore a clutter of ultra-up-to-date clothing. His whole appearance suggested a concerted effort to appear tough and with-it, to compensate for his slight physique. He arrived accompanied by his father who was anxious to sit in on the interview ... (The boy) looked relieved when his father was asked to sit in another room". (p.9) As Michael seems to be typical of poor readers of his age, observations on work with him may have wide applicability.

I worked with Michael for four months between February and June 1973. We met for one afternoon each week in the Community Centre. To begin with, he was given a reading test and was questioned about his reading habits and his interests. The testing took place in a small room with Michael on his own, and was carried out by myself. Eighteen interest sessions were then held with the boy. Each session was meant

to last for two hours in the afternoon, but Michael always managed to spend some of the time in diversionary activities, such as drinking coke, playing billiards and listening to pop music. About half the sessions were held in a large room in which three other boys were being taught 'social skills'. The remaining sessions were held with Michael by himself, in a small room.

#### Further description of Michael

To begin with, Michael was given Form A of the "Neale Analysis of Reading Ability" (Neale, 1958). This is an individually administered test of reading ability. It consists of short passages of increasing difficulty with accompanying illustrations. (A fuller description of the test is given in Chapter 7.) Norms for this test are only available up to the age of 13, but, in spite of this, the test provided what was required: a rough guide to reading ability. Before the test was given, I explained to Michael that the passages he was being asked to read were rather babyish, but that they would show where his difficulties lay, and that they could therefore be very helpful. Michael did not object, and seemed to do his best on the test.

He obtained a reading age of 6 years 10 months on the accuracy measure of the Neale test (and 7 years 9 months on the comprehension measure). He knew some of the letters of the alphabet and, using this knowledge as well as the context and the pictures, was able to read some words (e.g. a black cat). He read many common words wrongly (she, have, her) and other phonically complex words were also too hard for him (wandered, centre). He would guess at a word from recognising one or two of the letters in it. For example, 'time' became 'to me',

'wandered' was read as 'went', 'centre' as 'cart'.

When he wrote down his name and address, he misspelt every word. Even his first name was wrongly spelt, being written as 'Mihe'l'. Generally, words were spelt as they sounded, rather than as they 'should' be spelt. Michael knew how to write most of the letters of the alphabet, but even here his knowledge was imperfect, in that he wrote some letters in capitals and some in small print.

Thus, in ten years of schooling, Michael had made under two years' progress in reading on the Neale test. He could not write small and capital letters correctly, he was a very poor speller, and he could not write his name and address properly. Although no formal test of arithmetic was given, I later found out, through playing Monopoly with him, that his arithmetic was as poor as his reading. For example, he could not use the dice properly to work out how many squares he had to move.

He seemed a perfectly normal boy. On an intelligence test given when he was at school, he had apparently obtained an intelligence quotient of 85. (I was unable to find out what test was used.) Although this score is below average, it is by no means low enough to act as a severe handicap in learning to read.

Michael had left school eight months previously, and it is possible that his poor performance was partly due to his having forgotten some of the little he had picked up at school. Yet eight months is not a very long period of time, and one would not expect such basic skills as reading and writing to be forgotten almost completely in that period.

He himself said that he had never learned to read at school because there were always "boys at the back of the class mucking around and

throwing things, not letting the teacher teach anything".<sup>1</sup> He said he had had some remedial lessons, but did not learn much in these, partly because the lessons were held at the same time as woodwork classes. I received the impression that Michael spent most of his time at school sitting in the back of the class, playing around. The teachers presumably were unable to control the class sufficiently well to ensure that he (and the other children) did much work.

Michael received no help with reading from his home. His parents read a little; they took a local weekly newspaper, but no daily ones, and two weekly magazines on fishing. There was only one book in the home ('Treasure Island'). Michael himself had no books. He used to read comics, but he had stopped doing so.

The activities he pursued at work and at play were also of no help in improving reading ability. During the day he worked for his father, helping in the garage. In his spare time, he 'went out with the gang'. He also belonged to a boxing club and a fishing club. Although of no help in improving his reading, the extent to which Michael could learn when interested was demonstrated by the amount he knew about fishing. One of the first sessions consisted mainly of him talking about fishing techniques, fishing equipment and fishing competitions.

### The Interest Sessions

Activities that took place in sessions included the following topics:

1. Writing of name and address.
2. Reading and writing about fishing.
3. Looking at daily newspapers, both national and local.
4. Looking at magazines.

1. The descriptions of Michael at school and at home are based on what he himself said about his life. He seemed to be telling the truth and giving accurate descriptions.



5. Listening to pop records, and following the words to the songs.
6. Writing about airguns.
7. Learning traffic signs, and other signs (STOP, DANGER, ACCIDENT BLACKSPOT).
8. Reading books suitable for teenagers with low reading ages (e.g. the 'Manxman' series, 'Inner Ring').

All of these activities were of relevance to Michael. There can be little of more relevance than learning how to write one's own name. Michael's key interests at the time included fishing, dangerously firing airguns at people, and riding a moped illegally round the streets: hence the topic work on fishing, airguns and traffic signs. Even if he were riding a moped illegally, it would be less dangerous if he could read the traffic signs correctly! Apart from this, activities were pursued that were of general cultural relevance: looking at newspapers, magazines and listening to pop records. Local newspapers, with photographs of people whom Michael knew in them, proved particularly successful. Daily newspapers, with pictures of half-naked women in them, were also not unappreciated. One magazine with a story about a volcano exploding was well-received.

Michael also enjoyed following words to pop songs. These songs can provide very suitable reading material. For example, at the time of the sessions, 'Blockbuster' by The Sweet was Number One in the Top Ten charts for several weeks. This song begins:

You had better beware,  
you had better take care,  
you had better watch out,  
if you've got long black hair,  
He will come from behind,  
you'll go out of your mind.

As can be seen from the above quotation, this song has much repetition in it, as well as rhymes from which phonic rules can be learnt. In these respects, it is ideal 'learning-to-read' material, besides obviously being a part of popular culture.

Michael learnt to write his name and address correctly after about three sessions. If he can really learn this fast, the implications for the way he must have been taught at school are grim. On the other hand, this was quick progress, and he must have been re-learning to some extent what at some time or other he had learnt at school. The key question is: if he were seen again some time after the sessions had ended, would he still be able to write his name and address?

His behaviour in sessions indicated that he enjoyed listening to pop music, and looking at comics, magazines and books on fishing and other topics of interest. He attended sessions regularly, whereas if he had disliked the teaching, he would probably have stopped coming.

It must be pointed out, however, that when more traditional material was used with him, his reactions were not unfavourable. In one session he read the 'Ladybird Key Word' book, 4b. This book is babyish in content, but because it was at the right level of reading ability, it was easy for him to read. It would be unlikely to affect his views on the interest of reading material, however, except insofar as the very ease of the material leads to enjoyment. The extent to which easiness is important is a point which has been much argued about. Tansley (1972), for example, argues that interest must give way to ease of reading. Hence he produces a reading scheme that is boring by almost any criterion ('Racing to Read'). Fader, in "Hooked on Books", takes the opposite point of view from Tansley, asserting that if the interest is there, the difficulty of the material is unimportant.

On another occasion, Michael completed exercises on the 'magic E' rule from Ridout's 'Word Perfect'. Michael did not mind doing these exercises, because he could sit and work through them, without having to think other than mechanically. He knew exactly what he was meant to be doing. However, the usefulness of such exercises may be limited. They are so mechanical that the rules they are meant to teach may not be remembered, or the knowledge gained may not be transferred to normal reading.

Results on changes in reading ability and reading habits serve as a guide to the effectiveness of interest sessions. In the last session, Michael was again given Form A of the Neale test. On the accuracy measure, his reading age had improved from 6 years 10 months to 7 years 3 months - a gain of five months in four months of real time.<sup>1</sup> This is a smaller amount of progress than has commonly been found to result from remedial teaching, but previous studies have mainly used word recognition tests, such as the "Burt Rearranged Word Reading Test" (Burt, 1938) or Schonell's (1945) "Graded Word Reading Test". As Bookbinder (1970) shows, these tests have quite different norms from the Neale test. Bookbinder demonstrates that six months' progress on the Neale test may be equivalent to twelve months' progress on Schonell's "Graded Word Reading Test". If this is the case, then the progress made by Michael is at least as good as that found in previous studies of remedial teaching. In any case, results from previous studies are not comparable in that these other studies have all been concerned with younger children.

Past progress can be taken as a criterion by which to assess present rates of progress. Previously, Michael had made less than two years'

1. There was no progress on the comprehension measure of the Neale test, but it is argued in Chapter 7 that this is an extremely unrevealing measure, and that the accuracy measure should serve as the criterion of progress.

progress in ten years of schooling. In comparison to this rate, progress made during the sessions was extremely good, although re-learning is again a possibility. It may be concluded that, on the basis of the available data, the improvement in reading made by Michael during the interest sessions was encouraging.

Interest sessions are also aimed at changing reading habits. To this end, Michael was encouraged to borrow reading material, but he was unenthusiastic about doing so. He brought some material to lessons, arriving on occasion with a local newspaper or magazine, but even here his interest was limited, reaching its peak with the arrival of a pornographic magazine, carefully hidden in his jacket. Even so, it is possible that asking him to bring reading material to the lessons made him more aware of such material. Asking him what he had read at home seemed to work in the same way: he began to read simply because he was being asked about it, rather than because of great interest aroused in the sessions.

The amount Michael read at home seemed to increase slightly during the sessions. Whereas before the sessions he was doing no reading at all, during the sessions he mentioned looking at the logbook of his moped, pornographic magazines, comics and newspapers. Thus, there was a slight improvement in reading habits. It would be of great interest to know whether this slight improvement was sustained after the sessions, but unfortunately no follow-up study was carried out.

As a conclusion, it can be said that interest sessions with Michael seemed successful, in that he enjoyed himself, and apart from this, both his reading ability and his reading habits improved to some extent.

## 2. The Primary School Children

### Method

A nearby local education authority was approached for permission to work in schools in the area, and for advice on which schools would be suitable. The children described in this section were all drawn from one 'Educational Priority' school. A discussion was held with the head teacher and class teacher in this school. Interest sessions were described. Details were given of the children for whom they would be suitable, that is, backward readers, from low-literacy homes, without gross perceptual, emotional and intellectual difficulties. The head and class teachers then selected appropriate children.

The school was modern. It was one-form entry, drawing many of its children from an estate where a number of the problem families in the town had been re-housed.

Sessions in this school were held with eight children, four boys and four girls. The sessions were held in a small quiet room in the school. In the first session, the Neale test was given to each child on his own, and then a structured interview on reading habits and interests<sup>1</sup> was given to pairs of children. During the course of the sessions, four sub-tests of "The Wechsler Intelligence Scale for Children" (WISC) (Wechsler, 1949)<sup>1</sup> was given to each child on his own. The sub-tests used were Similarities, Vocabulary, Block Design and Object Assembly.

Interest sessions were held with the children twice a week, for thirty minutes for each group, from March to June 1973. The children were seen in pairs, except when a child was absent. Then the remaining

1. Further information on the interview and the tests used is given in Chapter 7.

child from the pair would have a session with another pair. Apart from this, the pairs were always the same. They consisted of either boys or girls. A maximum of 16 interest sessions was held with each group. The children attended an average of 13 out of the possible 16 sessions. In sessions, reading and writing were related to general or specific interests of the children, rather than concentration being placed upon the teaching of reading skills.

At the end of the sessions, in June 1973, the children were again given the Neale test individually and the structured interview on reading habits, to see how reading habits and reading ability had changed over the course of the sessions.

#### Description of the Children

As already stated, four of the children were boys and four were girls. They were aged between 9 and 11, with a mean chronological age of 10 years 5 months (standard deviation - SD - 7.1 months) at the start of the sessions. Two of the children were in the third year of the junior school, and six in the fourth year. All had fathers in manual occupations. One father was unemployed, although he had previously been in manual work.

At the start of the sessions, the children were considerably backward in reading. On the accuracy measure of the Neale test, they obtained a mean reading age of 7 years 1 month (SD 4.4 mths)<sup>1</sup>. In relation to their chronological age, they were retarded in reading by an average of 3 years 4 months (SD 8.8 mths).

The mean full scale intelligence quotient (IQ) obtained was below normal: 84.9 (SD 14.9) in contrast to an assumed normal score of 100.

1. Results for comprehension are given in Appendix D.

Verbal and performance IQs were similar to each other (86.5, SD 11.7 and 86.1, SD 17.9 respectively).

From the structured interview on reading habits, it seemed that reading in the home was mainly confined to newspapers, magazines and comics. All of the families took at least one newspaper a week, and most took newspapers daily. All of the newspapers were non-quality (e.g. the Sun, the News of the World). Half the parents had books of their own, but most read only the newspaper and sometimes magazines.

The children themselves did not look at books except for their school reading books. Three children said they had more than one book at home, two children said they had one book, and the remaining three said they did not have any books. When the children were asked what they had read in the last week, they all said that they had read only their reading books at school, and comics.

The children were questioned about how they spent their spare time, so that suitable topics for interest sessions could be found. The lack of relevance of reading to their daily lives emerged as strikingly from the answers to this question, as from the answers to the direct questions on reading habits.

All the children went home after school, had tea and then played out. A great variety of games were played outside. The boys played cops 'n robbers, cowboys 'n Indians, war, soldiers, and fighting, besides making dens and playing on a 'Tarzan-rope'. The girls played Tikinik, Tinker Nelly, Kick the Can, Draggler and hide 'n seek. Apart from playing out, the children watched television. All the girls liked pop music, and their favourite pop star was Donny Osmond. The boys were variously interested in pop music, swimming, drawing, birds and animals. Three

of the boys wanted to be soldiers when they grew up, and the fourth wanted to be a footballer. Two girls wanted to be teachers.

#### Description of Two Sets of Sessions

Interest sessions held with two pairs of children will be described. These were the two sets of sessions respectively most and least successful in terms of the children's apparent enjoyment of the sessions.

The most successful sessions, in terms of how much the children enjoyed themselves in relation to the interest-centred approach, were held with Keith and Paul. At the beginning of the sessions, these two boys had reading ages of 7 years 7 months and 7 years 0 months respectively. In the 'interests' interview, held at the start of the sessions, the boys said that they liked going out into the fields and woods and looking at birds and animals. This provided an ideal lead as to interests upon which sessions could be based, namely birds and, more generally, animals.

In most of the sessions, the boys either read simple books about birds, or else looked at books containing pictures or photographs of birds, birds' nests, birds' eggs, and so on. In addition, the boys looked at books about animals, they wrote about birds and animals, and they drew pictures. The boys were always enthusiastic and interested in the books on birds. They would come into the room at the start of the session and make such remarks as, "Have you brought any more bird books, Miss?" The session from then on would be punctuated by such exclamations as "Cor, look at that bird!" "Cor, another book about birds!" The boys were sometimes so engrossed in the books that they



would stay all through playtime, reading and looking at them. The girls with whom sessions were held in this school sometimes stayed through playtime, because they enjoyed being with the tutor, but the boys stayed only because they were enjoying looking at the books.

Books that were read by the boys included:

- Birds (Breakthrough Series)
- Birds (Macdonald Starters)
- Birds (the Clue Books)
- Birds and Migration (Macdonald First Library)

Books that were looked through and discussed, rather than read from cover to cover included:

- Life of Birds (Macdonald Introduction to Nature)
- Birds (Macdonald Junior Reference Library)
- Birds and their Nests (Bodley Head Natural Science Picture Books)
- Migration of Birds (Bodley Head Natural Science Picture Books)
- Piccolo Picture Book of Birds
- The Birds (Life Young Readers Library)
- Birds of Prey (Ladybird)
- Heath and Woodland Birds (Ladybird)

In spite of the boys' enjoyment of the sessions, gains in reading age were not astounding. Keith's reading age improved by a satisfactory four months to 7 years 11 months. Paul's reading age, however, improved by only one month to 7 years 1 month. Perhaps with greater long-term implications, the two boys seemed to be reading more than previously. When asked at the end of the sessions about what they had read during the past week, Keith said that, apart from comics, he had been looking at 'Birds of Prey' and Paul said that he had been looking at two Ladybird books, 'Garden Birds' and 'Dogs', and one other book on animals. This

would seem to be a direct result of the interest sessions.

Sessions with Peter and Philip were less successful in that the boys did not have such firmly held interests as Keith and Paul. Because of this, at times they tended to be rather silly and to play around. Peter was absent for part of the time and this broke the continuity of the sessions. However, the sessions were still fairly well enjoyed by the boys.

In their preliminary 'interest' interview, the boys talked about soldiers, fighting and the army. They liked playing war games outside, and they both wanted to be soldiers when they grew up. The sessions therefore began with the boys looking at books about war, soldiers, the army and fighter planes. This led on to them looking at books on planes in general, and also, from the fighting theme, to them looking at books on cowboys and Indians. The boys wrote about wars and fighting, and drew pictures connected with these topics. For example, Peter wrote:

I want to be in the army, to fly an aeroplane  
and drop bombs on the Germans, and fire at a  
plane ... I hit a plane, we won the war, no more  
fighting. I like the army. I cooked meals for the  
men ... I like the jet. They go fast in the world.  
And jet bombers, they are fast.

On several occasions the boys' writings were typed out and then re-read by them. They especially liked tape-recording what they had written.

In later sessions, some books on animals were looked at and read. (The boys requested this on seeing Keith and Paul looking at animal books.) Philip also wanted to look at books on sport, and so he read the 'Break-through' books on swimming and football. In addition, the boys drew and wrote on these topics. Philip liked the 'Dr. Seuss' books, and therefore he read two of these. In one session, he listened to a pop song, 'The Twelfth of Never', by Donny Osmond, and tried to read the accompanying

words. However, these were really too hard for him.

Over the course of the sessions, Philip's reading age increased by five months, from 6 years 6 months to 6 years 11 months. Peter was present for only just over half the sessions, as he was in hospital for part of the time. His reading age decreased by one month to 7 years 0 months. At the end of the sessions, when questioned about reading habits, Peter maintained that in the past week he had looked at comics and at two books, 'Captain Pugwash' and 'The Three Little Pigs'. Although this would indicate increased reading on his part, I felt that his behaviour in general indicated that his attitude to books had remained unchanged. The other boy, Philip, had only read his reading book and looked at comics during the past two weeks. No change in reading habits seemed to have taken place.

### Results and Conclusions

The results on changes in reading ability and reading habits for all of the primary school children will now be summarised. Reading ages for individual children before and after the interest sessions are shown in table 5.1 below.<sup>1</sup>

1. Additional information about individual children is given in Appendix D.

TABLE 5.1 CHILDREN'S INTELLIGENCE SCORES AND READING AGES BEFORE AND AFTER INTEREST SESSIONS.

Child's Name	Full WISC Score	Reading Before sessions (in yrs/months)	Ages <sup>1</sup> After sessions	Gain in reading age (in months)
Peter	70	7.1	7.0	-1
Philip	86	6.6	6.11	+5
Keith	109	7.7	7.11	+4
Paul	93	7.0	7.1	+1
Susan	78	6.11	7.0	+1
Ellen	62	6.10	7.2	+4
Sandra	96	7.7	7.11	+4
Wendy	86	7.1	7.5	+4

1. The reading ages were obtained using the accuracy measure of the Neale test.

Over the three months of sessions, with the exception of Peter, who was in hospital for nearly half of the sessions, each child showed a gain in reading age, varying from one to five months. At the end of the sessions the mean reading age was 7 years 4 months (SD 4.9 mths), compared to 7 years 1 months (SD 4.4 mths) at the start of the sessions. On average, in five years of schooling, the children had made two years' progress in reading. Therefore, they would be expected to make, in three months of schooling, a little more than one month's progress. On average the children made more progress than this (2.75 mths, SD 1.7 mths). Moreover, the median gain was higher than the mean gain, being four months. The degree of retardation in five of the children decreased. The sessions therefore seemed to be accelerating reading progress. In addition, from the interviews on reading habits, it seemed that four out of the eight children were reading more than previously.

These findings are slight, and their importance must not be exaggerated. Nevertheless, they indicate that the interest sessions were successful in accelerating reading progress, in changing reading habits, and in evoking enthusiasm in the children. The same conclusion had been reached from the sessions held with Michael. Thus, the interest-centred approach seemed to be working well.

However, many questions remained to be answered. Most important, would skill-centred teaching produce results that were as good? Would the above results also have been obtained by other teachers? What sort of long-term effects would interest sessions have? Could a sufficiently fundamental change in attitudes to learning be made? These were the questions that the main investigation set out to answer.

## CHAPTER 6

### THE HYPOTHESES

As described in Chapters 1 and 2, the majority of poor readers in school seem to be working-class children from low-literacy homes, who are not interested in reading and who are perhaps hostile towards school. They might have other problems but these are not, on the whole, of a severely incapacitating nature. Normal remedial teaching does not succeed in changing these children's attitudes, and consequently has no long-term effects on reading ability. An approach which uses the children's interests and culture to change attitudes could well be far more effective in turning the children on to reading than an approach which concentrates on straightforward teaching of reading skills. Good long-term effects should, then, be obtained from such an interest-centred approach. Visits to schools and the holding of 'interest sessions', as described in Chapters 3 and 5, supported these observations.

In the light of this theoretical and empirical work, it was decided to carry out a larger-scale experiment, to investigate further the effectiveness of the interest-centred approach. First, the interest-centred and skill-centred approaches were defined operationally, in terms of interest sessions and skill sessions. Then the hypotheses to be tested were worked out.

These hypotheses apply to poor readers, who do not have other severely incapacitating problems and who are given extra help with reading in withdrawal groups, by experienced teachers.

The hypotheses were as follows:

1. In the short-term, children who attend interest sessions will improve in reading ability more than children who attend skill sessions.
2. In the short-term, children who attend interest sessions will improve attitudes to reading more than children who attend skill sessions.
3. In the long-term, children who have attended interest sessions will improve in reading ability more than children who have attended skill sessions.
4. In the long-term, children who have attended interest sessions will improve attitudes to reading more than children who have attended skill sessions.

From the arguments set out in the first five chapters, it seemed likely that an interest-centred approach would be the most appropriate one for children who are failing in reading primarily through lack of interest. It could be argued, however, that for various sub-groups motivation through interest work is not the answer, and that a skill-centred approach would be the more appropriate one. Because of this possibility, subsidiary hypotheses were formulated concerning various sub-groups. Changes in reading ability in the short term, in interest sessions as opposed to skill sessions, would be analysed in relation to these sub-groups. The following sub-groups would be examined.

1. Girls. Girls often do not have strongly held interests, and they often seem to prefer to conform and to be told what to do. Therefore, it could be argued that girls who attend skill sessions will improve more than girls who attend interest sessions.
2. Boys.

3. Children of below average intelligence. Less intelligent children often do not have strongly held interests. Also, they may need fairly direct teaching in order to understand rules and to know when to use the rules they have learned. Therefore, it could be argued that less intelligent children will improve more with skill sessions than with interest sessions.

4. Children of above average intelligence.

5. Quiet, shy children. The argument about girls and children of below average intelligence improving more with skill sessions than with interest sessions applies to quiet, shy children also.

6. Aggressive and troublesome children.

The six hypotheses concerning these sub-groups are set out formally in Appendix E.



## CHAPTER 7

### THE DESIGN OF THE EXPERIMENT

The Institute of Education at Keele University runs a one-year, full-time course for experienced teachers, leading to the award of a Diploma of Advanced Study in Education, with special reference to Maladjustment and Deprivation. Practical work forms a major component of the course. The teachers are required to work in normal schools, and also to gain experience in units for maladjusted children and similar institutions. In 1973 it was arranged that, for the practical work in normal schools, the teachers should hold interest sessions and skill sessions with small groups of poor readers. In this way, it proved possible to carry out an experimental evaluation of the interest-centred and skill-centred approaches.

In this chapter, the design of the experiment is outlined. Selection procedures are dealt with first, and then the comparability of the two groups with whom interest sessions and skill sessions were held. Finally, the measuring instruments used in evaluation are discussed, as well as the measurement of other variables that could help to explain the results obtained.

#### A. Selection Procedures

##### 1. The Teachers

There were ten teachers on the Diploma course, five men and five women. They all took part in the study. They were aged from 25 to 52, with a mean age of 37. They had had from 4 to 25 years' teaching experience. The five youngest teachers had between 4 and 7 years' experience, and the other five all had 20 or more years' teaching

experience. Only one teacher had a degree. The teachers were from primary and secondary schools, and from schools for the educationally subnormal. Most had worked with deprived children or had taught reading. The teachers included two headmistresses and a head of a remedial department. Comments made by the schools from which they had been seconded ran along such lines as: "Her interest in and her success with the less able are second to none".

These teachers were, therefore, experienced and highly praised by their schools. They were well-motivated, in that they had opted to come on a special course in order to study educational theories and practice in more depth. They would seem likely to be better than the average teacher, and also one would expect that they would get the most possible out of any method. If a method failed with these teachers, then one would expect it to fail with most teachers.

## 2. The Schools

From preliminary observations and from theoretical considerations, it had been decided that the investigation would be carried out in primary schools. In order to minimise travelling time for the teachers and the experimenter, the investigation was carried out in a local borough near to the university. The education authority of the borough was first approached for permission to carry out the research in its area. This was duly given.

The area in which the study was conducted was, at the time, an Excepted District of a County, with educational provision administered by the Borough Council. The population of the borough was given as 76,590 in the Education Authorities Directory 1973. The total school roll was almost 17,000.

The borough consists mainly of a successful industrial town. Goods ranging from car cable harnesses to waterproof clothes are produced in the area. There are three collieries, employing 2700 miners. The town merges into a large conurbation, with over 250,000 inhabitants. Yet, as Pevsner (1974) comments, "it has its own unmistakable individuality. It is for instance not a town of slummy cottages mixed with obsolete-looking factories. Yet it is essentially an industrial town ... The first surviving charter was given by Henry III in 1235". (Staffordshire, p.208). The town has prosperous suburban areas as well as down-at-heel streets of small terraced houses. That is, it has its rich areas and its poor areas. It does not have the extreme problems found in decaying inner city areas, but it does have many relatively poor families.

There were twenty-one Junior and Junior-and-infant schools in the Borough. In June 1973, a letter was sent to all of these schools, to arrange a meeting with the head teacher. In the meeting, reading difficulties amongst the junior school children would be discussed, as well as the possibility of subsequent work with some of the children by experienced teachers on a course at the university. A follow-up letter was sent to those schools who did not reply to the first letter.

Nineteen of the twenty-one schools replied to either the first or the second letter. Two of these schools refused to take part in the study. Four of the remaining schools would have been willing to take part, but they did not have enough backward readers in the fourth year juniors.

In June and July 1973, the remaining thirteen schools were visited and the nature of the investigation was more thoroughly explained.

Information about the schools was obtained on this visit and noted on a schedule. (The schedule is printed in Appendix A.) In September 1973 a further meeting was held with all the co-operating schools, with the Assistant Chief Education Officer and with the remedial adviser for the area. In this meeting, the experiment was discussed, as well as practical requirements (time-tabling, provision of books, and so on). The children were then selected by myself in September and in the first week of October 1973.

Of the thirteen schools who were to take part in the investigation, ten were Junior Schools only. The other three were primary schools, with both junior and infant departments. Two schools were single-sex, one for boys and the other for girls. The schools varied in size from 160 to 370 children. Six schools were in modern buildings, and seven schools were in older buildings: one head said the buildings of his school were 100 years old. Three of the schools in older buildings seemed cramped, and the constraints on space were such that the head and secretary had to share a room. One school was situated next to a colliery, with the attendant problems of noise, shunting of trains and coal dust.

In the first meeting with the head teacher, the head was asked to describe the type of child that attended the school. Five schools had mainly working-class children, often from council houses and from large families. One head described the fathers as "casual workers, a lot are lazy ... a lot are on Social Security". Other schools had a range of children from lower-working-class to middle-class.

Twelve of the thirteen head teachers were men. The only woman was the head of the all girls' Junior School. Yet the class teachers consisted predominantly of women.

All of the schools had mixed ability classes. One head said: "If you have an A class and a C class, the C class hates the A class". In one school, the duller children of one year were put with the brighter children of the following year. In four schools, the children were setted for certain subjects, especially English and Maths. Other schools had only one class in each year and so could not practise setting. Three schools had remedial classes of 20 to 25 children for the morning or afternoon every day.

To sum up, the schools were chosen from one Borough, and consisted of all the schools in the Borough that would and could co-operate.

### 3. The Children

In selecting the children, there were two sets of guide lines. The first was the desirability of keeping the sample as homogeneous as possible, so that more clear-cut experimental results might be obtained. The second was the desirability of selecting the sort of children for whom interest sessions are primarily intended; that is, children who have not learnt to read largely because they are uninterested in reading and perhaps hostile towards school. Previous research indicates that this description should fit the majority of poor readers. The most obvious children who do not fit in are those with extreme intellectual, physical or emotional problems; also immigrants, children who have changed school many times, and so on.

With the twin aims in mind of homogeneity of the sample and selection of unmotivated children, it was decided to exclude the following groups of children from selection:

- a. non-readers and more fluent readers
- b. children from the non-manual social classes (IIINM and above)
- c. children with extreme intellectual, physical or emotional problems
- d. immigrants
- e. very irregular attenders
- f. children who had changed school three or more times.

Non-readers were excluded because such children might well be in need of basic tuition in reading skills, before being able to profit from an interest-centred approach. This is in spite of lack of interest probably being the main reason for their poor reading ability.

Children from the non-manual classes were excluded to keep the sample more homogeneous, and also because these children are more likely to come from high-literacy homes and hence to be failing in reading for reasons other than lack of interest.

It was decided that children would be selected from ten- and eleven-year-olds in the fourth year of the junior school. It had already been decided that the investigation would be carried out in primary schools. Selection was made from one year-group only to keep the sample more homogeneous. Working with fourth year juniors meant that the oldest children in the school were being studied. It seemed best to work with the oldest children available, as the older the child, the more likely he is to be disillusioned with and uninterested in reading. Fourth year juniors are also old enough to show a considerable degree of retardation in reading.

As stated above, children were required who were not non-readers and who were not fluent readers. The Neale Analysis of Reading Ability

was to be used in the selection.<sup>1</sup> This test has a base level of 6 years' reading age. A non-reader was defined as a child who did not score at all on the test; that is, he could not read such simple sentences as 'A black cat came to my door'. As far as more fluent reading is concerned, it was decided to exclude children who had reading ages above 8½ years on the Neale test. This meant that all the children included would quite clearly not be functionally literate, according to the Ministry of Education's (1950) definition of literacy as a reading age of nine years or greater (see page 5). The children also would be at least eighteen months behind in reading in relation to their chronological age. This is a considerable amount for ten-year-olds.

Selection was made as follows. The head teachers filled in questionnaires on all the children in the fourth year juniors who had obtained reading ages of 8½ years or below on the school reading test. These children were then given the Neale test. I gave this to each child individually. From the information provided in the questionnaires and from results on the Neale test, those children who fell into 'undesirable' categories, as listed above, were excluded from the study. Selection of the sample was then made randomly from the remaining children, taking into account the number of children available and required at each school.

#### B. Comparability of the Two Groups

If results from a comparison of two teaching methods are to be attributed to differences in the two methods of teaching rather than to other factors, then checks must be made and precautions taken to ensure that as far as possible other factors are not biasing results.

1. More details are given about this test in the third part of this chapter.

A description will be given here of the design that was used in the experiment, and the checks that were made on the children, the teachers and the methods, to ensure that the main difference between the Interest Group and the Skill Group was the method used with each.

1. The Children

a. Group size was held constant. Interest sessions and skill sessions were in all cases held with groups of the same size, except when children were absent. Although groups of six children are the most common in remedial education (Sampson, 1969), each group given sessions consisted of four children. The group size of four was decided upon because four was a more convenient number to work with than six, given the varying numbers of children in the different schools. One was able to choose units of four, eight or twelve children from each school, instead of only six or twelve children.

b. Matching of groups. The selected sample was such that one school was providing twelve children, five schools were providing eight children each, and seven schools were providing four children each. In the schools providing eight or twelve children, the children were divided into groups matched for sex and reading age. Methods were then randomly assigned to these groups. Schools providing four children only were paired according to geographical proximity. Then methods were randomly assigned within the pairs of schools. Thus, groups were balanced for sex and reading age, and, as methods were randomly assigned to groups, there should be no bias in the distribution of other factors.

c. Checks were later made to ensure that the groups were similar in intelligence and social adjustment. Both intelligence and social



adjustment could of course affect gains in reading ability.

Intelligence was measured by means of "The Wechsler Intelligence Scale for Children" (WISC) (Wechsler, 1949). It was decided that an individually administered test was likely to give a more accurate picture of the child's intelligence than a group test. The two standard individually administered intelligence tests are the WISC and "The Stanford-Binet Intelligence Scale" (Terman and Merrill, 1960). The WISC was chosen, as it has been more commonly used in investigations into reading difficulty than the Stanford-Binet Scale, and, therefore, it would be easier to compare the present investigation with other investigations. As it would have taken too long to administer the whole of the WISC to each child, only four sub-tests were given: two verbal ones (Similarities and Vocabulary) and two performance ones (Block Design and Object Assembly). Rutter et al used these sub-tests in their investigation on the Isle of Wight. The justification for choosing these four sub-tests lies in the finding, obtained from factor analysis, that the WISC measures two main factors which are composed of these two sets of sub-tests (Maxwell, 1959). In addition, correlations between sub-tests and total scale scores have been found to be high (Cohen, 1959).

Social adjustment was measured by means of "Bristol Social Adjustment Guides" (Stott, 1974) filled in by the class teachers for each child. Social adjustment was measured indirectly through the teacher rather than directly by questioning the child, because the children were already being given a number of time-consuming tests, and it seemed inadvisable to further lengthen the time occupied by testing. Two tests of social adjustment based on the teacher's view

of the child are available in Britain. One is a scale devised by Rutter (1967), but this is still in its development stage, and no norms are available. Therefore, Stott's (1974) Bristol Guides, for which standardisation data is available, were used. These Guides consist of a number of descriptions of behaviour: the teacher has to underline those words and phrases which describe the child for whom she is filling in the Guide. Scores can be obtained for under-reacting maladjustment (Unract) and over-reacting maladjustment (Ovract). Unract is based on three core syndromes: Unforthcomingness, Withdrawal and Depression. Ovract is based on two core syndromes: Hostility and Inconsequence.

Examples are given below of some of the behavioural descriptions that constitute each of the core syndromes.<sup>1</sup>

Unforthcomingness: waits to be noticed; too shy to ask; shy but would like to be friendly.

Withdrawal: never thinks of greeting; never makes any sort of social relationship good or bad; quite cut off from people, you can't get near him as a person.

Depression: too lacking in energy to bother; couldn't care whether teacher sees his work or not; too lethargic to be troublesome.

Hostility: can be surly; will help unless he is in a bad mood; inclined to be moody.

Inconsequence: attends to anything but his work; never gets down to any solid work; has a hit-and-miss approach to every problem.

(Bristol Social Adjustment Guides Manual, Fifth Edition, pp.36-39).

A strong criticism of the Guides is that behaviour different from normal is termed maladjusted, with the implication that this behaviour

1. The core syndromes are described further in Appendix B.

is bad; whereas the child might be responding to a situation he finds impossible with the behaviour best adapted to that situation. The problem here is that behaviour that is the norm can itself be regarded as maladjusted. For example, Laing has posited that schizophrenic behaviour is 'well-adjusted' and normal behaviour maladjusted, because normal behaviour involves the acceptance of many unpleasant facets of life.

While having these rather unacceptable, implicit assumptions, the Guides still serve to measure behavioural deviations from the norm, and hence were suitable for assessing whether children in the Interest Group and Skill Group deviated to the same extent.

## 2. The Teacher

a. Teacher personality and quality. If each teacher uses both methods, then such important factors as teacher personality and quality are to some extent controlled. Each teacher involved in the experiment therefore worked with two groups of children, holding interest sessions with one group and skill sessions with the other group.

b. The teacher's attitude towards the methods. Even if the same teacher is using both methods, he might prefer one method to the other and therefore unconsciously or otherwise, he might implement the preferred method more efficiently and with more enthusiasm. Attempts were made to prevent this happening by explaining to the teachers at the beginning of the teaching how important it was that they should remain neutral between methods. Reminders on this point were also given from time to time during the teaching. (Assessment

of the teachers' attitudes towards the methods is discussed in the last part of this chapter.)

### 3. The Methods

a. Implementation of methods. A common criticism of experiments in which teaching methods are compared is that it is not known whether the methods were implemented correctly, and, even, what exactly was done under the label of each method. It seemed essential, if meaningful results were to be obtained, to be able to describe what took place during the sessions, and to be able to say whether each teacher could be said to have held interest sessions and skill sessions, in accordance with the definitions of the two approaches.

To this end, observation was made by myself of one interest session and one skill session given by each teacher. Apart from this, there was continuous formal and informal contact with the teachers during the course of the sessions, in which activities pursued in sessions were discussed. However, the most important source of information on session activities was obtained from 'session accounts'. Shortly after holding a session, the teacher wrote a description of what took place on a 'session account form',<sup>1</sup> and gave this to me. The accounts were examined to see if appropriate activities had been pursued in the sessions.

In Chapter 4, operational definitions of interest sessions and skill sessions were given. Activities appropriate to interest sessions included the use of books relating to interests, writing on interests, the use of comics, magazines, pop records, and so on. Activities appropriate to skill sessions included the use of reading series,

1. A session account form is printed in Appendix A.

phonic work, word games, and so on.

For each method, it was recognised that some deviation from appropriate activities was likely to occur. It would be useful if the extent to which such deviations took place could be assessed. Each session account was examined to see if the majority of the time in the sessions had been spent on activities appropriate to the intended approach. If the majority of time in the session had been so spent, then the session was regarded as falling within the definition of the particular method. The percentage of sessions for each group which fulfilled the operational definition was calculated. Any group with whom a substantial proportion of sessions did not fulfil the operational definition could be excluded from subsequent analysis.

It was assumed that the session accounts gave accurate descriptions of the activities pursued in the sessions. In talks with the teachers it was stressed that session accounts should be as accurate as possible. However, there was room for error here. Presumably the teachers would not lie about what they did, but there might simply be unintentional discrepancies between what took place, what the teachers thought took place and how they wrote about what they thought took place.

### C. Measurement of Changes in Reading Ability and Reading Habits

The main purpose of the investigation was to see whether children who attended interest sessions improved attitudes to reading and reading ability more than children who attended skill sessions. It was necessary to consider carefully the measurement of attitudes and reading ability, so that any changes that occurred during the

course of the sessions would be reliably and validly assessed. It is for this reason that the tests used in measurement are discussed at some length below.

### 1. Reading Ability

The Neale Analysis of Reading Ability (Neale, 1958) was the main test used to measure reading ability. As described in Chapter 5, this is an individually administered test of reading ability. It consists of short passages of increasing difficulty with accompanying illustrations. There are three parallel forms. The Neale test was chosen, because it seemed preferable to use an individual test of reading ability, and it seemed the most suitable test available amongst the individual reading tests.<sup>1</sup>

### The Accuracy and Comprehension Measures

Three measures can be obtained from the test: of accuracy of reading, of comprehension and of rate. The accuracy measure is based on the number of errors the child makes in reading the passages aloud; the comprehension measure on correctly answering, from memory, questions about the contents of the passage; the rate of reading measure is based on the speed at which the passages are read. Only accuracy and comprehension were measured in the present investigations. Measuring rate of reading makes the test more cumbersome to administer, and in addition the rate at which a child reads may not be a good indicator of reading ability. Although information was obtained on comprehension, it was decided that accuracy would be taken as the most important measure of reading ability, and the criterion by which changes in reading ability would be assessed.

1. Further details are given in Appendix B as to why this test was chosen.

This was because the comprehension measure is rather a peculiar measure. It seems to be more a test of memory than of reading ability or of comprehension. For specific questions on content have to be answered from memory. Smith (1973) notes: "The proper distinction is not drawn between understanding what a sentence or passage or book is about, which means grasping the author's meaning, and recall of what was said, which is quite a different matter. While recall and understanding are related, in the sense that the former can rarely occur in the absence of the latter, committing detailed information to memory and retrieving it on a later occasion is a complex cognitive task that depends on much more than mere reading skill". (Psycholinguistics & Reading, p.191).

It is true that in the Bullock Report, the argument is put forward that, in monitoring standards of reading, instruments should be used which "assess a wider range of attainments than has been attempted in the past and allow new criteria to be established for the definition of literacy". (p.513) The reading tests used in national surveys are criticised for measuring only a narrow aspect of silent reading comprehension. As Start and Wells (1972) point out, the tests do not measure "what might be called the inferential aspects of reading, such aspects as the ability to follow an argument or extract a theme". (The Trend of Reading Standards, p.17). However, the children Start and Wells are discussing consist mainly of normal readers, with fluent reading ability. With such children, it may be true that all the different aspects of reading need to be assessed. But with poor readers, word recognition skills would seem to be of paramount importance. Other sub-skills involved in reading, such as inference and critical

interpretation, cannot come into play without reasonable word recognition skills.

Thus, in spite of the Bullock Report's criticisms of assessing only narrow aspects of reading performance, it was decided that accuracy would be taken as the measure of reading ability. Results from the comprehension measure are detailed mainly in Appendix D.

### Practice Effects

Before the sessions began, the child was given one form of the Neale test. (The Neale test consists of three parallel forms) At the end of the sessions, the child read this form again. However, practice effects, from taking the same test twice, might be artificially inflating improvement.<sup>1</sup>

The only work carried out to date on the susceptibility of the Neale test to practice effects is that by Netley et al (1965). Unfortunately, that study is unrevealing, as the test was not administered according to test instructions. It remains an open question, therefore, as to whether a child taking the test twice will do better the second time, simply because he has read the passages before. To check on this, at the end of the sessions, the child was given not only the form he had read at the start of the sessions but also one of the other parallel forms. If practice effects were inflating test scores, then the child should do better on the form he had read previously than on the new form.

1. Practice effect, in fact, is not important insofar as a comparison of the effectiveness of the two types of sessions is concerned, in that it would inflate the scores of both groups to the same degree, and so would not distort the picture of which type of session is the more effective in improving reading ability. Nevertheless, it was of interest in itself to have as accurate knowledge as possible of the real amount of progress made by the groups, and therefore to check on whether practice effects were artificially inflating test scores.



However, the issue is not as simple as this. If the forms are not exactly equivalent, practice effect might be obscured or exaggerated. For example, if all children were given Form A twice and Form B once, but Form B was actually easier than Form A, then practice effect might be occurring, but might not be evident. A balanced design, employing all three forms was therefore used, so that checks could be made on equivalence of forms as well as on practice effects.<sup>1</sup>

#### Experimenter Bias

As a check on experimenter bias, a group reading test, the "Schonell Silent Reading Test A" (Schonell, 1960) was also given at the end of the testing. All of the individual testing was done by myself, and results could have been biased by me, albeit unintentionally. However, results from a group reading test would be less likely to be biased by the administrator. The Schonell Silent Reading Test A consists of sets of short sentences, each set followed by a question which the child has to answer. The performance of the Interest Group and the Skill Group on the individual and group tests would be compared to see if children from the two groups fared differently on the two tests.

If checks on practice effects and on experimenter bias proved negative, then change in reading ability would be assessed by comparing the child's score on the Neale test before the sessions with the child's score on the same form of the test at the end of the sessions.

1. More details about the design are given in Appendix B.

## 2. Measurement of Attitude to Reading

Questionnaires on reading habits were administered before and after the sessions. Interest sessions are aimed at improving the child's reading ability through 'turning the child on to reading'. Obviously, one wants to know whether in fact the children have been turned on to reading, and to do this it is necessary to measure attitude to reading.

Previous research has shown the difficulty of creating sufficiently sensitive instruments for measuring attitudes and attitude change. In Britain, three scales have been devised specifically to measure attitude to reading; by Dunham (1960), Williams (1965) and Georgiades (1967). All three scales consist of statements about reading with which the child has to agree or disagree. Scale values are attached to the answers, and the total score is an index of the child's attitude to reading.

All three scales ask the child for his opinions and feelings about reading. Evans (1965) notes that: "It is too easy for a subject, knowing that he is under observation, to formulate views more for the benefit of his examiner than because they are those which he himself holds. This may stem from the desire to oblige, the desire to show oneself in the most favourable light". (Attitudes and Interests in Education, p.20). This may well apply to children even more than to adults.

If a child is asked questions about his actions rather than about his attitudes, he will probably be more likely to answer truthfully. For example, if the child is asked whether he likes reading, he may well say 'yes', whether he does or not; whereas, if

he is asked whether or not he belongs to a public library, he will probably answer truthfully 'yes' or 'no'. Therefore, instead of the children being asked about how much they liked reading, examination was made of how much they actually read. That is, attitude to reading was measured by measurement of the manifestation of the attitude in behaviour. Attitudes are commonly defined in terms of three components: cognitive, affective and behavioural (Krech, Crutchfield and Ballachey, 1962). It was the behavioural component to which most attention was paid in the present investigation. The more time a child spent reading, the more he was assumed to like reading. There may well have been exceptions to this rule - children who liked reading and yet had too many other hobbies to spend much time on it. However, a priori, in terms of the meaning of 'to like', there must be some correlation between liking for reading and the amount read.

With the above argument in mind, a questionnaire was drawn up, which concentrated on measuring reading habits; that is, the amount of voluntary reading carried out by the child. This questionnaire formed the basis of a structured interview, which was held twice with each child, once at the beginning and once at the end of the course of sessions. Change in reading habits was assessed by a comparison of the results obtained before and after the sessions.

To construct the questionnaire, I first examined previous questionnaires on the same subject, such as those used by Morris (1966), Barker-Lunn (1970), Schonell (1942, 1948). I then tried out variations of the questionnaire on 24 children (16 boys and 8 girls). The children in this pilot test were those with whom interest sessions were first held (see Chapter 5) and some of those children seen during the

preliminary observations in schools (see Chapter 3). The initial interviews led to modification of the questionnaire, until the one used in the main investigation was arrived at. This is printed in Appendix B.

As the questions were asked orally in an interview, the questions acted as a guide but the precise questions asked varied to some extent from interview to interview. There were both open-ended and fixed-alternative questions.

The child was asked the following questions about his reading habits:

- a. how he spent his spare time (in order to see if reading was mentioned as a spare-time activity)
- b. how much he read at home
- c. the number of books he had read at home recently
- d. whether he read or looked at comics
- e. whether he borrowed books from school
- f. whether he borrowed books from the local library.

The child was asked to back up affirmative answers with descriptions of the books or comics which he was claiming to have read.

Information was also obtained about the child's expressed liking for reading. This enabled the correlations between expressed liking, reading habits and reading ability to be examined. In this way it could be seen whether or not the criticisms previously made, of asking children to express likes and dislikes, were justified. The child was therefore asked:

- a. how much he liked reading
- b. how much he liked his present reading book

c. to name the lessons he liked most and least (in order to see if reading was mentioned as a favourite or disliked lesson).

In the interview at the beginning of the sessions, questions were also included about the literacy of the home, in order to obtain background information about the children. The children were asked about:

- a. the number of books belonging to the parents
- b. the number of books belonging to the child
- c. newspapers and magazines read
- d. parental reading habits
- e. parental help with reading.<sup>1</sup>

Reading scale scores for each child were calculated from the answers given by the child in the two interviews.<sup>2</sup> Separate scale scores were calculated for each of 'reading habits', 'liking for reading', and 'literacy of the home'. Scale scores obtained before the sessions were compared with scores made on the same scale after the sessions. In this way, it could be seen whether reading habits or attitudes had changed, and whether such changes had occurred more with the Interest Group than with the Skill Group.

1. An oversight here was not to include questions on siblings and how much they read. The level of literacy of the home could be substantially altered by the amount of reading carried out by the siblings.
2. Scale scores were calculated as follows. Scores made by a child on all relevant questions were added together. Then, correlations between individual items and the total scale score were worked out. In doing this, the scores for each item that had been asked twice (before the sessions and after the sessions) were added together, before being correlated with the total scale score. Then, the score a child made on any one question was multiplied by the correlation of this question with the total scale score, as well as by a factor that allowed for the number of categories that the answers could fall into. (Multiplying by this factor meant that each item would be equally weighted in the overall scale score.) The scores so weighted for all relevant questions were then added together to give a final score for the child on the scale.

D. Further Explanation of Changes in Reading Ability and Reading Habits.

In order to explain changes in reading ability and reading habits, and to see if such changes fitted in convincingly with the theoretical framework outlined in the first few chapters, some additional examinations were made:

1. of the children, to see if they fitted the portrait of the poor reader drawn in Chapter 1.
  2. of what the teachers said about the methods.
  3. of how the children behaved in the two types of session.
  4. of differences in activities in the two types of session, other than those that followed from the definitions of the two approaches.
  5. of correlates of progress in reading, irrespective of method used.
- Each of the above will be elaborated upon in turn.

1. Do the Children fit the Portrait?

Interest sessions were devised with a particular type of child in mind. The characteristics of the selected children were examined to see if these were congruent with the intended and expected ones. A number of the measures obtained primarily to compare the equivalence of the Interest Group and Skill Group were used to check on this point; for example, measures of intelligence, social adjustment, reading habits, literacy of the home.

Further information on the sample was obtained from the initial school questionnaire used in selection. The following information was so obtained:

- a. date of birth
- b. family size

- c. position in family
- d. description of home background
- e. child's attitude to school
- f. previous remedial help.

The Interest Group were also asked about their interests in a structured interview, which I gave to each child individually before the sessions.<sup>1</sup>

The primary purpose in giving the interview was to elicit interests from the children that could later be used in sessions, but the information so obtained would also serve to show the typical interests of such children.

## 2. The Teachers' Views

As stated earlier in the chapter, the teachers were asked to remain as neutral as possible towards the two methods, and to try and implement both methods with an equal degree of enthusiasm. However, although asked to remain neutral, the teachers would almost certainly have their own opinions about what was going on. These opinions might be most revealing in leading to an understanding of the effects obtained from the two methods. Because of this, a number of attempts were made to find out about the teachers' opinions of the two methods: by means of interviews, questionnaires, and from the session accounts.

During the course of the teaching, I held an interview with each teacher. The interview took place either at the end of the first term

1. The questionnaire which formed the basis of the Interest interview is printed in Appendix A. Interviews about interests had previously been given to 24 children, 16 boys and 8 girls. From the first of these interviews, a questionnaire had been drawn up on interests, and this was modified in the light of the later interviews. The final form arrived at was used with the children in the sample.

or at the beginning of the second term. In it, the teacher was asked how he felt about the two methods, and whether his views had changed since the start of the sessions. Further information about the teachers' views was obtained during the course of the sessions from informal contact with the teachers and from the session accounts. Then, when the sessions ended, each teacher filled in a questionnaire, in which he was asked about his views on the two methods, and how his views had changed since the start of the teaching.<sup>1</sup> In these ways, a comprehensive picture of how the teachers saw the methods was built up.

### 3. Behavioural Differences

The effects of the two methods upon behaviour was examined, as this might help to explain changes in ability and attitudes. As already stated, the class teachers filled in Bristol Guides for each of the children. After sessions had been going on for some time, session teachers also filled in these Guides. Differences in the class teachers' and session teachers' assessments of the children's behaviour, for the Interest Group and the Skill Group, would be examined. Such differences should show how the approach used was affecting the behaviour of the children, and hence perhaps, why the approach used had the particular effect on reading ability and reading habits.

### 4. Activities pursued in Interest Sessions and Skill Sessions

The session accounts were examined to see if interest sessions and skill sessions differed in activities pursued, other than those which were specific to the approach. For example, 'reading interest books' should be confined to interest sessions, and 'reading through

1. The questionnaire is printed in Appendix A.



a reading scheme' to skill sessions. However, reading itself could occur with equal frequency in either approach, and similarly with talking, writing and other activities.

The activities examined were: reading, browsing through books, writing, use of pictorial material, and talking. The number of sessions in which each activity was mentioned for each group of children was determined from the session accounts. From this categorisation, differences in activities in interest sessions and skill sessions became evident. This could enable the different effects of the sessions to be understood better.

#### 5. Correlates of Progress

In order to gain further understanding as to why some of the children improved and some did not, examination was made of other correlates of improvement in reading. The following variables were examined: intelligence, sex of child, social adjustment, reading habits, and amount of reading in sessions.

Such was the design of the experiment. The usefulness of the numerous measures obtained should become evident in the description of the experiment given in the next few chapters.

## CHAPTER 8

### A DESCRIPTION OF THE SAMPLE

#### A. The Population and the Sample

As stated in Chapter 7, the sample was to be drawn from all of the fourth year junior school children in thirteen primary schools in one borough, who had reading ages of  $8\frac{1}{2}$  years or below on the last school reading test given. They would then have to obtain reading ages between 6 and  $8\frac{1}{2}$  years on the Neale test. In addition, to obtain more unmotivated children and to increase homogeneity, the following criteria would be fulfilled. The children would be:

- a. from the manual classes (III Manual and below)
- b. not ascertained educationally subnormal (ESN)
- c. not said by the school to have extreme physical or emotional problems
- d. not immigrants
- e. not very irregular school attenders
- f. not frequent school changers.

Questionnaires were filled in by the schools on 143 children who had obtained reading ages of  $8\frac{1}{2}$  years or below on the last school reading test given.<sup>1</sup> All but eight of these children were given the Neale test. Six children were not tested because they were away at the time of my visits, and two children were obviously unsuitable for inclusion in the study. (One was Ugandan, and one had been ascertained ESN). Of the 135 children tested, 110 obtained reading ages of  $8\frac{1}{2}$  years or below on the Neale test, as well as on the school test. If it is assumed that

1. There were probably about five more children with reading ages of  $8\frac{1}{2}$  years or below on the school test: two headmasters, aware of the type of child in whom I was interested, did not fill in questionnaires on all the children in the fourth year who had low reading ages.

the eight children who were not given the Neale test would have obtained reading ages of  $8\frac{1}{2}$  years or below on it,<sup>1</sup> then there were in all about 118 poor readers in the fourth year of the primary schools involved in the investigation. The schools gave information in the questionnaires on the children's characteristics. From this information, nineteen children who did not fulfil the criteria listed above were excluded from possible selection. The reasons for excluding the children, and numbers of children so excluded, are shown in table 8.1 below.

TABLE 8.1 REASONS FOR EXCLUSION OF CHILDREN FROM THE FINAL SAMPLE, and NUMBERS OF CHILDREN EXCLUDED.

Reason for exclusion	Number of children
Non-readers (nil score on Neale test)	4
Social class (I, II or III non-manual)	1
Severe physical disabilities	2
Severe emotional problems	3
Ascertained ESN	2
Immigrants	2
Very irregular school attenders	4
Many school changes	1
TOTAL NUMBER	19
TOTAL NUMBER INCLUDED	93

Ninety-three children remained, from whom eighty were randomly selected to take part in the investigation. Groups of four, eight or twelve were selected randomly from the total number of children available in each school.

1. These children had obtained scores sufficiently below  $8\frac{1}{2}$  years on the school reading test, for it to be assumed that they would have obtained scores of  $8\frac{1}{2}$  years or below on the Neale test.

The first sample of 118 children is a sample from the population of fourth year children with low reading ages in the thirteen primary schools. The features peculiar to the region in which the schools are situated must be remembered. For example, there are few immigrants.<sup>1</sup> Apart from these peculiarities, this sample should be representative of poor readers of the age-group, and therefore, from now on, it will be referred to as the 'representative sample'. In view of the further selection criteria, the sample of eighty children who were finally selected to take part in the experiment is drawn from a somewhat purified population of poor readers. This sample will be referred to as the 'final sample'.

It is necessary to consider both samples, because one wants to know how the final sample arrived at differs from a representative sample of poor readers; and also how far both samples meet the picture of the poor reader drawn in Chapter 1.

It could be maintained that the final sample was atypical of poor readers, in that children with the gravest problems had been selected out, leaving a group of children that was too normal to be safely considered representative of poor readers. However, only the most severe cases of handicap were selected out. For example, a child was considered to have an extreme intellectual problem only if it had been ascertained ESN. Therefore, many children of low intellectual ability were included in the study. Similarly, very irregular attenders were excluded from the study, but irregular attenders were included. In addition, detailed epidemiological studies, such as that carried out in the Isle of Wight, reveal the high level of unnoticed multiple disadvantage, and it is therefore only to be expected that the children

1. Fuller details about the region were given in Chapter 7.

in the sample will have handicaps other than poor reading ability.

Even so, the final sample represents a purified population of poor readers. Particularly important, as ascertained from later examination, was the fact that non-readers and very irregular attenders had been excluded. These two groups were later found to have more unfavourable attitudes towards school than the other children, and so the most hostile children may have been left out of the study. However, to conclude, it must be stressed that the final sample remains representative of by far the majority of poor readers.

#### B. The Children's Characteristics

In this part of the chapter, the characteristics of the final sample will be detailed. This is for three reasons: first, to provide a composite picture of the children involved in the investigation; secondly, to provide further information on variables related to poor reading ability; and, finally, to see how far the children fit the picture of the unmotivated working-class poor reader drawn in Chapter 1. This last reason is important, because interest sessions were devised with a particular type of child in mind, and they may well not work with other types of children.

Information on the representative sample as well as the final sample will be detailed in those cases where, because of selection criteria, the final sample might be atypical of poor readers. For example, one might say in startled tones, "all the children in the final sample are working-class". This would hardly be surprising, as one of the selection criteria was that the children should be working-class.

However, unless otherwise stated, all the information given below refers to the final sample.

## 1. The Child

### Chronological age and reading age

At the start of the experiment, the final sample children had a mean chronological age of 10 years 4½ months, but a mean reading age on the Neale test of only 7 years 10 months (SD 5.9 mths). They were therefore, on average, retarded in reading in relation to their real age by 30½ months - a considerable handicap.

Poor readers generally have been found to be on the young side in their year-group (Lunn, 1972), and the final sample was no exception to this. The average age of fourth year juniors on the 1st September of the school-year would presumably be 10 years 6 months, unless there were birth peaks in the year of birth or regional variations. Yet the median age for the final sample was 10 years 3.7 months on 1st September 1973. That the children were young in their year-group is brought out by the fact that there were almost twice as many children aged 10 years 5 months and below, as there were aged above 10 years 5 months (52 children and 28 children respectively).

### Sex

Boys have been found to be more likely to be poor readers than girls. In the final sample, there were forty-three boys and thirty-seven girls. Other investigations have found a higher proportion of boys to girls amongst poor readers than this, there sometimes being two or three times as many boys as girls (Rutter et al, 1970, Cashdan et al, 1971). In the present investigation, an association was noticed

between level of reading ability and the sex of the child. The four non-readers were all boys, whereas there was a preponderance of girls among those children with the higher reading ages between 8 and 8½ years. The findings from the present investigation as to relative numbers of boys and girls may well differ from other investigations, because there were children with a higher level of reading ability in the present investigation, this leading to a greater number of girls being included.

### Intelligence

As stated in Chapter 1, poor readers tend to be below average in intelligence, but boys who are poor readers are more likely to be of average intelligence than girls who are poor readers.

Four sub-tests of the WISC were given to seventy-seven of the eighty children during the course of the sessions.<sup>1</sup> The WISC is standardised with a mean of 100 and a standard deviation of 15. On this test, the children obtained scores well below the norm: a mean pro-rated Full Scale score of 94.5 (SD 13.6). Both Verbal and Performance scores were low: 96.5 (SD 13.6) and 93.4 (SD 15.6) respectively.

The boys obtained higher scores than the girls on all parts of the WISC (see table 8.2). The mean Verbal score obtained by the boys was slightly above the norm (101.8), and the Full score was only slightly below (98.92). In contrast, the girls' scores were well below the norm: for example, Full Scale score was 89.7. The boys' scores were significantly higher than the girls on the Full Scale

1. I gave the WISC to each child individually, some time during the course of the sessions. Of the three children not tested, one boy changed school and was dropped from the study, one boy was absent on every visit to the school, and the third boy flatly refused to take the test.

and on the Verbal Scale, but not on the Performance Scale.<sup>1</sup>

TABLE 8.2 INTELLIGENCE SCORES OF THE FINAL SAMPLE.

WISC Scale	<u>Boys</u> (N=40)		<u>Girls</u> (N=37)	
	Mean	SD	Mean	SD
Full Scale	98.92	13.13	89.67	12.48
Verbal	101.80	13.47	90.78	11.38
Performance	95.97	15.88	90.54	15.07

The data was examined to see if the children seemed to be characterised by specific intellectual deficits, that is, by particularly low scores on either the Verbal or Performance scales, or on any of the sub-tests. Previous research on this subject has produced conflicting results, although the tendency, if it goes any way, is for poor readers to do worse on verbal than on non-verbal tests (Belmont and Birch, 1966). This makes sense, as there is obviously a close relationship between reading and language. In the present sample, the boys unusually did better on the verbal tests than on the performance tests, not worse: they obtained higher mean scores on both verbal sub-tests than on the performance sub-tests (see table 8.3), and the total Verbal scale scores obtained were significantly higher than the performance scores ( $t=2.16$ ,  $df=39$ ,  $P<.05$ ). In contrast the girls obtained very similar scores on all of the sub-tests and also on the Verbal and Performance Scales.

1. These statistical results are given in Appendix D.



TABLE 8.3 WISC SUB-TEST SCORES OF THE FINAL SAMPLE.

Sub-test	Boys (N=40)		Girls (N=37)	
	Mean	SD	Mean	SD
Verbal:				
Similarities	10.55	2.93	8.97	2.45
Vocabulary	9.97	1.78	8.03	1.64
Performance:				
Block Design	9.45	2.81	8.81	2.61
Object Assembly	9.35	2.42	8.43	2.43

The main conclusions to be drawn from this study of intelligence are that, in line with previous research, the boys in the present investigation were of average intelligence, whereas the girls were of below average intelligence.

#### Social adjustment

As stated in Chapter 1, poor readers tend to be more maladjusted than normal children, but specific types of maladjustment have not been convincingly identified with poor reading ability.

At the beginning of the first term of sessions, the children's class teachers were asked to fill in Stott's (1974) Bristol Social Adjustment Guides. Bristol Guides were filled in for seventy-nine of the eighty children. (One boy who changed school did not have a Guide filled in for him).

Stott provides norms for the overall measures of Unract and Ovract, and for each of the five core syndromes. Separate norms are provided for boys and girls, each set based on Guides filled in for about 1300

children by class teachers. In all cases, the lower the score obtained, the 'better adjusted' is the child. Results for the sample are displayed in table 8.4 below, along with some of the normative data, so that comparisons can be the more easily made.

The girls displayed significantly more signs of under-reaction than would be expected from the norms ( $\chi^2=6.99$ ,  $df=2$ ,  $P<.05$ ). This was due to slightly higher scores on Unforthcomingness ( $\chi^2=5.06$ ,  $df=1$ ,  $P<.05$ ) and markedly higher scores on Depression ( $\chi^2=15.13$ ,  $df=1$ ,  $P<.01$ ). The girls' scores on the other Unract core syndrome, Withdrawal, were similar to the norms, as also were their scores on Ovract and its two core syndromes.

The picture is quite the reverse for the boys. They obtained perfectly normal scores on Unract, and hence on its three core syndromes. The scores on Ovract, however, were significantly higher than would be expected from the norms ( $\chi^2=8.42$ ,  $df=2$ ,  $P<.05$ ). The higher scores on Ovract were due not, as one might expect, to higher scores on Hostility, but to significantly higher scores on Inconsequence ( $\chi^2=11.08$ ,  $df=2$ ,  $P<.01$ ). Scores on Hostility were slightly higher than the norms, but not significantly so ( $\chi^2=3.04$ ,  $df=1$ , NS).

From the present study, it seems that particular types of maladjustment are associated with poor reading ability. The pattern of maladjustment varies according to the sex of the child. Girls who are poor readers are more likely to display under-reacting maladjustment, whereas boys who are poor readers are more likely to display over-reacting maladjustment.

TABLE 8.4 BRISTOL GUIDE SCORES FOR THE FINAL SAMPLE, AND NORMATIVE DATA.

Measure	Scores	Boys		Girls	
		Norms %	Sample (N=42) %	Norms %	Sample (N=37)%
Unract	0-2	60	59	62	50
	3-5	20	24	20	22
	6 or more	20	15	18	27
Ovract	0-3	57	46	77	73
	4-7	17	26	11	19
	8 or more	26	29	13	8
Unforthcoming- ness	0-1	70	69	65	54
	2-4	23	26	24	27
	5 or more	7	5	10	18
Withdrawal	0	71	83	83	76
	1	17	12	10	20
	2 or more	13	4	7	5
Depression	0	70	69	82	68
	1-2	21	24	13	27
	3 or more	9	7	4	5
Hostility	0-1	79	71	85	81
	2-3	12	14	8	11
	4 or more	9	9	7	8
Inconsequence	0-3	72	62	88	89
	4-6	14	26	7	5
	7 or more	12	12	5	5

#### Attitude to school

Whilst on the subject of social adjustment, the children's attitudes to school will be discussed. The picture drawn in Chapter 1 was of a child either neutral or hostile towards school. This was not evident on the social adjustment measures: neither boys nor girls scored markedly

higher than normal on the hostility syndrome. How much, then, was it evident in the teachers' direct ratings of the children's attitudes to school?

In the initial questionnaire filled in by the schools, the teacher was asked to rate the child's attitude to school on a three-point scale: likes very much, likes more than dislikes, and dislikes. Results for both the final sample and the representative sample will be considered here, as selection criteria seem to have slightly biased findings for the two groups. The results are given in table 8.5.

TABLE 8.5 ATTITUDE TO SCHOOL OF THE FINAL SAMPLE AND THE REPRESENTATIVE SAMPLE.

Attitude Rating	Final Sample (N=74)		Representative Sample (N=104)	
	No.	%	No.	%
Likes very much	29	39	38	35
Likes more than dislikes	43	58	60	54
Dislikes	2	3	11	10

It can be seen that the representative sample had slightly less favourable attitudes to school than the final sample, although the difference was not large. The difference arose because three out of the five very irregular attenders excluded from the final sample were said to dislike school, and three out of the four non-readers: that is, by reason of exclusion on other grounds, a number of children who disliked school had been excluded from the final sample. However, for both the final sample and for the representative sample, over 30 per cent of children were said to like school very much. Most of the other

children were seen as liking school more than disliking it. In the teachers' eyes, the majority of these children were not anti-school; more than this, a substantial proportion were seen as being in favour of school.

The reasons for these children disliking school were examined. All of the children said to dislike school were seen by the teachers as having emotional problems. One wonders whether this reveals more about the teachers and their coding systems than it does about the children: no child could dislike school, unless there were something wrong with him.

There are different ways of disliking school. In Chapter 1 a picture was drawn of an alienated, hostile, poor reader, reacting viciously against school. In seven out of the total of eleven children who disliked school, dislike was connected with shyness, withdrawal from school activities and difficulties in making friends with other children. In only three cases was it connected with the type of behaviour that is commonly expected from alienated, failing children: arguing, stealing, lying, answering back, smoking cigarettes.

## 2. Home Background

### Social Class

The data was examined to see whether, as expected, the children in the representative sample were predominantly working-class; and whether children from the non-manual classes had been successfully excluded from the final sample.

Social class was determined from the head of household's occupation, in accordance with the Office of Population Censuses and

Surveys (1970) six-fold classification. Information on occupation was provided by the schools in questionnaires filled in about each child. Unfortunately, social class could not be determined for twenty children in the final sample,<sup>1</sup> and for fifteen more children in the representative sample. This was due either to insufficient information being given on the questionnaires, or to there being no working head of household. But where there was insufficient information for precise placement into one of the six classes, comments on the father's work and home conditions indicated that the fathers had manual rather than non-manual jobs.

The percentages of children falling into the different social classes for the borough as a whole,<sup>2</sup> for the representative sample and for the final sample are shown in table 8.6 overleaf.

Although expected, the virtually complete absence of children from the non-manual classes from the representative sample still surprises: 4 per cent compared to an average for the borough of about 36 per cent.

Children from the non-manual social classes were meant to be excluded from the final sample. Only one child was excluded on this count, and it was later found that two children whose fathers had non-manual jobs had been erroneously included in the sample. (The fathers were a publican and a clerk.)

1. In the final sample, insufficient information was given about the work of seven fathers. Seven fathers were unemployed, and no information was given about their previous work. Two fathers were economically inactive, and again no information was given about previous work. Four children had no fathers nor substitute fathers, and their mothers apparently did not work.
2. The borough average was worked out from census data on socio-economic group (SEG). SEG was collapsed into social class, and percentages for each social class worked out. The collapsing was based on the pre-dominant social class for each SEG, as given in "Social Trends" (1974) p.97. The figures are given in Appendix D.

TABLE 8.6 SOCIAL CLASS DISTRIBUTION IN THE BOROUGH, IN THE REPRESENTATIVE SAMPLE AND IN THE FINAL SAMPLE.

Social Class Category	Borough %	Representative Sample %	Final Sample %
Non-manual	36	4	3
III Manual	44	46	52
IV	15	40	38
V	5	8	7

### Economic Conditions

It was apparent that the representative sample consisted overwhelmingly of children from working-class homes. A move was next made to examine the economic conditions of the children's home. It was pointed out in Chapter 1 that many children live in poverty-stricken and mean home conditions, and that such conditions can hardly be conducive to good educational progress.

### Employment

One good indicator of the economic condition of a particular group is the level of unemployment. In "Facts in Focus" (1974), the national average of unemployment for males during 1973, as a percentage of all male employees, is given as 3.6 per cent. The average for the Midlands was below the national average, at 2.9 per cent.

The level of unemployment for the fathers of the final sample children was much higher than the regional average. Out of the seventy-six fathers or substitute fathers, ten were described as unemployed, that is, 13 per cent compared to a regional average of 2.9 per cent.

This is a striking disparity, bearing in mind the grim economic, social and personal implications that unemployment carries with it.

Three of the fathers (3.7 per cent) were economically inactive through disablement. This compares with the percentage obtained in the General Household Survey, carried out in 1971, of 2.12 per cent of all males between the ages of 25 and 60 being economically inactive. The level of economic inactivity amongst the fathers is therefore only slightly higher than would be expected.

### Family size

This also tends to be an indicator of the economic and social conditions of the home. This is partly because, with the advent of family planning, only certain sorts of people tend to have large families. Also the larger the family, the smaller each person's share of the available resources, whether these be economic, or are viewed in terms of parental love and attention.

Information on family size for the final sample is given in table 8.7 below.

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TABLE 8.7 NUMBER OF SIBLINGS OF THE FINAL SAMPLE (N=75)

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No.of Siblings	Frequency	Percentage
0	2	3
1	14	19
2	20	27
3	9	12
4 or more	30	40

---

From the table, it can be seen that 40 per cent of the sample had



four or more siblings. This compares, for example, with the 22 per cent of good readers of a similar age, found by Morris (1966) to have four or more siblings. The sample therefore seemed to come from larger families than would be expected.

#### Ordinal position in family

In a larger family, the children may lose out because there is a smaller share of available resources for each person. This would be likely to affect the younger children more than the older children. As could be predicted from previous research (e.g. Rutter et al, 1970, p.120), the children in the final sample tended to be the younger members of the family (see table 8.8). 35 per cent of the sample had three or more older siblings, whereas only 5 per cent had a comparable number of younger siblings.

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TABLE 8.8 ORDINAL POSITION OF THE FINAL SAMPLE (N=75)

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No. of Siblings	older No.	siblings %	younger No.	siblings %
0	15	20	22	29
1	20	27	28	37
2	14	19	21	28
3 or more	26	35	4	5

---

#### Broken homes

An estimated 10 per cent of families are one-parent only (Finer Report, Vol.1, p.21). In the final sample, ten children (8 per cent) came from broken homes. Seven of these children were living in one-parent

families, and three with one real parent and one substitute parent. The incidence of one-parent families was therefore no higher than would be expected. This finding is in agreement with previous research: commonly, no clear-cut link has been found between broken homes and educational attainment (Rutter et al, 1970; Davie et al, 1972).

#### The teacher's view of the child's home background

In the initial questionnaire filled in by the schools on each child, the teacher was asked to describe the child's home background. This question was answered for thirty-one of the final sample children only. Although only made for a minority of the sample, these comments may still be illuminating.

Nineteen of the thirty-one children had negative comments made about their homes. The teachers' criticisms of the home background included neglect of the children by the parents, disturbances due to marriages splitting up, dirtiness in the home leading to skin diseases, and general poverty.

In the eyes of the teachers, therefore, at least a quarter of the eighty children in the final sample had disadvantages in their home backgrounds. We do not know, however, how many of the other children for whom this question was not answered had such disadvantages, and also how a control group of normal children would compare; that is, how the sample differs as a group of poor readers per se. Nevertheless, a flavour of the types of home some of the children come from is given by such descriptions as those detailed below. (Admittedly, these descriptions have been chosen to some extent selectively.)

Financially poor home - children often dirty and unkempt. Dorothy often absent to look after sick sister or brother. Welfare officer regular visitor.

Council housing - poorly furnished - not very clean. All children have suffered from skin diseases involving prolonged absences.

Large family (seven older brothers, one older sister) with strong tradition of delinquency. Several older brothers in prison at present. This boy is the most settled of the family as far as we can tell. Father rheumatic complaint - not able to work.

### The relevance of reading

As stated in Chapter 1, one factor that stands out clearly as a characteristic of the poor reader is the lack of relevance to daily life that reading has for such a child. Reading is unimportant in his home and in his own life. Examination will now be made of how far this was true of the final sample children.

Information was obtained about the literacy of the home and the child's reading habits in a structured interview given straight after the first Neale test. The interview was held with seventy-four of the children, although some children were not asked every question. For example, children not living with their natural parents were not asked questions about parental reading habits, in case this proved disturbing. Some questions were missed out in error, and some children could not answer all the questions. For these reasons, results given below are not always for all seventy-four of the children; where this is the case, this is stated in the text.

### Literacy of the home

Few books were owned or read by the parents. Out of 60 children, nearly half said that their parents had no books of their own. Only seven children said that their parents had more than twenty books. However, most homes took newspapers or magazines. 71 of the children said that their parents bought newspapers, either daily or weekly. These were almost entirely non-quality newspapers. Out of 56 children, 41 said that their parents bought magazines.

Although most homes took newspapers, and some took magazines, the children did not view their parents as 'readers'. Out of 66 children, 27 said that their father never read at all, and only five children said that their fathers read a lot. A similar picture was obtained of the mothers' reading habits: out of 67 children, 33 said that their mothers never read at all, and only four said that their mothers read a lot.

Most of the children were given little or no help with reading by their parents. Where help was given, it was more likely to come from the mother than from the father. Out of 70 children, 47 received no help from their father, compared to 31 who received no help from the mother. Three children received a lot of help from their mothers, and one child a lot from his father. It is possible that more help was given to the children by their parents when the children were younger.

### The children's reading habits

The children did little voluntary reading. When the children were asked about what they did in their spare time, only 12 children mentioned reading as an out-of-school activity. When asked more directly whether they read at home, 29 children said that they did not read at all and

only two children said that they read a lot. (This was out of 72 children.) The children were also asked about what they had read at home during the last two weeks. Again, 29 children said that they had read nothing, and only three children had read more than one book. 26 children had never belonged to a public library, and only ten children seemed to be active members of a library.

The children were asked whether they borrowed books from school. 41 children never did so, and only 14 borrowed books regularly or had borrowed books recently. One wonders whether teachers could not have encouraged more children to borrow books. Some children said that they did not borrow books, because the books might get torn up or dirtied at home by the younger children in the family, and admittedly this factor has to be taken into account in encouraging children to borrow books.

As far as books at home were concerned, 33 of the children had five or fewer books at home. Seven children said they had more than thirty books.

In contrast to their lack of concern with books, over three-quarters of the children said that they looked at or read comics regularly. Of course, they might simply have been looking at the pictures rather than reading the text, but at least they were displaying positive attitudes towards some reading material.

The girls spent more time reading than the boys. The girls obtained significantly higher scores than the boys on the reading habits scale ( $t=2.31$ ,  $df=72$ ,  $P<.05$ ).<sup>1</sup> Morris similarly found that amongst her group of readers, the girls did more reading than the boys.

To summarise results on reading habits and literacy of the home, it seemed that the children did little voluntary reading, and that they

1. The scores for girls and boys on the reading habit scale are given in Appendix D.

and their parents had few books of their own. However, the homes did not entirely lack reading material, in that comics, magazines and newspapers were usually available in them. This is important as it indicates a willingness to read, but only certain types of material.

Nevertheless, one would still want to say that the children do little reading, and that their homes are low in literacy. There was no control group of normal children in the present study against which the level of literacy of the children and their homes could be compared. However, the final sample can be compared with good readers of a similar age studied in Morris's (1966) survey. The comparison reveals clearly that the good readers in Morris's study read far more and came from homes that were much higher in literacy than the poor readers in the final sample. For example, 87 per cent of Morris's good readers said they liked reading a lot, compared to 36 per cent of the final sample. Only 7 per cent came from homes with no books, compared to nearly half in the final sample. The other data provided by Morris gives the same picture, with all of the good readers doing some reading at home, and 74 per cent borrowing books from public libraries. Interestingly enough, the one instance where the final sample read more was in the case of comics. Only 20 per cent of good readers in Morris's sample read comics, whereas 82 per cent of the final sample looked at or read comics.

#### The children's spare-time interests

Additional information was obtained from 39 of the 40 children in the Interest Group about how they spent their spare time. The information was obtained primarily to find interests which could be used in sessions. However, it will be detailed here, as it will add to

the composite portrait being drawn of the poor reader, and will show more fully the small part reading plays in the children's lives.

The information was obtained by means of a structured interview which I held with each child individually, once allocation had been made to the Interest Group.

The most popular pursuits were as follows:

- a. watching television. All 39 of the children said they watched television some nights, and 23 said they watched it every night. Cartoons were the most popular programmes.
- b. playing outside. All of the children played outside in the evenings and at weekends. 30 of the 39 children mentioned street games that they played. Apart from street games, the children played football, played on the swings, had conker battles, ran around, and built dens and hides. Four children said they just walked around and talked, but the remaining children specified particular activities that they pursued.
- c. pop music. 25 of the children liked pop music. The girls were more enthusiastic about pop music than the boys. The girls liked such pop stars as Donny Osmond and David Cassidy, whereas the boys liked pop stars who played rather heavier music, such as The Slade and Gary Glitter.
- d. football. This was a popular sport at school. 24 of the children supported a football team.
- e. 34 of the children came from homes with pets in them. There was a surprisingly large number of pets: taking each species of animal owned by each family as a set, at least 69 sets of pets were owned by the 34 families. Dogs were the most popular animals.
- f. 21 of the children belonged to clubs, mainly the youth sections of

local clubs that their parents attended.

g. 8 children went to church or Sunday School fairly regularly.

Activities that could be regarded as more middle-class (for example, stamp-collecting, learning musical instruments, ballet dancing) were not pursued by these children. There were various other miscellaneous interests. For example, three boys went fishing, four liked making Airfix or Meccano models, five girls did sewing or knitting, and three boys collected fossils from the local coal tip.

The spare-time interests were therefore much as would be expected, with watching television and playing out being the most popular pursuits, closely followed by pop music and football. Less often mentioned in the literature was the number of pets found in the children's homes, and also the number of children (over half those questioned) who belonged to clubs. Finally, there was virtually no mention whatsoever by the children of reading.

### 3. School-related Variables

#### Attendance

As attendance was one of the criteria involved in selection of the final sample, attendance figures for both the final sample and the representative sample are considered here. In the initial questionnaire filled in by the schools, the teacher was asked to rate the child's attendance on a five-point scale ranging from very good to very irregular. Children who were rated as very irregular attenders were excluded from the final sample. As one would expect, therefore, the final sample were slightly better attenders than the representative sample (see table 8.9). Nevertheless, with both the final and the



representative sample, over 70 per cent of the children were rated as good or very good attenders. For many of these children, attendance at that point in time at any rate did not seem to be one of the contributory factors leading to poor reading ability.

TABLE 8.9 ATTENDANCE OF THE FINAL SAMPLE AND OF THE REPRESENTATIVE SAMPLE.

Attendance Rating	Final Sample (N = 74)		Representative Sample (N = 110)	
	No.	%	No.	%
Very good	29	39	36	33
Good	28	37	42	38
Average	10	13	13	12
Irregular	7	9	14	13
Very irregular	-	-	5	4

### School changes

One child who had changed school six times had been excluded from the sample. Fifteen children in the final sample had changed school once or twice, and twenty-one children in the representative sample.

### Remedial provision in the schools

The remedial provision in the schools was examined to see what sort of help the children were being given and if this fitted the stereotype of skill-centred teaching drawn in Chapter 2.

First it should be noted that one-third of the eighty children were not and had not been receiving help with reading, apart from that given in the normal class. It is true that the third not given extra

help had slightly higher reading ages than the remaining children (a mean of 8 years,  $SD=4.7$  months, compared to a mean of 7 years 9 months,  $SD=6.3$  months respectively). Nevertheless, the children not given extra help were still considerably retarded in relation to their chronological age, and were not functionally literate.

In the first interview with the headteacher, information was obtained about remedial provision in the schools, with special reference to the age-group taking part in the investigation.

All of the schools had some form of remedial provision. In eleven of the thirteen schools, this took the form of small withdrawal groups: children were drawn out of class two to four times a week for tuition in groups of six to eight, for thirty to sixty minutes at a time. In three of the schools, the children spent some of the time (either a morning or an afternoon of most days) in a small remedial class of about twenty children. Full-time remedial segregation was not practised in any of the schools.

There were only two full-time trained remedial teachers at work in the schools. In five schools, part-time teachers (probably married women returning to work) were used. In three schools, tuition was given by ancillary untrained assistants. In two schools, tuition was given by class teachers in their free time.

As far as methods in the withdrawal groups were concerned, only an impressionistic piece-meal picture was obtained, but this was still quite revealing. Lessons held by one teacher with withdrawal groups were described as formal. The children sat and read in turn from the 'Beacon' reading scheme, and learnt phonic rules. In the last year at school, they also usually spent some time reading normal children's books, such as "Emil and the Detectives". One school used "Racing to Read",

and had invested quite a sum of money in a special tape-recorder and tapes that went with the scheme. This scheme seems totally unsuitable for the children with whom it was being used - tough, 10-year-old, working-class boys. It includes such lines as: "Mary has a big cat. The cat is Tabby. I like Mary's cat. I like Tabby and she likes me". (Racing to Read, Bk.5,p.5). An idyllic world, where everyone likes everyone else, and there is no anger, hate or disgust.

In three schools, more diverse procedures were followed. In one school, the BBC 'Look and Read' programme was first watched, and then a thirty-minute lesson was spent on a follow-up to the programme. In the two schools with full-time trained remedial teachers, the teaching was quite varied. In one of these schools, a range of books suitable for older primary school children were available: 'Rescue Reading', 'Data' and the 'Pirate' series. In the other school, use was made of a number of the traditional reading schemes ('Happy Venture', 'Wide Range', 'Adventures in Reading') as well as of such series as 'Nippers' and 'Macdonald Starters'. Each child had a chart consisting of reading age levels, with books from the different series at each level. As the child read through a number of books at one level, these were ticked off. When he had read enough books at one level, he moved onto the next level. Reading games were used, as well as 'word wheels, word slides, jigsaws and telephone directories'. It is startling that only a few of the thirteen schools seemed to have a suitable range of easy reading materials for older primary school children, whereas all these schools had older primary school children who were failing in reading.

Further information on the material used with the children was obtained by asking the child in the initial structured interview about

the reading book he was using at that time. Most of the children could either name their current reading book or describe the story. On the whole, the children were using books from reading schemes rather than free reading. The most commonly used reading scheme was 'Wide Range': 31 children were reading books from this scheme. 12 children were reading from the 'Pirate' series, and five from the 'Ladybird' series. (All the children reading from the 'Ladybird' series had reading ages of seven or less). Ten children were reading books from other reading schemes. Only ten children described books that sounded like simple reading books rather than from reading schemes.

#### Causes of poor reading ability

Finally, it seemed of interest to examine why the teachers thought the children were failing in reading: whether the causes in their eyes were the same as those detailed in Chapter 1.

In the initial school questionnaire, the head or class teacher was asked: "What do you think are the main causes of this child's poor reading ability?" The question was answered for forty-seven children. More than one reason was given for some children.

The main reasons given by the teachers for the children's failure in reading were home background (especially lack of books), low intelligence, lack of motivation and emotional problems.<sup>1</sup> The pre-eminence of literacy of the home and also lack of interest amongst the reasons for failure should be noted. It should also be pointed out that not once was the blame for the child's reading difficulties laid on poor schooling or inferior teachers.

To conclude, a summarising description will be given of the sample. This will show the characteristics that poor readers are likely to have. Consideration will also be given to how far the children fit the stereo-

1. More information is given in Appendix E.

type of the poor reader, as drawn in Chapter 1.

There were more boys than girls in the sample. The boys were of average intelligence, whereas the girls were of below average intelligence. Along with the different intelligence levels of boys and girls, there was a different pattern of maladjustment for boys and girls. With social adjustment, the boys displayed more over-reacting behaviour than would be expected, this being due to more inconsequential behaviour rather than to more hostile behaviour. The girls, in contrast, displayed an undue amount of under-reacting behaviour, in particular of unforthcomingness and depression.

It is clear that the boys and girls in the sample were rather different animals from each other. A classic picture emerged, of normal boys, extrovert and lively, failing to learn to read, presumably in part through lack of concentration and interest; and rather duller girls, shy and withdrawn, also failing to learn to read, presumably handicapped by dullness as well as by all the other disadvantageous factors.

Examination was made of whether the children seemed to be alienated from school. The children did not obtain unduly high scores on the hostility syndrome of the Bristol Guides; they were seen by the teachers as being mostly neutral to or positively liking school; and their attendance at school was on the whole good.

A clear pattern of disadvantage in home background emerged. The children were overwhelmingly from the manual classes. There was a far higher percentage of unemployment amongst fathers than would be expected from regional averages. Families were large, and the children tended to be younger members of the family. Reading seemed irrelevant to the children's lives. There were newspapers, magazines and comics in the home, but few books belonging to either parents or children, and generally

not much time was spent reading.

This description of the sample leads into a consideration of whether or not the children fitted the portrait of the poor reader drawn in Chapter 1. The alienation of the children from school was not as evident as one would have assumed it would be. However, the expected type of home background was found and, most important, the irrelevance of reading to the children's daily lives stood out clearly. The final sample had other problems (emotional, intellectual), but these did not seem to be severely incapacitating. The children by and large fitted the portrait originally drawn, and were, therefore, suitable candidates for interest sessions.

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## CHAPTER 9

### THE VALIDITY OF THE RESULTS

There were a number of ways in which results obtained from the experiment might be rendered invalid.

- A. Reading ability and/or reading habits might be measured inaccurately.
- B. Methods could be implemented incorrectly.
- C. The two groups of children might not be well-matched. For example, one group might have a higher level of intelligence than the other group.

As outlined in Chapter 7, various checks were made to see if results were being distorted in any of the above ways. In this chapter, results from these checks are detailed. We begin with whether or not reading ability and reading habits were measured correctly.

#### Measurement of Reading Ability and Attitude to Reading

Whatever else happened in the experiment, it was obviously important to ensure that the key variables, reading ability and attitude to reading, were measured as accurately as possible.

##### 1. Reading Ability

The reading test used was the Neale Analysis of Reading Ability. Information given by Neale in the Manual indicates that this test has good reliability and validity. Nevertheless, two checks were made to see if reading ability and, more importantly, changes in reading ability had been assessed accurately: a check on practice effects and a check on experimenter bias.

### Practice effects

As a check on practice effects (see Chapter 7), two forms of the Neale test were given at the end of the sessions. The child had read one of these forms previously, at the start of the sessions, but, as far as was known, he had never seen the other form before. So that differences in difficulty of forms could not disguise or exaggerate practice effects, a balanced design was used, with different children being given different forms.<sup>1</sup> Mean scores obtained on the two forms given at the end of the sessions are shown in table 9.1 below.

TABLE 9.1 PRACTICE EFFECTS: READING AGES ON A REPEATED AND A NEW FORM OF THE NEALE TEST.

	Reading age (accuracy) N = 77 (in months)	
	Mean	SD
Repeated form	98.9	6.6
New form	98.6	6.1

The scores obtained on the two forms were very similar, thus giving no indication at all of practice effects.

With this point settled, the effects of experimenter bias were next examined.

### Experimenter bias

As a check on experimenter bias, results from a group reading test (Schonell Silent Reading Test A) were compared with results from the individual test, on the assumption that a group reading test would be less biased by the experimenter than an individual test.<sup>1</sup>

1. More details are given in Chapter 7 and Appendix B.



49 children took the group test. It was administered to children if sufficient time was available after all the individual tests had been given at the end of the sessions. The children took the test in groups of about four or eight, depending on the number of children involved in the investigation who were in school at the time of testing. Mean scores obtained by the Interest Group and Skill Group were compared (see table 9.2).

TABLE 9.2 EXPERIMENTER BIAS: READING AGES OF THE INTEREST GROUP AND THE SKILL GROUP ON A GROUP AND ON AN INDIVIDUAL TEST.

	Interest Group			Skill Group		
	No.	Mean (in mths)	SD	No.	Mean (in mths)	SD
Schonell Silent Reading Test A (Group)	24	102.0	8.67	24	105.7	15.33
Neale Test (Accuracy) (Individual)	24	99.1	5.49	23	101.4	6.76

On both the individual and the group test, the Skill Group obtained a higher mean score than the Interest Group. Because the two groups' scores differ in the same way on both tests, experimenter bias does not seem to have affected results.

#### Conclusions on measurement of reading ability

Given the absence of practice effects and of experimenter bias, then the difference in the reading ages obtained at the start and at the finish of the sessions on the same form of the Neale test should show the progress that has been made. As explained in Chapter 7, the accuracy measure of the Neale test, rather than the comprehension measure, was taken as the

criterion of improvement in reading ability. (The comprehension measure seems to be more a test of intelligence and of memory than of reading ability. Results on this measure have been confined to Appendix D.)

## 2. Attitude to Reading

Attitude to reading was measured indirectly by measurement of reading habits, as described in Chapter 7. As a reminder for the reader, the interview on reading habits included questions on the amount the child had read at home recently, whether he borrowed books from school, and whether he belonged to a local library. Reading habit scores were calculated from the answers to these questions. The interview was given at the beginning and end of the sessions, so that changes in reading habits could be ascertained.

Checks were made on the initial assumption that asking a child how much he read would be a better way to measure attitude to reading than asking a child whether or not he liked reading. Questions on liking for reading were asked in the initial 'reading habits' interview held with the child, scale scores were derived, and then correlations between the different scales were examined. This enabled inter-relationships between the scales to be studied, and, from this, an assessment could be made of the factors being tapped by the different scales. The correlations between various scale scores, as obtained at the start of the sessions, are shown in table 9.3.

TABLE 9.3 CORRELATIONS WITH READING HABITS AND LIKING FOR READING  
(N = 74).

	Pearson's r	Significance level
Reading Habits with Literacy of the home	.33	.002
Reading Habits with Initial Reading Age (Accuracy)	.24	.01
Reading Habits with Liking for Reading	.09	NS
Liking for Reading with Literacy of the Home	-.08	NS
Liking for Reading with Initial Reading Age (Accuracy)	.01	NS

From the table, it can be seen that Reading Habits correlates significantly with Literacy of the Home but not with Liking for Reading. Reading Habits also correlates significantly with reading ability. Liking for Reading does not correlate significantly either with Literacy of the Home or with reading ability. The child's expressed liking for reading does not therefore seem to tie in with any other variables. This could be a case of inaccuracy in self-reporting. The child says he likes reading in the same way that someone might say, "yes, I love skiing", only then to reveal that he has been skiing once, ten years ago, for four days. As a contrast, Reading Habits does tie in with other variables, and therefore seems to be a measure worth taking. The initial assumption seems justified. That is, it seems that attitude to reading can best be measured by asking the child how much he reads, rather than by asking him whether or not he likes reading.

## B. Implementation of the Two Methods

First, a brief description will be given of the way the sessions were organised and of the activities followed in the sessions. Then, an examination will be made of whether or not the methods were put into practice as intended.

The teachers saw the children twice a week, for an hour at a time, from October 1973 to March 1974. A meeting was held with the teachers before the first session, in which I explained the purpose of the experiment and what they, the teachers, would be required to do. In this meeting, the teachers were given several pages of instructions written by myself<sup>1</sup>, and a general discussion about the experiment took place. Formal meetings were held with the teachers once a week during the course of the two terms. The meetings' main purpose was as seminars on the psychology of reading, but they also provided the opportunity to discuss how the teaching was going, and to deal with any difficulties. Apart from these formal meetings, I had continuous informal contact with the teachers. They were always welcome to come and see me about any problems they had with the sessions. In addition, as stated in Chapter 7, individual interviews were held with each teacher sometime during the course of the two terms.

The university at which the teachers were based does not have a library of children's books, and therefore a collection of books for use in the sessions had to be built up. About 300 books were borrowed from local libraries, and about another 200 were bought. A number of books were donated by publishers.<sup>2</sup> The teachers were also allowed to

1. These instructions are printed in Appendix A.

2. A list of these publishers is given in Appendix E.

buy extra materials, if necessary. The books were placed in the teachers' common-room, so that suitable material would be readily available.

The children attended an average of 21 sessions. This ranged from one child who attended only 12 out of a possible 24 sessions, to one child who attended all out of a possible 26 sessions. 43 children attended all of the sessions, or all but one of the sessions. 14 children were absent for more than three sessions.

### Interest sessions

The following activities were the main ones pursued during interest sessions.

- Mrs. Beeton<sup>1</sup>: Group work on cooking. This group choose cooking as its 'interest approach to reading', and during the two terms cooked the following: coconut ice, banana milk shake, raspberry buns, peppermint creams, jam tarts, chocolate hedgehogs, scones, pink mice and Chocolate crunchies.
- Mrs. Burns: Individual reading on a variety of topics. Visits to a local library, museum and fire station, and subsequent work on fire and fire prevention.
- Mrs. Field: Individual work on farming, football, shops, painting and holidays.
- Mrs. Lowry: Individual work on a variety of topics. Group work on Tutankhamen and on the environment.
- Mrs. Walton: Individual work on animals, outer space, soldiers, football, sewing and nursing. Group work on fish and on an aquarium.

1. All the teachers' names are pseudonyms.

- Mr. Bailey: Group work on science experiments, on photography and on making a book about the neighbourhood. Individual work on cars and on cowboys.
- Mr. Copeland: Group work, making a book about the neighbourhood 'Read about where we live'. Also group work on music, including making 'paper symphonies'.
- Mr. Shaw: Group work on drama.
- Mr. Wayne: Individual work on animals, pop stars and nursing. Group work on the neighbourhood, pop shows, and on a Wild West theme. The Wild West theme involved making covered wagons and a totem pole.
- Mr. Williams: Individual work on a variety of topics. Group work with a guitar and making kites.

### Skill Sessions

Reading series and other material used by the teachers included the following.

- Mrs. Beeton: the 'Pirate' series.
- Mrs. Burns: Royal Road Readers and the 'Pirate' series.
- Mrs. Field: 'Nippers'.
- Mrs. Lowry: the 'Pirate' series.
- Mrs. Walton: the 'Pirate' series.
- Mr. Bailey: 'Ladybird Key Words' and Royal Road Readers.
- Mr. Copeland: Oxford Colour Story Books and the 'Pirate' series.
- Mr. Shaw: Science Research Associates (SRA) Reading Laboratory IC.
- Mr. Wayne: Royal Road Readers and material from the Remedial Supply Company.
- Mr. Williams: Racing to Read, Sounds and Words, New Interest and SRA Reading Laboratory IIA.

As stated in Chapter 4, any reading scheme could be used, provided it had a gradually increasing level of difficulty. The teachers could also use more than one scheme, if necessary, to keep the children

interested and to ensure that sufficient practice was obtained at any one level of difficulty. As can be seen from the above list, this meant there was some diversity in the schemes used by the various teachers. The 'Pirate' series was the most popular of the schemes, being used for all or part of the time by five teachers.

Sample session accounts, for both interest sessions and skill sessions, are printed in Appendix C.

### Correct and incorrect implementation

There was some difficulty in ensuring that the teachers implemented the two methods correctly. This difficulty arose partly because teachers very much have minds of their own. The classroom is their castle. Within it they are kings, and they dislike being told what to do in their kingdoms, especially by academics rather than by fellow teachers. Thus, some of the teachers had their own views as to what it would be best to do in sessions. For example, some of the teachers insisted that ideally they would have wanted to mix the two approaches rather than keeping the approaches separate. These teachers seemed to find it difficult to understand that, because in practice there is usually an emphasis upon either skills or interest, it could be useful to know which approach is likely to be the more effective.

In spite of these problems, on the whole instructions were followed and the teachers seemed to try as hard as they could to help the children in line with the prescribed approach.

After it had been determined that the teachers had at least tried to implement the two approaches correctly, categorisation of session accounts was made to see whether or not the teachers had succeeded in

the aim, that is, whether or not sessions had been conducted in line with the operational definitions of the methods given in Chapter 4. As this is an important topic, a brief recapitulation of the definitions will be given here.

Activities appropriate to interest sessions include any way in which reading is related to the children's interests. More specifically, this could include:

1. use of simple reading books, picture books, comics, magazines, pop records.
2. story-reading.
3. bringing and borrowing reading material.
4. writing on interests.
5. outside visits.

Activities appropriate to skill sessions include anything focussing on the skill of reading and, more specifically:

1. the use of one or more reading series.
2. phonic work.
3. written work to consolidate reading skills.
4. reading games.
5. use of workbooks and workcards.

For each type of session, some deviation from appropriate activities would be expected. Each session account provided by the teachers was examined. If the majority of the time in that session seemed to have been spent on appropriate activities, such as those listed above, then the session was regarded as fulfilling the operational definition of the method. The percentage of sessions fulfilling the operational definition for each teacher was calculated.



Complete session accounts were provided by eight teachers. One teacher did not hand in session accounts for the last four sessions. Another teacher, Mr. Shaw, only handed in session accounts for the first half of the teaching, but in talks with him he made it clear that he had followed the same procedures in the remaining half of the teaching.

The results obtained from the classification are given in table 9.4 below. The percentage and number of sessions consisting predominantly of appropriate activities are shown for each teacher.

TABLE 9.4 PERCENTAGE AND NUMBER OF SESSIONS CONSISTING PREDOMINANTLY OF ACTIVITIES APPROPRIATE TO THE INTENDED APPROACH.<sup>1</sup>

Teacher's name	Interest sessions			Skill sessions		
	%	No.	Total no. of sessions	%	No.	Total no. of sessions
Mrs. Beeton	91	21	23	78	18	23
Mrs. Burns	91	21	23	86	18	21
Mrs. Field	100	21	21	83	19	23
Mrs. Lowry	96	24	25	88	22	25
Mrs. Walton	92	23	25	78	21	27
Mr. Bailey	100	22	22	91	20	22
Mr. Copeland	76	19	25	54*	14	26
Mr. Shaw	27*	3	11	85	11	13
Mr. Wayne	96	22	23	96	22	23
Mr. Williams	75	18	24	79	19	24

1. These figures are based not on the number of sessions actually held, but on the number of session accounts given in by the teachers.

\* Less than two-thirds of the sessions consisted of appropriate activities.

All of the teachers gave three-quarters or more of sessions along the lines of the relevant approach, except for Mr. Shaw in interest sessions and Mr. Copeland in skill sessions. Under a third of Mr. Shaw's

interest sessions consisted of relating reading to interests. Most of the sessions were spent on drama work. This may have been much enjoyed by the children concerned, but very little attempt was made to connect the drama with reading and writing. For example, Mr. Shaw described part of two of his sessions in the following way:

Session No.3. Talking about words and qualities of meaning. Effort as feeling and words. Heavy. Light. Push. Pull. First, individual movement quality. Then incorporated into short play. Very good effort by Christopher.

Session No.12. Using musical instruments. Examined sounds and how they affect us. Shock, Soothing, Marching, Slowing, Quickening etc. Carried on with street scene and much more language came out. Played a game with Basic Mime.

Only just over half of Mr. Copeland's skill sessions involved a focus on reading skills. A number of sessions were spent counselling the children and taking them for walks.

Session No.3. Decided to chat with the group....

Session No.7. Good weather today - decided to take them out of school. They chatted away as we walked round school, church and shops... We got back to school - did ten minutes' reading from Oxford Colour Books.

Results for the four children with whom Mr. Shaw held interest sessions, and for the four children with whom Mr. Copeland held skill sessions were therefore excluded from those analyses in which a direct comparison was made of the effectiveness of interest sessions and skill sessions.

### C. Comparability of the Two Groups

As pointed out in Chapter 7, if a valid comparison of teaching methods is to be made, the groups in the experiment should be as similar as possible in all respects other than the teaching method used with each group. If the groups are not similar, allowance must be made in the analysis of the data for the differences.

In the initial selection of children and assignment to groups, chronological age was held constant, and the two groups were matched for sex and initial reading age. As methods were assigned randomly, the groups should have been similar in other characteristics. However, the sample that remained at the end of the sessions was not precisely the same as that with which the sessions began. As already explained, eight children were excluded, because methods had not been properly implemented with them. In addition, final results were not obtained for two other children, one of whom changed school in the course of the study, and one of whom broke her leg and was not at school at the time of the final tests. One of these children was from the Interest Group, and the other was from the Skill Group.<sup>1</sup> This very conveniently left an equal number of children in the Interest and Skill Group - 35 in each group.

Data for the 35 children left in each group was examined, to see if the Interest Group and Skill Group in their final form differed mainly in the teaching methods used with each group. Information about the two groups is given in table 9.5. overleaf.

There were 18 boys and 18 girls in the Skill Group, and 19 boys and 17 girls in the Interest Group. Mean initial reading ages for the two groups were similar. Mean intelligence scores were slightly higher

1. Information on the ten children is given in Appendix D.

for the Skill Group, but the differences were not significant. ( $t=1.22$ ,  $df=67$ , NS, for the Full WISC).<sup>1</sup> There were also no significant differences on the Bristol Guide Unract measure (Mann-Whitney  $U=496$ ,  $Z=1.36$ , NS), and on the Ovract measure ( $U=554$ ,  $Z=0.69$ , NS).<sup>2</sup> The Interest Group and Skill Group therefore seemed to be similar to each other in all important respects other than the one under examination - teaching method.

TABLE 9.5 INITIAL READING AGES, WISC SCORES AND BRISTOL GUIDE SCORES FOR THE INTEREST AND THE SKILL GROUPS.

Variable	Interest Group			Skill Group		
	N	Mean	SD	N	Mean	SD
Initial reading age:						
Accuracy	35	7yrs 10.6mths	4.96mths	35	7yrs 10.2mths	6.47 mths
Comprehension	35	7yrs 9.7mths	7.23mths	34	7yrs 9.9mths	8.91 mths
Full WISC	34	92.21	15.94	35	96.26	11.24
Verbal WISC	34	94.91	14.03	35	97.43	14.29
Performance WISC	34	90.88	18.37	35	95.67	12.69
Unract	35	3.83	4.15	35	2.37	2.77
Ovract	35	4.26	5.30	35	4.26	6.04

To conclude, the various checks that had been made had provided useful information. On the one hand, they gave the assurance that reading ability and reading habits had been validly measured; also the assurance that the Interest Group and Skill Group were similar, except for the methods used in sessions. On the other hand, they enabled two groups with whom approaches had not been correctly implemented to be excluded, and thus for it to be the more certain that the methods being compared were the intended ones.

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1. T-test results for the Verbal and Performance WISC scores are given in Appendix D.
2. The non-parametric Mann-Whitney U test was used here, as the Bristol Guide measures were, as would be expected, severely skewed.

## CHAPTER 10

### RESULTS: THE SHORT-TERM EFFECTS OF THE SESSIONS

Results will be dealt with in terms of the hypotheses set out in Chapter 6. The hypotheses will be discussed in the order that is most logical, in view of the results obtained, rather than as they were set out in Chapter 6.

#### Hypothesis

1. In the short-term, children who attend interest sessions will improve reading ability more than children who attend skill sessions.

The improvement in reading ability of the Interest Group and the Skill Group over the course of the sessions is shown in table 10.1.

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TABLE 10.1 IMPROVEMENT IN READING ABILITY DURING THE SESSIONS OF THE INTEREST GROUP AND THE SKILL GROUP.

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	No.	<u>Improvement</u>	SD
		Mean (in mths)	
Interest Group	35	4.17	2.96
Skill Group	35	5.71	3.61

---

The Interest Group made less, not more, progress than the Skill Group: a mean of 4.17 months of reading age compared to the 5.71 months made by the Skill Group. The difference was significant at the 0.054 level ( $t=1.96$ ,  $df=68$ ,  $P<.054$ ).

It can be concluded that the expected results were not obtained: that children who attended interest sessions did not improve reading ability more than the children who attended skill sessions. What is less

clear is whether the reverse is true: whether the children in skill sessions improved significantly more than the children in interest sessions. The different progress made by the two groups may be regarded as statistically significant, but trivial in real terms. It is true that the Skill Group made an average of 1.54 months' more progress than the Interest Group, and that this represents about a third of the progress made by the children as a whole - a substantial proportion. Also, over a longer period of time, one might expect the difference between the two approaches to be greater and to show up more clearly. On the other hand, 1.54 months' difference in progress could be regarded as a small difference. Of greater importance, there was a great deal of variation in the progress made by the children in each group, as is indicated by the size of the standard deviations.

### Intelligence

2. Children of average or below average intelligence in interest sessions compared with similar children in skill sessions.
3. Children of above average intelligence in interest sessions compared with similar children in skill sessions.

The relationship between teaching method and improvement becomes far more clear-cut and interesting if intelligence is taken into account. Verbal WISC scores were used as the measure of intelligence, rather than Performance scores. This was because reading and language are so closely related that verbal intelligence is more likely to be important in relation to reading progress than non-verbal intelligence. (This was borne out later, when it was found that Verbal WISC scores correlated significantly with progress, whereas Performance WISC scores did not.)

An intelligence quotient (IQ) of 100 was taken as the dividing line. The choice of 100 was determined by this being the mean score that should be obtained by a group of normal children. The children were divided into a higher intelligence group, obtaining IQs of above 100, and a lower intelligence group, obtaining IQs of 100 or below. Mean improvement scores for the groups are given in table 10.2 below.

TABLE 10.2 IMPROVEMENT OF CHILDREN OF DIFFERENT LEVELS OF VERBAL INTELLIGENCE.

	Verbal IQ more than 100			Verbal IQ 100 or less		
	No.	Mean (in mths)	SD	No.	Mean (in mths)	SD
Interest Group	13	6.31	2.60	22	2.91	3.56
Skill Group	15	6.47	2.71	20	5.15	3.04

The children of higher verbal intelligence improved by about the same amount, whichever approach was used: the Skill Group made 6.47 months' progress and the Interest Group made 6.31 months' progress. In contrast, the children of lower verbal intelligence improved significantly more with skill sessions than with interest sessions ( $t=2.19$ ,  $df=40$ ,  $P<.05$ ).<sup>1</sup> The Skill Group made 5.15 months' progress, whereas the Interest Group made only 2.91 months' progress.<sup>2</sup>

1. T-tests were used in these analyses of results, rather than analyses of variance, because I was interested in how different types of children fared with the two methods (e.g. less intelligent children in interest sessions and skill sessions) rather than with whether overall group interactions (e.g. intelligence by method) were significant.
2. Checks were made to see if the difference in progress of the less intelligent children in the two groups could be due to factors other than teaching method. The verbal intelligence scores and reading habit scores of the two groups of less intelligent children did not differ significantly. (Results are given in Appendix D). Thus, other factors did not seem to be the cause of the difference in results.

Thus, the more intelligent children did not benefit more from interest sessions than from skill sessions. The null hypothesis (of no difference between the groups taught by the two different methods) was accepted. The less intelligent children, however, benefited significantly more from skill sessions than from interest sessions. The null hypothesis was therefore rejected.

Therefore, more intelligent children seem to be able to pick up reading skills, whether an interest-centred or a skill-centred approach is used. In contrast, less intelligent children seem in need of the greater structure and direction that is obtained in skill sessions.

#### Sex

4. Girls in interest sessions compared with girls in skill sessions.
5. Boys in interest sessions compared with boys in skill sessions.

Mean progress scores for boys and girls are given in table 10.3. Both boys and girls in the Skill Group improved more on average than boys and girls in the Interest Group. However, the differences were not significant for either sex ( $t=1.64$ ,  $df=32$ , NS, for the girls, and  $t=1.13$ ,  $df=34$ , NS, for the boys). It is to some extent understandable, as outlined in Chapter 6, if girls do as well in skill sessions as in interest sessions. However, it was more surprising to find that the boys did not improve to a greater extent with interest sessions than with skill sessions. In both cases, the null hypotheses were accepted.



### Social adjustment

6. Quiet, shy children in interest sessions compared with similar children in skill sessions.
7. Aggressive, troublesome children in interest sessions compared with similar children in skill sessions.

The Unract measure of the Bristol Guides was taken as the measure of quietness and shyness. Under-reacting children were taken to be those children who scored 3 or more on the class teacher's assessment of Unract. The Ovract measure of the Bristol Guides was taken as the measure of aggressive and troublesome behaviour. Over-reacting children were taken to be those children who scored four or more on the class teacher's assessment of Ovract. Mean scores for the groups of children are given in table 10.3.

Both under-reacting children and over-reacting children improved more with skill sessions than with interest sessions, but the difference between groups was not significant. In both cases, therefore, the null hypotheses were accepted. (See table 10.3 overleaf)

8. Attitude to reading. The hypothesis concerning attitudes will be stated in full, as it was one of the four main hypotheses:

In the short-term, children who attend interest sessions will improve attitudes to reading more than children who attend skill sessions. Interest sessions were meant to improve the child's reading ability by altering his attitude to reading, whereas it seemed unlikely that skill sessions would affect attitudes.<sup>1</sup> Attitudes were measured through measurement of reading habits. (Details about this were given in Chapters 7 and 9.) The mean scores obtained by the Interest Group and

1. The knowledge that good progress was being made might affect attitudes, and in this case, as children who attended skill sessions made good progress, then attitudes could be expected to change. On the other hand, previous experimental studies had not shown that good progress led to such attitude change.

the Skill Group on the reading habit scale are shown in table 10.4.

TABLE 10.3 PROGRESS IN READING OF VARIOUS SUB-GROUPS

Sub-group	Interest Group			Skill Group		
	No.	Mean (in mths)	SD	No.	Mean (in mths)	SD
Sex of child:						
Boys	18	4.55	3.78	18	5.83	2.97
Girls	17	3.76	3.46	17	5.59	3.01
High & Low Ovract Scores:						
4 or more	13	4.00	2.81	15	5.20	3.02
less than 4	22	4.27	4.03	20	6.10	2.91
High & Low Unract Scores:						
3 or more	16	4.75	3.60	13	6.69	2.81
less than 3	19	3.68	3.62	22	5.14	2.91

TABLE 10.4 READING HABIT SCORES OBTAINED BY THE INTEREST GROUP AND THE SKILL GROUP BEFORE AND AFTER THE SESSIONS.

	Interest Group			Skill Group		
	No.	Mean	SD	No.	Mean	SD
Before sessions	35	22.7	3.8	32	24.7	5.6
After sessions	35	22.9	5.0	34	26.0	6.5

From table 10.4 it can be seen that the Interest Group was reading almost precisely the same amount at the end of the sessions as at the beginning. The group obtained a mean scale score of 22.9 at the end of the sessions, compared to a very similar one of 22.7 at the beginning.

Clearly, interest sessions had not had the desired effect of improving the children's attitudes to reading.

As had been expected, the Skill Group's attitudes to reading also did not alter significantly: the mean score for reading habits improved slightly from the beginning to the end of the sessions (from 24.7 to 26.0), but the difference was not significant ( $t=.22$ ,  $df=29$ , NS). Thus, in contrast to what was expected, the Skill Group's attitudes had altered more than the Interest Group's. However, the difference in improvement between the two groups was not significant ( $t=0.15$ ,  $df=62$ , NS). The null hypothesis (of no difference in improvement between the two groups) was therefore accepted.

To conclude, children who attended interest sessions did not improve reading ability more than children who attended skill sessions. If anything, the contrary was the case: children who attended skill sessions, rather than interest sessions, improved reading ability the more. However, the greater improvement in reading ability found with skill sessions only seemed to be of significance, both statistically and in real terms, when intelligence was taken into account. Then it became clear that more intelligent children did equally well whichever approach was used, whereas less intelligent children benefited more from skill sessions. It could be argued that this would not have mattered greatly if, as expected, the Interest Group had improved attitudes to reading more than the Skill Group. However, both types of session proved to be equally ineffectual in changing attitudes to reading.

## CHAPTER 11

### EXPLANATIONS OF THE SHORT-TERM RESULTS

The theoretical framework and pilot studies outlined in the first five chapters had all led to the conclusion that children who attended interest sessions would improve reading ability and attitudes to reading more than children who attended skill sessions. Why, then, did the children attending interest sessions not improve more than the children in skill sessions? Furthermore, why did the majority of children in skill sessions (the children of average or below average intelligence) improve their reading ability significantly more than the children who attended interest sessions?

In an attempt to explain these results, a number of variables were considered:

- A. Factors that correlate with reading progress, other than teaching method. Knowing which other factors are associated with progress could lead to increased understanding of the results.
- B. Differences in session activities other than those that follow from the definition of the two approaches.
- C. Differences in the behaviour of the Interest Group and the Skill Group.
- D. What the teachers have to say about the two methods: how they, the practitioners, view the two approaches.

#### A. Variables associated with Progress in Reading

The data was examined to see which variables other than teaching method were associated with progress in reading.<sup>1</sup> Knowledge of the variables so associated could lead to better understanding of the short-term effects of the sessions. A number of the associations are summarised in tables 11.1, 11.2 and 11.3. Significant and non-significant correlations are given in tables 11.1 and 11.2 and mean scores for various groups of children in table 11.3. Comments will be made on different points of interest.

Many factors were found to bear no relationship to achievement. Thus, in spite of the oft-quoted importance of the teacher in determining progress, there were no significant differences between groups of children taught by different teachers. Similarly, there was no significant difference in the progress made by poor and good session attenders. This was unexpected, as children who attend well would seem likely to make more progress than those who do not attend well.

Verbal intelligence correlated significantly with progress, but Performance scores did not. Thus, the close relationship between language and reading ability is pointed to by the fact that the significant correlations with reading progress were with the verbal components of intelligence rather than the non-verbal. Smith (1971) argues for the importance of language in learning to read, whereas other researchers (e.g. Tansley, 1972) discuss the importance of non-verbal skills and from this argument move on to the necessity of teaching the children skills of perceptual discrimination or of a similar kind.

1. In the comparison of teaching methods, eight children had been left out of the analyses, because methods had been incorrectly implemented with these children. However, all children were included in the analyses concerning other correlates of improvement. This was because the subject of interest was not the method used with the children, but rather the variables correlating with progress for those children who have spent a certain amount of time each week in withdrawal groups for poor readers.

TABLE 11.1 SIGNIFICANT CORRELATIONS WITH PROGRESS IN THE SHORT-TERM

Variable	No.		Probability	Test
Verbal WISC	76	.19	<.05	Pearson
Ovract (session teacher)	71	-.22	<.05	Spearman
Inconsequence (session teacher)	71	-.29	<.01	Spearman
Reading Habits (at start of sessions)	72	.36	<.005	Pearson
Amount of reading in sessions	71	.28	<.01	Pearson

TABLE 11.2 NON-SIGNIFICANT CORRELATIONS

Variable	No.		Probability	Test
Performance WISC	76	.07	NS	Pearson
Ovract (class teacher)	78	-.15	<.1	Spearman
Unract (class teacher)	78	.09	NS	Spearman
Unract (session teacher)	71	.04	NS	Spearman

TABLE 11.3 MEAN PROGRESS IN READING FOR VARIOUS GROUPS OF CHILDREN

	No.	Mean (in mths)	SD
Sex of child: Boy	42	4.93	3.40
Girl	36	4.78	3.43
Social Class: III Manual	29	4.55	3.68
IV	23	4.43	3.46
Attendance: Good (less than 4 sessions missed)	14	5.57	3.55
Poor (4 or more sessions missed)	57	4.74	3.37
Teacher group 1-10:			
Mrs. Beeton	8	4.7	3.4
Mrs. Burns	8	4.4	3.4
Mrs. Lowry	8	4.4	5.1
Mrs. Walton	7	5.1	3.2
Mrs. Field	8	5.6	2.0
Mr. Bailey	8	3.9	3.4
Mr. Copeland	8	3.7	3.1
Mr. Shaw	8	4.4	4.0
Mr. Wayne	8	7.1	4.0
Mr. Williams	8	5.1	2.8

The relationship found in the present study between verbal intelligence and reading progress rather than non-verbal intelligence would seem to support Smith's point of view rather than Tansley's.

It should be pointed out that the social adjustment measures as assessed by the session teacher correlated with achievement, but those assessed by the class teacher did not. The view of the child obtained from a specific reading situation relates to reading progress, but the general behaviour of the child does not. The significant correlation here was with over-reacting behaviour. The more a child over-reacted, the less progress he was likely to make. Of the two core syndromes that make up the over-reacting score, this was due to a correlation with Inconsequence and not with Hostility.

The sheer amount of reading carried out by the child emerges as important. The three variables that correlate most highly with progress are all measures of the amount of reading that takes place. These variables are: the reading habits of the child, the amount of reading carried out in sessions, and the extent to which the child displays inconsequential behaviour. (Inconsequence may be indirectly a measure of amount of reading, as it seems to measure how much the child settles down to his work, and hence how much reading gets done.)

There was a low but significant correlation between verbal intelligence and progress. In spite of this, groups of children with higher intelligence levels did not necessarily make more progress than groups with lower intelligence levels. Thus, the boys had higher intelligence quotients than the girls, but boys and girls made the same amount of progress. Similarly, children from social class IV had obtained higher intelligence quotients than children from social class IIIM, but in spite of this, the two groups made approximately the same

amount of progress. These results point to the importance of factors other than intelligence in the improvement of reading ability. From what is known about the differing attitudes of boys and girls to school, and the differing attitudes of the various social classes these other factors seem likely to be motivational ones.

It must be pointed out that all of the significant correlations are fairly low - too much so to be of any great use in predicting the progress of individual children. On the other hand, the correlations are high enough to be revealing about the process of learning to read. They point to the important role of practice in improvement of reading ability, and they indicate that motivation plays its part by determining the amount of practice that takes place.

#### B. Differences in Session Activities

The activities that took place in interest sessions and skill sessions were examined to see if there were differences that did not follow from the definitions of the approaches. The way activities would be categorised was described in Chapter 7. For each group of children, the number of sessions in which reading, browsing through books, talking, writing and drawing were mentioned in session accounts was worked out.<sup>1</sup>

More direct reading was carried out with the Skill Groups, whereas more browsing through books, writing, drawing and talking was carried out by the Interest Groups. The extent to which some of the interest groups did very little direct reading was notable. Mrs. Field, Mrs. Lowry and Mr. Williams mentioned direct reading during sessions with their interest groups only two or three times. More reading than this

1. The two groups in which the approaches were not properly implemented were excluded from this analysis.



must have taken place in these three groups, since reading is involved in browsing through books, writing and drawing as well as in direct reading. Nevertheless, in the light of the results on reading ability being in favour of skill sessions, one would assume that the appearance of more reading taking place in skill sessions is not only appearance but actuality.

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TABLE 11.4 NUMBER OF SESSIONS IN WHICH VARIOUS ACTIVITIES TOOK PLACE

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Activity	Interest sessions	Skill sessions
Reading	70	169
Browsing through books	44	6
Writing	117	59
Drawing	90	31
Talking	98	42
Total Number of Sessions	211	201

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C. The Two Methods and the Children's Behaviour

The children's behaviour in sessions was examined in more detail, as this could throw light on why interest sessions were not more effective than skill sessions. As explained in Chapter 7, to make this examination, children's scores on Bristol Guides filled in by the session teachers were compared with their scores on these Guides when these were filled in by the class teachers. The Skill Group and Interest Group did not differ significantly in social adjustment according to the class teachers' assessments. Therefore, if differences were found between the two groups on the session teachers' assessments, these differences would seem to be a function of the approach being used with the children.

Bristol Guides were filled in for all the children by the class

teachers, and for all but three of the children by the session teachers. In the comparisons, median scores were examined as well as mean scores, because the distributions were severely skewed.

Children displayed more over-reacting behaviour in interest sessions than in skill sessions (see table 11.5). For although the two groups' scores did not differ significantly on the class teachers' assessments, the scores made by the Interest Group on the session teachers' assessments were significantly higher than those made by the Skill Group (Mann-Whitney  $U=413$ ,  $Z=1.84$ ,  $P<.1$ ). It should be noted, however, that the difference is significant at only the 10% level.

Ovract is made up of two core syndromes, Inconsequence and Hostility. It was possible that one or the other of these was the more responsible for the increase in over-reacting behaviour in interest sessions. When the data was examined with this problem in mind, it turned out that the increase in over-reacting behaviour was due to an increase in inconsequential behaviour, not to an increase in hostile behaviour (see table 11.6). For, on the class teachers' assessments, the two groups scored similarly on both Inconsequence and Hostility. On the session teachers' assessments, the two groups again scored similarly on the Hostility syndrome, but the Interest Group scored significantly higher than the Skill Group on the Inconsequence syndrome ( $U=376$ ,  $Z=2.31$ ,  $P<.05$ ). The probability of the results being due to chance was less than 5%.

Interest sessions and skill sessions did not have different effects upon under-reacting behaviour. In both types of session, less under-reacting behaviour was displayed than on the class teachers' assessments (see table 11.7). That is, the Interest Group and Skill Group obtained similar scores to each other on the class teachers' assessments of Unract,

and also similar scores to each other on the session teachers' assessments of Unract; but for both groups, session teachers' assessments gave the children lower scores than class teachers' assessments. Results for the three core syndromes which make up the Unract measure were similar to the results for Unract itself (table 11.8). Thus, the children were less shy and withdrawn in the sessions, presumably as they were in small groups.

These results indicate that with a skill-centred approach, children may stay calmer and settle down to work more easily, whereas with an interest-centred approach, the children may take advantage of the freedom of the sessions to play around, avoid reading activities and to pursue displacement activities instead. For the behaviour, which in the Guides is counted as inconsequential, includes: "Attends to anything but his work; Never gets down to solid work; Constantly restless". (Bristol Social Adjustment Guides, Fifth Edition, p.39). If such behaviour is more prevalent in interest sessions, it is easy to understand why children in interest sessions do not improve their reading ability more than children in skill sessions.

#### D. What the Teachers Say

Finally, we look at what the teachers have to say about the methods. The comments the teachers make could be extremely illuminating in explanation of results - in explaining why reading ability improved more in skill sessions, why there was no change in attitudes, why there was less restless behaviour in skill sessions. Ten intelligent adults, all experienced teachers, in close contact with both methods, are giving their views about what is going on.

TABLE 11.5 OVRACT SCORES FROM CLASS TEACHERS AND SESSION TEACHERS FOR THE INTEREST GROUP AND THE SKILL GROUP

	No.	Interest Group			No.	Skill Group		
		Mean	SD	Median		Mean	SD	Median
Ovract (class teacher)	35	4.26	5.3	2.42	35	4.26	6.04	1.33
Ovract (session ")	35	5.17	6.52	1.85	32	2.09	3.78	0.44

TABLE 11.6 INCONSEQUENCE AND HOSTILITY SCORES FROM CLASS TEACHERS AND SESSION TEACHERS

	Interest Group (N=35)			Skill Group (N=35: class teacher N=32: sess. teacher)		
	Mean	SD	Median	Mean	SD	Median
Inconsequence (class teacher)	1.83	2.62	0.86	1.89	2.84	0.37
Inconsequence (session teacher)	2.94	4.08	1.12	0.59	1.13	0.2
Hostility (class teacher)	1.03	2.33	0.17	1.11	2.18	0.23
Hostility (session " )	1.11	1.87	0.29	2.16	7.36	0.11

TABLE 11.7 UNRACT SCORES FROM CLASS TEACHERS AND SESSION TEACHERS FOR THE INTEREST GROUP AND THE SKILL GROUP

	Interest Group				Skill Group			
	No.	Mean	SD	Median	No.	Mean	SD	Med.
Unract (class teacher)	35	3.83	4.15	2.12	35	2.37	2.77	1.6
Unract (session " )	35	2.14	3.58	1.2	32	2.0	2.88	0.5

TABLE 11.8 SCORES ON UNRACT CORE SYNDROMES

	Interest Group (N=35)			Skill Group (N=35: class teacher N=32: session " )		
	Mean	SD	Median	Mean	SD	Median
Unforthcomingness (class teacher)	1.66	2.35	.58	1.40	1.77	.75
Unforthcomingness (session teacher)	1.46	2.40	.57	1.44	2.30	.34
Withdrawal (class teacher)	.69	1.68	.23	.23	.73	.08
Withdrawal (session teacher)	.11	.53	.03	.19	.47	.09
Depression (class teacher)	.77	1.21	.37	.29	.62	.15
Depression (session " )	.23	.55	.10	.16	.51	.05

Information on the teachers' views was obtained from session accounts, from individual interviews, from informal contacts, and from a questionnaire filled in by the teachers at the end of the sessions. (Further details about measurement of views are given in Chapter 7.)

First, information will be given on the teachers' preferences between approaches and how these changed over the course of the sessions. Then, a number of reasons for these changes will be considered.

### The teachers' preferences

At the beginning of the sessions, the majority of the teachers preferred interest sessions, but by the end of the sessions the majority preferred skill sessions. That is, at the beginning of the teaching, four teachers favoured interest sessions, four were neutral, and only one teacher preferred skill sessions. By the end of the sessions, six teachers favoured skill sessions, although four of these qualified their preference with remarks about sometimes mixing approaches. Of the remaining four teachers, two teachers were neutral between approaches and two wanted to mix approaches. By the end of the sessions, interest sessions were not favoured wholeheartedly by even one teacher.

Some amplification will be made of the above, beginning with the teachers who were not in favour of either approach in particular. One teacher from start to finish was firmly in favour of suiting the approach to the individual child. She stated:

I believe that in acquiring reading skills each child needs to follow an approach which is best suited to his particular needs ... consideration for the individual and his specific needs at each stage (is) the most important factor.

Sampson's (1969) comment on the utopian nature of this aim may be recalled here:

Admirable as is the ideal of suiting the method to the child, and excellently as it is sometimes achieved, there is a clear possibility that some of the respondents were deceiving themselves.

(Remedial Education Services, Remedial Education, 4, p.62)

Another teacher was very much in favour of an eclectic approach. He said:

None of the approaches used in entirety is, in the opinion of the writer, the complete answer to reading development. Rather what is required is a more eclectic approach where successful elements of each method are employed as required.

Two teachers by the end were neutral between the two approaches, regarding the two as equally good.

Six of the teachers by the end of the sessions favoured skill sessions. (It is true that four of these qualified their preferences, saying that sometimes they would like to mix approaches.) Some illustrative comments about these teachers' changes in preferences are given below.

One teacher said that, to begin with, "I knew that depending on teacher-child relationships, either approach could be successful, so I determined to make them both work". However, at the end of the sessions, she said:

I'm certain I preferred the skill-centred approach because all concerned worked consistently very hard indeed. Each lesson, one felt satisfaction in the skill-centred group's achievement. This latter feeling was not always achieved with the interest-centred group - particularly in the later stages, when interest was fading.

Mr. Bailey said that to begin with:

I felt that the interest approach, though more vague and more difficult to initiate, should be the better one ... I thought this approach would help the children more because it would make them want to read ... Later in the year I felt the interest approach was failing because the interest was lacking, or at least difficult to sustain ... The constant practice of the skills approach seemed to be more beneficial, and this group seemed to be making more progress.

The fullest expression of this feeling is given by Mr. Copeland:

I began by being entirely in favour of interest-centred work. I was enthusiastic and so were the group. I thought that it would allow much more room for individual development. I felt that perhaps their rejection of reading lay in an area of 'disinterestedness' in the material they were reading rather than in skills.

I became convinced (much against my inclination) that skills were the key to the actual business of smooth progression - there may be other far more important psychological factors to examine but unless the teacher knows where the gaps in skills really occurred, it seems useless to go on building on a poor foundation. Skills must be tackled systematically and logically - there must be careful recording of progress - given an environment which is not repressive and full of opportunity, I think this may be the way for those with handicaps in reading.

The advantages and disadvantages of the two methods, in the teachers' eyes.

The teachers moved from preferring interest sessions to preferring skill sessions because of the various advantages and disadvantages that they found in the two methods.

### Interest sessions

In working on the children's key interests, a tremendous emotional and motivational effect could be obtained. Thus, one teacher commented that, in the first session, when she started discussing the children's interests with them:

Their eyes opened wider and wider ... their back visibly straightened and, when I'd finished, they held themselves like princes and princesses. I then gave each child a selection of books ... on one of his interests ... They spread out with the books and were engrossed, looking firstly at the pictures and then the story content. They soon started to read avidly. The next week, the class teacher commented "I'm amazed, these children have really smartened themselves up for your coming". It was an obvious physical change which I'd immediately noticed - a white shirt, fresh sweaters, etc.

That the children actually changed physically as a result of working on interests makes one realise the great impact that such an approach can have.

The intensity of the children's interests can lead to hard, concentrated work. This is evident from descriptions such as the following one given of two boys, one keen on football and one on farming:

Great interest aroused from detailed autographs, Club history, photographs from Celtic Football Club to Alan. Both boys and girls were fascinated. Alan proceeded to write a thank-you note. I wanted Nigel to record his experiences at the Cattle Market, when his thumb was injured when a sow trod on it. He worked conscientiously on this piece without being distracted.

However, the picture is not always as rosy as this. Interest sessions were less likely to be successful with girls. For one girl, it was noted that "her enthusiasm is not as obvious as the boys", and at the end of the interest sessions, it was said, "not suitable for this



child. I feel this to be true of many girls. Only the 'tomboys' really work at projects in my experience". Along the same lines, another teacher noted that whereas the boys in her group sustained their interests from one term to the next, the girls did not. In the first session of the new term, she noted, "Nigel's talk was basically farming and Alan's discussion was mainly of football ... The two girls did not mention their interests from the autumn term".

Some children started off by working enthusiastically on their key interests, but towards the end of the sessions their concentration started to flag and they sometimes became bored and giggly, and attempted to play around. Thus, one teacher commented:

It was disappointing today to find the group, particularly the girls, lethargic ... I felt interest had waned generally throughout the group.

and from another teacher:

Karl lazy and Paul a bit of a nuisance today.  
Had a quiet word with them after the lesson.  
Not really naughty but silly and giggly.

and from the final questionnaire:

Interest sessions: very successful for the first term but I felt less happy about them the second term when the children seemed to lose some of their interest.

With other children, the problem was different, in that their initially expressed interests seemed to the teachers to be extremely superficial. Four teachers noticed this, and made such comments as:

...fishing, football, swimming, popstars - at a very superficial level - no depth of interest apparent .. Gary Glitter was appointed Number One ... but she knew nothing about him or his records ... David had chosen football but had brought no information and appeared to have none ... All the children in the group seem to be lacking in enthusiasm and not really keen on their chosen subjects.

and:

The boys said (they were interested in) football. The girls, Michelle and Mandy, said 'Horses'. On further enquiry Mark had never seen a professional match and did not play much; the girls had never ridden a horse or touched one. Gathered that Horses and Football were in-things ... am not happy about the reason for interest choices - they are neither honest nor deeply satisfying.

The teachers solved this problem by moving, after several sessions, from work on individual interests to work on group topics. Mr. Wayne started to work on the Wild West with his group.

I have decided to introduce a topic ... concerned with a western theme. To this end I hope to direct the girls towards reading about, designing and constructing models on this western theme, the culmination of which will be the construction of a covered wagon, totem pole and other items. The emphasis will however be on using the books available for researching the work by the group, then going on to models.

Mrs. Beeton worked on cooking with her group:

Period began with a general discussion about their real or affected interest in topics they had chosen. (I had become very concerned with their lack of real interest). We talked of things we had done in school and had enjoyed, and cooking was mentioned. Children became very interested and full of ideas of what they would like to cook if they had the opportunity ... A list was compiled of items they would like to cook in order of preference and it was decided that cooking was to be the group's new interest approach to reading.

It was noticeable that the group topics seemed to be connected to the teachers' rather than to the children's interests. Thus, Mrs. Beeton was a motherly lady who probably did a lot of cooking at home. Mr. Wayne liked woodwork and his group, who were all girls, started to make wooden models on the western theme. Mr. Copeland was a music specialist, and his group all ended up making 'paper symphonies'. Although the children seemed to be working on the teachers' rather than their own interests, it must be said that once they had moved on to these group topics, they worked with great enthusiasm.

It is possible that the teachers were too quick in rejecting the children's own interests. I had seen one of these children a year before sessions started, and she had told me then that she was interested in horses. She still claimed this interest a year later. Yet the teacher concerned immediately dismissed it as superficial. There may have been an unwillingness on the part of the teachers to accept the children's culture at face-value. This point is dealt with further in the discussion in Chapter 14.

A main problem was found with three of the interest groups in that the children's attention never seemed to be really caught. Although both individual and group topics were pursued, the children on the whole were unenthusiastic. They often fidgeted and were easily distracted, moving restlessly from one subject to another. The three teachers involved in these unsuccessful sessions made very similar comments to each other about the children's behaviour. From one teacher:

They were willing to talk about bonfires and fireworks, but did not pursue any one topic for any length of time. Found them slightly excited and difficult to settle down.

and from another teacher:

Didn't follow any interests (e.g. swords) to any length. Interest is very momentary. Looking up dolls, we came across dogs. All children immediately started telling me about their dogs, dropping whatever they were doing on armour, swords, etc.

One of the teachers summed up the way the sessions went as follows:

The Interest Group were interested in very little and were never grateful for comics, books, visits, etc. In fact, they grew to expect these extras, as a comment on the last day shows: 'haven't you brought us our comics?' They seemed to view the lesson as a 'skive'.

The unsuccessful nature of the interest sessions held by these three teachers was later found to be reflected in the fact that the children in these three groups obtained the lowest median scores on improvement in reading ability (see table 11.9).

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TABLE 11.9 IMPROVEMENT IN WORD ACCURACY OF THREE INTEREST SETS

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	Teacher	Median Improvement (in mths)
Set 1 (individual interests)	Mrs. Walton	5.5
	Mrs. Field	4.5
	Mrs. Lowry	4.5
Set 2 (group work)	Mr. Wayne	6.5
	Mr. Shaw	5.25
	Mrs. Beeton	5.0
	Mr. Copeland	4.0
Set 3 (children unenthusiastic)	Mrs. Burns	3.5
	Mr. Bailey	3.5
	Mr. Williams	3.5

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The teachers also mentioned other disadvantages that they had found in interest sessions. They noted that in such sessions it was easy for the child to avoid reading if he wanted to do so. For example, he could browse through books, without reading much, he could draw instead of write, and he could mechanically copy text. Books were not always at the right level of reading ability. Finally, it was not easy for the child to see if he was making progress or not.

### Skill sessions

One of the main advantages of skill sessions was that the children could see the progress they were making. This point emerged as important enough to be specifically mentioned by five out of the ten teachers. The visibility of progress could lead to both the children and the teacher feeling pleased and satisfied with what they were doing, and these feelings could then lead to yet greater efforts being made by children and teacher. The thought of getting onto the next book in the reading series often acted as a great spur to achievement. Typical comments were: "Colin and Mark still very keen. Anxious to start another book as soon as one is finished ..." and: "Gary took out C1 to read. Very keen to finish the reading scheme first".

Children in skill sessions often worked very hard and regularly. Thus, it was said of one group: "This group has a very positive approach to work. Little effort is needed to motivate them and great interest is forthcoming whatever they are presented with". Of two girls it was said:

Beverley, Marie: Both work extremely hard, it is difficult to get them to converse as they appear to want to work from the minute they enter the room, most prolific output from both girls, element of competition is creeping in between them.

It is clear that motivation in some skill sessions was not lacking, but quite the opposite. The material used was often much enjoyed by the children, in spite of the criticisms of such material made in Chapter 2. Thus, of the 'Pirate' series, Mrs. Lowry commented:

Children seemed very enthusiastic about this reading scheme and were pleased to have easily dealt with the pre-readers.

Admittedly, the 'Pirate' series seems more interesting than many of the other ones in current use. Even so, far more 'uninteresting' material was also enjoyed by some of the children. Thus, such comments are made as:

Dawn. Offered her 'Reading to Some Purpose' book. She liked this very much and asked me to bring it to next lesson.

and of the 'Royal Road Readers':

Marie and Beverley. Great enthusiasm and enjoyment of these books, are keen to read as many as possible.

However, sometimes books could become boring. For example, in one session : "Continued with Royal Road Readers. It is becoming clearer that they do not greatly like being confined to one reading scheme". This difficulty could be avoided however by changing from one reading scheme to another, when necessary.

A more serious difficulty was that the different levels of ability of the children stood out far more clearly than in interest sessions. Thus, in five out of the ten skill groups, one or more children stood out as being much worse than the other children. This was evident from such comments as:

Colin and two Marks still very keen.  
Can't tell about Kevin because he  
doesn't speak much at all and is much  
slower than the others.

Following on from this visibility of ability, competitive attitudes sometimes built up amongst the groups, as it was easy for the children to compare the progress they were making. For example:

Malcolm is very aware of the fact (and keeps rubbing it in) that he is reading ahead of Philip ... Philip 'embarrassed' that Malcolm has read more books than him but this appears to motivate no fighting spirit in him to read and catch up. Generally he appears a poor loser.

The visibility of progress could be demoralising, even without this competitive element, because if the child was not making any progress, he was aware of it.

It is evident that both interest sessions and skill sessions had a number of advantages and disadvantages, but that, in the eyes of the teachers, skill sessions had more advantages than interest sessions. These additional advantages of skill sessions presumably help to explain why skill sessions were on the whole more successful than interest sessions. Children were often bored in interest sessions, their interests fading or being seen as superficial.

From the findings outlined in this chapter, we know that more reading took place in skill sessions than in interest sessions. The more reading that is done, the more one would expect the child's ability to improve. We know that the children displayed less inconsequential behaviour in skill sessions, that is, avoided reading less and so improved more. We know that, in the eyes of the teachers, the children were better motivated in skill sessions. With the knowledge that there were these differences between interest sessions and skill sessions, the results can be better interpreted. This interpretation is set out in Chapter 14.

## CHAPTER 12

### THE FOLLOW-UP STUDY

#### A. Aims and Hypotheses

The children were followed up in May 1975, fourteen months after the sessions had finished. The aim of the follow-up was to see whether the two teaching methods had differential long-term effects on reading ability and reading habits. One of the starting-points for the investigation had been the observation that remedial teaching had poor long-term effects. Interest sessions were devised with the intention of altering attitudes to reading, so that long-term improvement would be obtained. It was therefore necessary to take the investigation to its logical conclusion by studying the longer-term effects of interest sessions and skill sessions on reading and attitude to reading.

Hypotheses as to long-term effects were formulated right at the beginning of the investigation, before the sessions started. These hypotheses were that children who had attended interest sessions would improve reading ability and attitude to reading more, in the long-term, than children who had attended skill sessions. As the results obtained from the short-term experiment were not as expected, the hypotheses concerning long-term effects had to be re-formulated. The final hypotheses arrived at are stated and discussed below.

1. In the long-term, children who have attended interest sessions will make the same amount of progress in reading as children who have attended skill sessions.

It had been expected that children who attended interest sessions would improve their attitudes to reading, and that this improvement in



attitudes would lead to long-term progress in reading. However, children who had attended interest sessions had not changed their attitudes to reading, and therefore good long-term effects could not result from such attitude change. Children in skill sessions had also not improved their attitudes, and so again good long-term effects on reading could not result. Children in both groups should make the same small amount of progress.

2. In the long-term children who have attended interest sessions will improve attitudes to reading to the same extent as children who have attended skill sessions.

In the short-term, the Interest Group's and Skill Group's changes in attitude had been the same: there had been no improvement for either group. There seemed no reason for there to be differential changes between the two groups in the long-term either.

#### B. Method

The nine secondary modern schools,<sup>1</sup> in the borough in which the first study was carried out, were approached through the remedial adviser for the area. The head teachers were asked if they would allow the children involved in the first study to take part in the follow-up. All the head teachers were most co-operative.

The children were given individually administered tests, and in addition, further information about progress was obtained from the schools. I administered all the tests myself. The testing was carried out in quiet rooms or similar spaces provided by the schools. The children were always given the tests in the order listed below. The following information was obtained.

1. The area still has secondary modern and grammar schools, rather than comprehensive ones.

1. The children were asked whether they preferred their primary or secondary school, and why. This question was asked partly as an easy opening to lead into the tests proper, and partly to see how far preferences between primary and secondary schools related to progress in reading. The decision to ask this question was made only halfway through the testing programme, and therefore only about half the children were asked it.
2. The children were then given a reading test. The Neale Analysis of Reading Ability was again used. This meant that changes in reading ages from one testing to another could not be affected by the variations in test norms of different reading tests. Also, the Neale test was originally chosen because it was the most suitable reading test available. This was still the case at the time of the follow-up. During the first study, it had been found that repeating a form of the Neale test over a five month interval of time did not lead to any noticeable practice effects, but that the forms were not exactly equivalent. Therefore, as in the first study, the form used was that which had originally been given to the child. Results from one testing to the next should then be more directly comparable.

The reading age obtained on follow-up was compared with that obtained at the end of the sessions. The difference between the two represented the improvement (or deterioration) that had been made. At follow-up, measurement was made of both word accuracy and comprehension. As in the first study, because of the unsatisfactory nature of the comprehension measure, accuracy was taken as the measure of reading ability. Results on comprehension are given in Appendix D.

3. The questionnaire on reading habits was repeated to see if habits had changed, and how reading habits related to progress.
4. The head teachers or class teachers were asked to provide the following information.
  - a. Whether classes were streamed or mixed ability; if streamed, which stream each child had been placed in.
  - b. Whether remedial help was provided; if so, what this help consisted of, and which children in the investigation received it.
5. Class teachers were asked to fill in Bristol Social Adjustment Guides for each child. The measures of social adjustment would allow examination to be made of how behaviour related to progress, and of whether the children's behaviour had changed. Furthermore, besides the information on social adjustment, there are also questions in these Guides on attendance.

### C. Results

79 of the 80 children involved in the first study were traced. All 79 children had moved to secondary modern schools, and all were in their first year there. 75 of the 79 children traced were given the reading tests,<sup>1</sup> and 73 of the 75 children were given the questionnaire on reading habits.

### The Long-Term Effects of Interest Sessions and Skill Sessions

#### Reading ability

Mean reading ages of the Interest Group and the Skill Group at follow-up are shown in table 12.1.

1. Of the four children not tested, one had moved out of the borough, one was traced only after testing had finished, and two were away during the entire period of testing.

TABLE 12.1 READING AGES OF THE INTEREST GROUP AND THE SKILL GROUP AT FOLLOW-UP

	No.	<u>R e a d i n g   a g e</u>	
		Mean	SD
Interest Group	33	8yrs.9.6mths	6.98 mths
Skill Group	33	9yrs.0mths	9.06mths

The two groups had mean reading ages of 8 years 9.6 months, and 9 years 0 months respectively. Both groups were therefore well behind the average for children aged twelve to thirteen. It is true that a number of the children were now functionally literate, according to the Ministry of Education's (1950) definition of functional literacy as a reading age of nine years or greater: 13 out of the 33 children in the Interest Group, and 16 out of the 33 children in the Skill Group. But in our increasingly complex society, nine years' reading age is the minimum necessary for functional literacy. Many forms and newspapers require a far higher reading age. Of the children who could be regarded as 'functionally literate', only three in the Interest Group and eight in the Skill Group had a reading age of 9 years 6 months or greater. Not one child in either group was reading at a level equal to or greater than his chronological age.

To fill in the picture somewhat, this consideration of the children's reading ages at follow-up has been made. The main question of interest, however, was whether the Interest Group during the follow-up made more progress in reading than the Skill Group. Mean progress scores of the two groups are shown in table 12.2.

TABLE 12.2 PROGRESS IN READING OF THE INTEREST GROUP AND THE SKILL GROUP IN THE LONG-TERM

	Progress (in months)		
	No.	Mean	SD
Interest Group	33	6.88	4.57
Skill Group	33	7.79	4.69

It can be seen from the table that the Interest Group made slightly less progress than the Skill Group. The difference was small however and not statistically significant ( $t=0.80$ ,  $df=64$ , NS). Thus, there is no evidence of differential long-term effects from the two types of remedial teaching. In the long-term, the children who attended interest sessions made the same amount of progress as the children who attended skill sessions. The hypothesis as to changes in reading ability was therefore accepted.

One can also ask whether the two methods were as successful in the long-term as in the short-term. Was the good rate of progress during sessions maintained during follow-up? Percentage rates of progress as a function of chronological time are shown in table 12.3.

TABLE 12.3 PROGRESS OF THE INTEREST GROUP AND THE SKILL GROUP IN RELATION TO CHRONOLOGICAL TIME

Time interval	Chronological time (in mths)	Progress of Interest Group		Progress of Skill Group	
		Mean (in mths)	% of Chronol-time	Mean (mths)	% of Chronol-time
Start of schooling to start of sessions	61.25	34.6	56	34.2	55
Start of sessions to end of sessions	5	4.17	83	5.71	114
End of sessions to follow-up	14	6.88	49	7.79	56

It can be seen that for both groups there were no long-term effects from the sessions, in that the rate of progress, which had accelerated during the sessions, had returned to its former, slower rate. Progress during the sessions was about equal to the amount of real time passed, whereas progress both before and after the sessions was only equal to about half the amount of real time passed.

#### Reading habits

The data was examined to see if the two groups had changed their reading habits differentially. Reading habit scale scores of the two groups are shown in table 12.4, and the amount of change during follow-up in table 12.5. Although both groups' scores had risen slightly, the changes made by the two groups did not differ significantly, one from the other ( $t=-0.28$ ,  $df=62$ , NS). In the long-term, the children who had attended interest sessions changed reading habits to the same extent as the children who had attended skill sessions. The hypothesis concerning changes in reading habits was therefore accepted.

TABLE 12.4 SCORES ON THE READING HABIT SCALE ON FOLLOW-UP, FOR THE INTEREST GROUP AND THE SKILL GROUP

	No.	S c o r e s	
		Mean	SD
Interest Group	33	25.39	4.68
Skill Group	31	28.17	6.38

TABLE 12.5 CHANGES IN READING HABIT SCORES DURING THE FOLLOW-UP PERIOD

	No.	C h a n g e s	
		Mean	SD
Interest Group	33	2.01	5.82
Skill Group	31	1.61	5.86

### Further Examination of Changes in Reading Ability

Further information was obtained in the follow-up in order to help with understanding why some children were reading better and some were not. Although not directly relevant to the comparison of interest sessions and skill sessions, the information is briefly detailed here, as it could prove revealing.

As already stated, all 79 children had moved to secondary modern schools. Out of the 72 children for whom information was available, 46 (64 per cent) had been placed in bottom streams or sets, or in smaller remedial classes. That is, about two-thirds had ended up at the bottom in their new schools.

38 children (51 per cent) were given extra help with reading either in small withdrawal groups or in the smaller remedial classes. No child was reading at a level even equal to his chronological age, yet only half the children were being given any extra help.

The relationship between individual characteristics of the children and progress during follow-up was examined. Results are given in tables 12.6, 12.7 and 12.8. The only significant correlation was with intelligence. Reading habits at the end of the experiment, social adjustment measures, and chronological age did not correlate significantly with progress. The sex of child, social class, initial reading age, and progress during sessions were examined to see if they related to progress during follow-up, but no relationship could be discerned.

TABLE 12.6 SIGNIFICANT CORRELATIONS WITH READING PROGRESS DURING THE FOLLOW-UP PERIOD

Variable	No.	Pearson's r	Sig.
IQ = Full	72	.36	<.001
Verbal	72	.29	<.01
Performance	72	.32	<.01

TABLE 12.7 NON-SIGNIFICANT CORRELATIONS

Variable	No.	Spearman's r	Sig.
Reading habits	72	.04	NS
Ovract	51	-.03	NS
Unract	51	-.10	NS
Chronological age	73	-.06	NS
Inconsequence	51	-.004	NS

TABLE 12.8 READING PROGRESS MADE BY VARIOUS SUB-GROUPS DURING THE FOLLOW-UP PERIOD

Group	Mean (in mths)	SD (in mths)	No.
Progress made during sessions:			
1. 2 months or less	8.1	4.01	13
2. 3 to 6 months	7.0	4.3	39
3. 7 months or more	8.1	6.0	21
Sex of child:			
Boys	8.25	5.36	40
Girls	6.61	3.86	33
Social class:			
III Manual	7.73	4.63	26
IV	8.04	4.54	22
Initial reading age (accuracy)			
1. 7 yrs 0 mths - 7 yrs 11 mths	7.8	5.1	20
2. 8 yrs 0 mths - 8 yrs 6 mths	7.25	4.5	28
3. 8 yrs 7 mths or more	7.56	4.98	25

School differences were examined, to see if children in different schools made varying amounts of progress. This seemed an area worth looking at because, from such research as that in the Plowden Report and Jencks's (1972) investigations, it is often asserted that 'schools



make no difference'. The mean progress scores of children in the different schools are given in table 12.9. As there were significant differences in levels of intelligence of children in different schools, an analysis of covariance was carried out, regressing progress made onto intelligence. The adjusted means are also given in table 12.9. The covariance led to some alteration in the rank order of the different schools. The analysis of covariance showed that the difference in the children's progress at the various schools was significant at less than the 5 per cent level ( $F=2.57$ ,  $df= 7.63$ ,  $P<.05$ ).

TABLE 12.9 INTELLIGENCE QUOTIENTS AND READING PROGRESS (UNADJUSTED AND ADJUSTED) OF CHILDREN IN THE DIFFERENT SECONDARY SCHOOLS

School Name <sup>1</sup>	Full WISC IQ			Reading progress (in months)				
	No.	Mean	SD	No.	Mean	SD	Adjusted Mean	Standard Error
Ampleside	6	106	16.1	7	11.57	7.11	11.04	1.78
Gordonsfield	8	92.12	10.36	8	9.87	2.64	10.19	1.49
Wincheston	7	94.14	12.67	7	9.29	2.06	9.39	1.59
Eatorme	13	102.92	10.29	13	8.77	3.14	7.96	1.21
Roefort	6	86.83	10.3	6	7.67	3.93	8.52	1.75
Harron	15	91.6	11.18	12	5.67	4.01	5.93	1.22
Replands	6	90.17	17.23	6	5.5	3.51	6.01	1.73
Marlbridge	14	93.36	15.17	14	4.43	5.79	4.61	1.13

1. The school names are pseudonyms.

Differences between schools were examined to see if such differences could explain the varying rates of progress between schools. Attendance, remedial provision and the children's preferences between primary and secondary schools were all examined.

### Remedial provision

Children given remedial help were defined as those children either taught in withdrawal groups for part of the time or in smaller remedial classes. The difference in amount of improvement between children who were given remedial help and those who were not was significant at less than the 10% level ( $t=1.78$ ,  $df=71$ ,  $P<.1$ ). It should be noted that the two groups had similar intelligence levels.

### Attendance

In the Bristol Guides, the teacher is asked to rate the child's attendance as good or as falling into one or more of four other categories. These four categories were classed together and labelled as 'poor'. The good attenders made significantly more progress than the poor attenders ( $t=1.92$ ,  $df=48$ ,  $P<.1$ ).

### Preference between schools

41 children were asked whether they preferred their primary or their secondary school, and why. Children who preferred the secondary school to the primary school made significantly more progress than the children who preferred the primary school to the secondary school ( $t=3.12$ ,  $df=34$ ,  $P<.01$ ).

Therefore, in the schools in which least progress was made, the children were less likely to be given remedial help, they were less likely to be good attenders, and they were more likely to prefer their primary school (see table 12.11).

TABLE 12.10 SCHOOL-RELATED VARIABLES AND PROGRESS

	No.	Progress (in months)	
		Mean	SD
Remedial provision	36	8.5	4.4
No special remedial provision	37	6.54	5.0
Good attenders	39	9.20	4.36
Poor attenders	11	6.45	3.45
School preferred:			
Primary	10	4.7	3.06
Secondary	26	10.35	5.36

TABLE 12.11 THE RELATIONSHIP BETWEEN SCHOOLS AND SCHOOL-RELATED VARIABLES

Schools (rank ordered according to progress)	Children receiving remedial help. %	Attendance		School Preference	
		No. of good attenders	no. of poor attenders	No. of children preferring primary school	No. of children preferring secondary school
Ampleside	71	7	0	0	3
Gordonsfield	50	7	1	0	4
Wincheston	86	5	2	2	0
Roefort	50	4	1	0	2
Eatorme	85	12	1	2	10
Replands	67	-	-	-	-
Harron	20	5	8	7	3
Marlbridge	14	-	-	1	5

To sum up, there were no differential long-term effects from interest sessions and skill sessions. As found in previous studies, the remedial teaching was ineffective in the long-term. Progress returned to its former disappointing rate, and attitudes to reading remained unchanged.

If remedial teaching was ineffective in the long-term, what factors then determined the long-term progress made by the child? Progress seemed to largely depend on the treatment meted out to the child by the school. Individual characteristics of the child were unimportant, except for intelligence, whereas school-related variables were important. If the child liked school, if he attended well, and if he was given remedial help, then he was likely to make good progress in reading.

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## CHAPTER 13

### POLICY IMPLICATIONS

The main theme of this investigation has been that of how one can best help poor readers. The conclusions to be drawn from the experiment have various practical implications concerning the help given to poor readers. These implications will be dealt with in three sections.

1. Does school matter? 2. The effectiveness of remedial teaching of reading. 3. Remedial methods.

#### 1. Does School Matter?

In recent years, there has been a growing body of literature stressing the comparative unimportance of the school in relation to the home. For example, the research in the Plowden Report leaves one with a distinct impression that school is unimportant. Jencks's work in America serves the same end. Should we then shut down the schools and send the children home?

In spite of this growing body of anti-school literature, the present investigation shows clearly that schools can leave a distinct impression upon at least some of their children. First, the remedial teaching was effective in markedly increasing the children's rate of progress: the remedial teaching would not have been provided, were it not for the school. Secondly, when correlates of progress during the follow-up period were examined, it was found that individual characteristics of the children (e.g. sex, reading habits, social class) were not related to progress, except for intelligence. The factors that were related to progress were principally school factors. When allowance was made for intelligence, there were significant differences between the progress

made by children in the various schools. Children who attended school regularly made more progress than poor attenders. Children who were happy at school, preferring their secondary school to their primary one, made more progress than the other children. Children who were given remedial help made more progress than the other children. In other words, a number of school-related variables were clearly related to progress.

It seems that because poor readers receive little help from their homes, on the whole if they are to make good progress, the help they are in need of must be provided by the schools. For these failing children from poor homes, school is important.

## 2. The Effectiveness of Remedial Teaching of Reading

One of the main reasons for the advocacy of the interest-centred approach at the start of the investigation was the emphasis in previous research on the ineffectiveness of remedial teaching in the long-term. Such teaching has not been shown to affect children's attitudes to reading, and hence no long-term effect upon reading ability could result from such a change. Academics have argued therefore that "remedial teaching is ineffective". Meanwhile, remedial teachers have continued with their teaching.

In the present study, results were obtained in line with previous research. The remedial teaching, whether interest-centred or skill-centred, accelerated the children's rate of progress in reading during the time the sessions were being held. It was only when the sessions were discontinued that the rate of progress returned to its former unimpressive level.

Thus, it seems true that remedial teaching has no effect on subsequent progress, once it is discontinued. But why should one expect it to? It is similar to expecting one to continue to make progress in a foreign language after lessons have stopped, if one does not speak the language. Reading for the working-class child is similar to a foreign language for many post-French-O-Level English people: both normally play little part in everyday life. If progress in either sphere is to be maintained, then lessons must be kept up, or practice must otherwise occur.

The answer to the lack of long-term effectiveness of remedial teaching is not to condemn remedial teaching out-of-hand as ineffective, but rather to accept that it is only effective whilst being given. Poor readers are unlikely to practise reading on their own, or, as was pointed out in the last section, to be given help at home. Therefore, if good rates of progress are to be maintained, it is essential that remedial teaching be given continuously over long periods of time.

### 3. Remedial Methods

The question asked in the investigation was: if experienced teachers see small groups of poor readers for short periods of time each week, will children who attend interest sessions improve attitudes and reading ability more than children who attend skill sessions, both in the short-term and in the long-term?

Interest sessions were a comparative failure. They did not succeed in changing attitudes to reading. Neither did skill sessions,

but skill sessions were not formulated with this aim in mind, whereas interest sessions were devised specifically to this end. Because attitudes did not change, they could not affect long-term reading progress.

Interest sessions were also a failure in that, in the short-term, children who attended interest sessions improved reading ability less than children who attended skill sessions. The difference between the two groups was not large, however, and, given the amount of individual variation, did not seem to be of great importance. But when the groups were divided according to level of intelligence, a further pattern in the results could be discerned. More intelligent children improved by the same amount, whichever approach was used; whereas the less intelligent children made significantly more progress with skill sessions.

Thus, it seems that with children of above average intelligence, either an interest approach or a skills approach may be used. The problem is one of identifying these children. The intelligence tests used by many schools cannot serve to do this, as the tests used too often involve reading and therefore they may under-estimate the intelligence of children with reading problems. Individual testing by educational psychologists may be the answer, or else the use of group intelligence tests that do not require reading ability.

With children of below average intelligence, or with 'unsorted' groups of children, lessons should emulate skill sessions and not interest sessions. In this way, maximum progress should be made by the majority of children.



## CHAPTER 14

### DISCUSSION

The practical implications of the results from the experiment have been outlined in Chapter 13. In this chapter, theoretical implications will be considered. From the comparison of interest sessions and skill sessions, the question arose as to why none of the expected results were obtained. Not only that, why were some of the obtained results the opposite of those expected?

The initial reaction to the unexpected (and unwanted) results could well be to dismiss them as invalid. However, a number of checks on validity had been made in the course of the investigation. It seemed fairly certain that reading ability and attitudes had been validly measured; that methods had been correctly implemented, apart from eight children whose results had been excluded from the analysis; and that, for the remaining children, the Interest Group and Skill Group were well-matched.

There are a number of other ways in which the results can be accounted for. First, it could be the case that interest sessions were less successful than skill sessions because of the teachers who held the sessions. More reactionary teachers might be less able to handle interest sessions than less reactionary teachers. Five of the teachers had been teaching for over twenty years, and some of the teachers seemed over-ready to dismiss the children's interests as superficial.

Length of teaching experience and conservatism on Cattell's 16 PF scale could both be indicators of reactionary attitudes. These two variables were therefore examined. Within the group of teachers, there was no apparent relationship between scores on these variables and the

amount of progress made by the different teachers' groups.

In addition, the teachers were all highly experienced. Some held posts of responsibility, and all were highly praised by their schools. In my own observations of them at work with the children, eight out of the ten seemed to have a gift for teaching. These teachers seemed likely to be better than other teachers, not worse. It does not therefore seem that the blame for the comparative failure of interest sessions can be placed solely upon the teachers' shoulders.

On the other hand, it is possible that no teacher could successfully implement interest sessions, and that a far more radical approach to the problem is necessary. Labov et al (1969), discussing Negro children in New York, suggest that no teacher can really be conversant with these street-children's culture. The suggestion is made therefore that young men aged between 16 and 25, from the children's own culture, should be employed in the classroom as 'cultural intermediaries'. Labov et al argue that it is only in this way that interest-centred approaches can succeed. This idea of cultural intermediaries seems worth exploring further. Theoretically, it would be of great interest to know if the use of such cultural intermediaries would alter the effectiveness of interest-centred approaches. How acceptable the idea would be to some teachers' unions is another matter.

The results can be further explained by blaming the schools. It could be that children would profit from interest sessions, if they had not been so maimed by school. Schools might be maiming children by making them lose their spontaneity and creativity, and hence their ability to profit from the freedom given to them in interest sessions. It is possible that in more progressive schools interest sessions would be far more successful. The children would be used to handling the freedom, and besides the sessions would fit well into the general

school philosophy, rather than being a couple of hours a week divorced in style and content from the rest of the teaching in the school.

In less progressive schools, the children may be so used to being directed from above that as soon as this direction disappears they become unruly and disorderly. This ties in with the increase in inconsequential behaviour in interest sessions, and the small amount of reading that may take place in such sessions. The extent to which the school context affects the success of interest sessions and skill sessions stands in need of further examination.

Alternatively, the differences in the children's behaviour in interest sessions and skill sessions need not be regarded as reflecting deleteriously upon interest sessions. For example, the 'playing around' behaviour evident in interest sessions could be seen as desirable, in that the children may be expressing themselves freely and doing what they want to do. For the children, interest sessions might be a heaven-sent haven from the rigours of the rest of the week.

There is also the possibility that, as sessions continue, the children might begin to settle down somewhat. However, in the experiment, they did not do so, but on the contrary, the children's behaviour showed a steady deterioration throughout the sessions. The children became bored with working on their interests and therefore often played around. That is, the children themselves did not seem to regard interest sessions as a heaven-sent haven. They seemed to prefer the greater structure and direction of the skill sessions. It could be argued however that their preferences are as unhealthy as the preferences of brainwashed people, and should be disregarded. There seems to be no final answer to this problem.

To return to the main theme, there are therefore the possibilities that in a different school context, with people holding interest sessions who are more attuned to youth culture, interest sessions might be more successful. However, apart from blaming teachers and schools, there are other possible explanations of the results.

To recapitulate somewhat, children who attended interest sessions did not become more interested in reading, as it had been expected they would. Clearly, the difficulties of changing attitudes in such sessions had been under-estimated. The irrelevance of reading to most of the children's lives emerged as strikingly from the present investigation as from previous research. On the whole, the children came from low-literacy homes, their parents spent little time reading, and reading played almost no part in the children's spare-time activities. Most of the children's attitudes to reading were too deeply rooted, determined already by a life-time's conditioning, to be changed by a few sessions, whether these be interest- or skill-centred.

Given that little change can be made in the children's reading outside of sessions, what goes on in sessions becomes crucial. Practice is important in improvement of reading ability. This is clear on theoretical grounds, but was also evident in the present study from correlations between reading progress and those factors which indicate amount of reading; for example, correlations between reading progress and initial reading habits, amount of reading in sessions, remedial help provided by the secondary school.

Skill sessions seemed to be more successful than interest sessions, because in skill sessions, the children did more reading. A fairly

trivial point is that this was partly because of the nature of the approach. If, for example, cooking were used as an interest approach to reading, then time in sessions was spent cooking not reading.

The reasons for less reading in interest sessions extended beyond this point, however. It was easier to avoid reading in interest sessions than in skill sessions, and many children in interest sessions seized this opportunity. Poor readers often seem not to have learnt to read because they have become very adept at avoiding doing any reading. They simply never practise the skill. Interest sessions may provide unlimited opportunity for the children to obtain much further practice of avoidance tactics, rather than of reading. The greater use of avoidance tactics in interest sessions was reflected in the greater amount of inconsequential behaviour displayed by the children who attended interest sessions than by the children who attended skill sessions.

Clearly, the dynamics of the children's motivation had been misunderstood. It was assumed that with unmotivated, alienated, working-class poor readers, an approach using material that related to the children's interests and culture would be the most motivating. In the remedial context, this was often a false assumption.

The first suspicion that the interest approach would be ineffective arose from the fact that the children turned out not to be as alienated from school as it had been assumed they would be. The children attended school well; over a third of them were said to like school very much; and they obtained normal scores on the hostility part of the Bristol Social Adjustment Guides. Because of the lack of alienation and hostility of these children, an interest-centred approach immediately became less of a necessity.

Whether or not the lack of hostility of the children was responsible, it seemed that the content of the reading material was less important than its suitability as regards reading level and structure. It is true that some interest sessions were much enjoyed, but on the whole both the teachers and the children felt that they were not really getting down to the task they were there for. The greater structure and direction of the skill sessions was preferred, and in particular, the feelings of success and mastery, as the child moved from book to book of the reading series.

One must briefly consider here the problem of the content of reading schemes. Given that the structure and grading of the reading schemes is extremely helpful for both teachers and children, it then seems necessary to produce reading schemes with the necessary structure which in addition relate closely to the children's lives. 'Nippers' and the 'Pirate' series attempt to meet these criteria. Even so, these books are often disliked by poor readers. Many of the 'Nipper' stories are trivial in the extreme. Moreover, they are not as well-structured as say the Ladybird Key Words scheme. The widespread use of the Ladybird Key Word books in schools indicates that this structure is much appreciated by teachers.

In the present investigation, it was not possible to examine reading schemes in great detail. Given that reading schemes are a virtual necessity for the teacher and the child, such an examination needs to be made. The effectiveness of different schemes could be compared. Inter-relationships between content and structure could be examined. Most important, further attempts could be made to produce the alternative reading scheme. Many people have tried to produce such a scheme, but success so far seems to have been limited.

Returning to the analysis of the children's motivation, the

Skinnerian viewpoint of the great reinforcing value of 'knowing an answer is correct' seems borne out. In terms of Dunn-Rankin et al's analysis of reward preferences (see Chapter 4), Independence Rewards, such as were offered in interest sessions, were not greatly rewarding. Positive reinforcement was more likely to stem from Adult Approval and Competitive Rewards. To put this into more concrete terms, "Teacher writes 'Excellent' on your paper" or "Be first to finish your work" seems to be more rewarding for poor readers than such categories as being "free to work on something you like". (Dunn-Rankin et al, 1969, Reward Preference Patterns in Elementary School Children, Int.J. Educ. Sci.3, p.61).

The qualification must be made that this was only so for the less intelligent children. The more intelligent children fared equally well with either approach, and therefore the rewards offered in interest sessions were presumably as motivating for them as the rewards offered in skill sessions. For example, there was one little boy, David, with a WISC Full Scale score of 130, who became totally involved in interest work. At the start of the sessions, he began writing a story on outer space. He did this during the sessions and at home as well. The teacher found it extremely difficult to divert his attention to any other topic and actually complained about this in several of her session accounts. The boy made about 11 months' progress in reading during the course of the sessions, much higher than the overall mean for the Interest Group. It is clear that interest sessions can sometimes be highly successful.

Further research could therefore be directed towards delineating groups of children with whom the skill-centred or interest-centred approaches could be the most successful. The present delineation has

only been in terms of intelligence. It should be possible, if more children were examined, to make the delineation more precise. For example, in spite of the results obtained in the present study, I am still not sure that for very unmotivated, hostile boys an interest-centred approach might not be the only way. Other individual differences may also be important. Thus, the dimensions of introversion and extraversion have been shown to be related to achievement (Eysenck and Cookson, 1969). This whole area of individual differences in relation to remedial teaching is in need of further research.

What are the broader implications of my findings? Strictly speaking, the findings apply only to selected groups of children with reading problems. However, the findings may well apply to other children also. The investigation has been concerned specifically with reading, but the findings may also throw light on learning in general.

It has to be borne in mind that the interest/skills distinction is not clear-cut; that the equation of the interest and skill methods with progressive and formal teaching is uneasy; and that the elements which compose progressive and formal teaching are unclear. Bearing these limitations in mind, it can be said that the interest-centred approach is related to progressive teaching methods, and that the skill-centred approach is related to formal teaching methods.

Assuming results can be generalised out of their immediate context, then the implications for progressive education, with the stress it lays on pupil choice and freedom, may be grave. For the implications are that many children, and especially the duller ones, will make maximum progress and will prefer a situation in which teaching is well-structured, with little pupil choice. As Froome (1975) asserts:



...for the great mass of our children the discipline, structure, system and purposeful direction of 'old-fashioned' formality are preferable ... The 'smorgasbord' approach is not for them. Children of low ability respond most enthusiastically to formal didactic methods which set out to instruct them, not to cajole them into learning.

(Reading and the School Handicap Score,  
in Cox and Boyson (eds.), Black Paper, 1975, p.11)

One would assume of course that, within the formality, there should still be a good teacher-pupil relationship, and that the atmosphere and environment should not be repressive.

There are many holes still to be filled in. In particular, the distinction between progressive and formal methods is in need of further exploration, both in the remedial context and in normal teaching. This could be by means of questionnaires and by observations of classes and of small groups of backward readers, with careful noting of the different activities pursued and the teacher's handling of the class.

But meanwhile, what is one left with? In a well-controlled experiment, where both the experimenter and the teachers were initially in favour of the progressive approach, the more formal approach proved the more successful for the majority of children. This was so not only in terms of reading ability, which might be expected, but also in terms of the teachers' and children's reactions towards the two approaches. Both teachers and children seemed to prefer the more formal approach. One can only say that these results provide little with which to comfort the progressive educationalists.

Thus, the answer provided by the present investigation as to how best to help poor readers runs as follows. Because poor readers tend to come from homes which give little educational support, progress is

## APPENDICES

APPENDIX A	...	MATERIALS
APPENDIX B	...	INFORMATION ON MEASURING INSTRUMENTS
APPENDIX C	...	EXCERPTS FROM SESSION ACCOUNTS
APPENDIX D	...	ADDITIONAL TABLES
APPENDIX E	...	MISCELLANEOUS INFORMATION

APPENDIX A

1. School Observation Schedule
2. Confidential School Report
3. Instructions for Practical Work
4. Relevant Information about the Children
5. Session Account Form
6. Final Teacher Questionnaire
7. Interests Questionnaire

A.1 SCHOOL OBSERVATION SCHEDULE (used on first visit to primary schools)

1. School: .....
2. Address: .....
3. Phone No.: .....
4. Name of head: .....
5. Name of remedial teacher: .....
6. Names of other teachers: .....
7. Date of first visit: .....  
    second visit: .....  
    third visit: .....
8. Size of school: .....
9. Infant dept: YES/NO .....
10. Descr. of school buildings: .....
11. Descr. of school surroundings: .....
12. Type of child (as described by head): .....
13. Percentage grammar school entry: .....
14. Estimated no. of backward readers  
    in school: in third year junrs.: .....  
    in fourth year jnrs: .....
15. Reading schemes used:  
    Infants/lower juniors: .....  
    upper juniors/backward readers: .....
16. Descr. of library facilities  
    (in classroom, separate library, etc.): .....
17. Descr. of remedial treatment: .....
18. Willing to take teacher? .....
19. Facilities. Free room: .....  
    When free: .....  
    Tape-recorder: .....
20. Any other comments: .....

A. 2 CONFIDENTIAL SCHOOL REPORT

(This was filled in at the start of the sessions for all children in the fourth year juniors who had reading ages of  $8\frac{1}{2}$  years or below on the last school reading test given.)

To be filled in by head or class teacher

Name of person completing form : .....  
Name of school: .....  
Date: .....

1. Child's full name:
2. Sex:            Boy ....      Girl ..... (Please tick)
3. Age:            Years ...      Months ...
4. Date of birth: Day ...      Month ...      Year ....

5. Reading age (or quotient) :

Reading test used:

Date reading test given:

6. IQ or Verbal Reasoning score:

Test used:

Date given:

#### HOME BACKGROUND

7. Please tick.

- Does the child live
- |   |      |
|---|------|
| a. with 2 natural parents                         | .... |
| b. with true mother alone (ie. not with a father) | .... |
| c. with true mother & father substitute           | .... |
| d. with true father alone (i.e not with a mother) | .... |
| e. with true father & mother substitute           | .... |
| f. with third person (but neither parent)         | .... |
| g. In an institution of any kind                  | .... |
| h. not known                                      | .... |
| i. other  | .... |

8. How many older brothers does the child have? ....

How many younger brothers does the child have? ....

How many older sisters does he have? ....

How many younger sisters does he have? ....

9. Describe the father's work as fully as possible: .....

.....

If he is now unemployed, please describe his last job as fully as possible: .....

10. Describe briefly what else you know of the child's home circumstances: .....

.....

#### PHYSICAL

11. Does the child have any physical handicaps? Yes ....

No ....

If yes, please describe briefly, under the appropriate headings.

Vision: .....

Hearing: .....

Speech defects: .....

Respiratory: .....

Other: .....

EMOTIONAL

12. Does the child have (or has it had) any emotional problems? Yes ....  
No ....

If so, please give details : .....

13. Has the child changed school, other than the normal infant/junior transfer? Yes ..... No .....

If yes: How many times? .....

Why did the child change school? .....

How long has he been at his present school? .....

ATTENDANCE

14. a. Please tick.

Very good .... Good .... Average .... Irregular .... Very Irregular.

b. Has the child had any prolonged absences? Yes ... No ....

If possible, please give details and reasons for absences.....

READING

15. Has the child previously received special help with reading?

a. outside the school Yes .... No ....

b. in school Yes .... No ....

Please describe briefly the special help he has received .....

16. Has he been referred to any other outside agencies (e.g. Assessment Centre)? Yes .... No ....

If yes: Where had he been referred to? .....

When was he referred there? .....

Why was he referred there? .....

17. Is he this year receiving extra help with reading apart from that supplied by the teacher from Keele? Yes .... No ....

Please describe briefly the nature of the help: .....

18. What do you think are the main causes of this child's poor reading ability? .....

19. Please tick one.

Would you say the child a. likes school very much ....  
b. on the whole likes school more  
than he dislikes it ....  
c. dislikes school ....

HOBBIES AND INTERESTS

20. Please give any information available on these: .....

Thank you very much for sparing the time to fill in this form.

### A.3. INSTRUCTIONS FOR PRACTICAL WORK

(These instructions were given to the ten session teachers before sessions began.)

Remedial reading teaching of ten-year-old working-class children by means of an "interest-centred" and "skill-centred" approach

We want you to work with ten-year-old working-class children, with reading ages between 6 and 8½ years, using two different approaches, an "interest-centred" and a "skill-centred" approach. The interest-centred approach involves relating reading material as much as possible to the interests and culture of the child, and encouraging the child to read on his own, outside of school. The skill-centred approach involves treating reading as a skill to be taught in as structured a way as possible. Both approaches will be operationally defined and explained more fully later in this paper.

Each of you will teach eight children, four by means of one approach, four by means of the other.

We are intending to look at the differential effectiveness of these two approaches in improving the child's reading ability. We think the comparison is one worth making for the following reasons.

Various studies have been made over the past few years of the effectiveness of remedial teaching of reading. Most of these studies show that such remedial teaching frequently produces good short-term results, but that, in the long run, there is usually little difference in reading ability between a child who has received such help, and one who has not (Collins, 1961; Carroll, 1972). Now, studies of the backgrounds of poor readers show that many of these children come from homes with relatively few books and other reading materials, where the parents do little or no reading (see Peaker, 1967; Morris, 1966). It would seem, then, that whilst the child receives remedial lessons, he gets practice in reading, as well as possibly helpful tuition in phonic rules and word analysis. But, when the remedial lessons end, he returns to an environment where little or no reading takes place. Hence, he may well do little reading, once the remedial lessons end, and so not improve his reading ability much beyond the point reached in remedial lessons.

Now, given these findings and the interpretation outlined of them, it seems that it might be more important during lessons with the child to put the emphasis on trying to make the child more interested in books and in reading, and so doing it on his own, outside of reading lessons,

in preference to putting the emphasis on teaching the skills involved in reading (although of course getting the child interested in reading and teaching the skills need not be mutually exclusive). T. Booth et al (1973) in their "Evidence to the Bullock Committee", put this point in the following way:

"The learning needs of individual children can best be met if attention is paid not only to their levels of attainment, but to the progress they are making towards independent learning... The aim ... in remedial and special education is to enable the student to improve himself in the areas where he has difficulty. Carefully structured reading programmes have an important place ... but procedures which rely too much on the direction of a tutor or teacher ... can be counter-productive. It may be that too great a reliance on formal instruction in remedial work can help to explain some of the disappointing results found in follow-up studies of children who have 'received' remedial teaching. Short-term gains are typically lost after a couple of years, and it sometimes happens that children make no further progress once remedial help is terminated."

(Learning to Communicate, p.1)

One of the ways in which it may be possible to make the child into an "independent learner", as far as reading is concerned, is to use material that relates to the child's interests, and to try to move from this to getting the child reading voluntarily on his own.

As for the "skills" approach to the teaching of reading, the easiest way to obtain the necessary structuring and gradual increase in difficulty may be to use one or more reading schemes, supplementing this with additional tuition in various aspects of the skill, where necessary. Hopefully, the reading schemes used will hold some interest for the child, although they are unlikely to relate to any specific interests he may have.

The two sides of the interests/skill question are rather nicely commented on by Tansley on the one hand, and Fader on the other.

Tansley (1972) asserts:



"There are many ways in which children can be motivated to read. In the past, the predominant one was interest ... Experience with children, slow to read, led to a different understanding of motivation. They want not only initial success, but continuing feelings of success ... The interest motive is, of course, important, but the predominant one seems to be mastery. If this is so, it becomes necessary to write books for children with sufficient control of vocabulary load and repetition that continuing feelings of mastery are obtained. This may mean that the interest factor has to take a subordinate role."

(Basic Reading, p.12)

Fader, on the other hand, claims:

Semiliterate readers do not need semiliterate books. The simplistic language of much of the life-leeching literature inflicted upon the average schoolchild is not justifiable from any standpoint.

(Hooked on Books, p.57)

The null hypothesis in this experiment, is that progress by the children in reading will not differ significantly, whether the interest-centred or skill-centred approach is used. Whatever your personal beliefs, it is very important that during the teaching, you try to remain as unbiased as possible towards the two approaches. A valid comparison of the two methods cannot be made, unless you try to remain neutral between the two approaches.

#### The Skill-centred Approach

This involves using one or more of the standard reading schemes, and giving additional tuition in phonic rules, techniques of word analysis, learning of vocabulary and some language and comprehension work.

#### Some suggestions about possible ways of doing this

The reading schemes: Any moderately well-structured reading scheme may be used e.g. Royal Road Readers, the Griffin and Dragon Pirate series, the Ladybird Key Words Reading Scheme, Racing to Read, Happy Venture and Wide Range, and the Beacon scheme. Some of these reading schemes are rather babyish in content, but, on the other hand, they may be well-structured. You might prefer to use a somewhat more adult reading scheme e.g. Step up and Read.

The reading schemes used should not be ones the child is already very familiar with. For this reason, Happy Venture and Wide Range may not be suitable, as most schools seem to use these schemes rather a lot. Preferably, the reading schemes used should be completely new to the child, but, as many schools carry a range of reading schemes, this may well not be possible.

In addition to working through the reading schemes, phonic rules may be directly taught and phonic games may be played. (An outline of phonic regularities is given in one of the appendices in the "Breakthrough to Literacy" manual, and can also be obtained from Vera Booth's "Sounds & Words". We have both these books in stock for you.)

The child could be helped to break down words and build them up on his own. New vocabulary could be noted in vocabulary books and revised in succeeding lessons. Some time could be devoted to language and comprehension work, using, perhaps, some of the Ridout books, and Tansley's Sound Sense.

These are only a few preliminary suggestions. You will, doubtless, have many more ideas. But please do not choose books from outside the reading schemes you are using, that relate to the specific interests of the child. Do not actively encourage the child to read on his own outside of lessons, although do not discourage this either. For example, if a child wants to take a book home with him, he should be allowed to do so.

#### The Interest-centred Approach

This involves relating reading material to the interests and culture of the child and encouraging reading to take place outside of reading lessons.

#### Some suggestions about possible ways of doing this

1. Using books that relate as closely as possible to the particular interests of the children or to particular exciting events in their lives.
  - a. Books with many pictures and photographs.

On the whole, these may be too hard for the children to read, but the pictures and photographs may be looked at, and talked about. Parts of the text can be read to the children. The children can try to read appropriate parts of the text e.g. chapter headings and picture captions. W.E. Hildick (1970) talks of these books as "the books designed to be read (and looked at) with children, as distinct from those to be read to

them or by them ... Skilfully done, as so many of them are, they form an excellent introduction to the feel of books, to their power to delight." (Children and Fiction, p.82). It may well be valuable for the children to look at picture books, if they enjoy doing so, even though little or no reading may be done.

b. Simple reading material, about topics the children are interested in, at an appropriate level of reading ability, e.g. if the child is interested in cowboys, there are quite a few fictional and non-fictional books about cowboys available.

2. Reading stories aloud to the children. Hildick (1970) comments "fiction written to be read to young children is every bit as important as that which is written to be read by them ... Thus, as the skill (of reading) is being mastered an experience of the delights ... to which that skill is the key is being offered ... (Reading-to is more often regarded) as an intellectual indulgence ... than as the vital basic necessity it is.. While most teachers would automatically allocate time for regular primer-using periods, few would give an equal, let alone a greater, amount of time for reading stories to their classes". (op.cit. pp. 78,80).

Work by Cohen (1968) supports the view that reading stories aloud to poor readers may have beneficial effects on reading ability. It seems likely that this would be a way of making some lowly-motivated backward readers realise that there were interesting things in books.

### 3. Using comics.

Children seem to like comics a lot. Even the less able look at them regularly (Alderson 1968). Comics seem to be potentially highly motivating devices, as far as reading is concerned. Unfortunately, comics seem to be too hard on the whole, for backward readers to read. These children tend to just look at the pictures. Nevertheless, various uses can be made of comics. Stories can be read to the children from them. Pictures can be cut out, and captions written underneath (see Johnson & Johnson 1971). When comics have been finished with in class, children can take them home.

Comics seem to be one of the few sources providing reading material and pictures about pop stars. As many of the children, especially the girls, seem to be interested mainly (or only) in pop music, it is essential to try and use comics in relation to this. Comics and magazines relating to other specific interests of the children may also be used, e.g. war, football, bird, animal and fishing magazines.

With these magazines, it may need some skill to get the children reading rather than just looking at the photos, e.g. the teacher may need to prepare simplified worksheets about the topics covered in the magazines.

4. Pop songs can be tape-recorded, and then played to those children who like pop music. Whilst listening to the music, the children can follow the words of the songs. Words to pop songs can be obtained from various magazines (Disco 45).

5. The children may want to write on topics of interest to them and on exciting events in their lives. (Sylvia Ashton-Warner would call this 'organic' writing!) They could do drawing and other accompanying activities whilst writing.

6. The children could be encouraged to bring their own reading material to the lessons. (If the children are to become "independent learners", they have to be able to find material to independently learn from.) Books and comics should be lent to the children. This is likely to encourage reading at home.

7. Visits to the local library and to local bookshops could be arranged.

8. Children should be encouraged to read to themselves as much as possible, with subsequent discussion about what has been read with the teacher. Some oral reading may be necessary. Some children may not concentrate unless they are reading aloud to the teacher. Oral reading also provides the teacher with instant feedback about the child's difficulties.

9. When in reading, the child has difficulty with particular words, the relevant phonic rules or methods of word attack may be explained to him. However, phonic games should not be played.

10. "Interest" vocabulary can be noted down and learnt by the child. Books such as those by Ridout and Tansley's Sound Sense should not be used, unless passages in them relate to the children's interests.

These instructions are rather longer than for the skill-centred approach. Nevertheless, they are still only meant to act as guidelines. Different children have different interests, and so each child has to be dealt with individually. A lot depends on the teacher's skill in successfully relating reading material (much of it not particularly suited to the purpose) to the children's interests.

The suggestions above are only suggestions. You may find a lot of them don't work with the particular children you're working with, and you will probably have a whole lot more ideas about what will work. But please keep to the general approach outlined of working from the child's interests, relating reading material to these interests and actively encouraging reading to take place outside of reading lessons.

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A.4. RELEVANT INFORMATION ABOUT THE CHILDREN YOU WILL BE TEACHING

(This information was given to the session teachers before the sessions started.)

This information has been collected from questionnaires filled in by head or class teachers, interviews with the children and a reading test (the Neale Analysis of Reading Ability) given individually to each child.

Intelligence test results provided by the schools are not given here, as most of the tests used in these schools require reading ability, and therefore give no valid indication of the 'intelligence' of a poor reader.

In the 'interests' section, I have given only specific interests of the children to which it may be possible to relate reading matter. Almost all of the children may be assumed to spend a lot of time playing out and watching television.

This information was given by teachers on the condition that it would be kept completely confidential. Please remember this, and do not leave it lying around or discuss it (using children's names) with other people.

A.4. RELEVANT INFORMATION ABOUT THE CHILDREN YOU WILL BE TEACHING

1. Child's name: ..... 2. School: .....
3. Sex. Boy ... Girl ...
4. Date of Birth: ..... Age (Sept/Oct 1973): .....
5. Reading test results.  
Neale Analysis of Reading Ability (given Sept/Oct 1973):  
Accuracy ..... Comprehension .....  
School reading test. Reading age (or quotient): .....  
Test used: ..... Date given: .....  
Reading test given by educational psychologist or remedial adviser.  
Reading age: ..... Test used: ..... Date given: .....
6. Distinguishing features of home background: .....
7. Older brothers: ..... Younger brothers: ..... Older sisters: .....  
Younger sisters: .....
8. The child. Physical: .....  
Emotional: .....
9. Attendance at school. Very good ... Good ... Average ... Irregular ..  
Very irregular ...
10. Long absences: .....
11. School changes: .....
12. Previous help given to the child: .....

13. Present help given to the child: .....

For these children taking part in the interest-centred approach

14. Interests. A. As given by the head or class teacher:

.....

B. As given by the child during an interview. (Roughly  
in order of importance for the child.)

.....

A.5. SESSION ACCOUNT FORM

CONFIDENTIAL

Practical work: Accounts of remedial reading lessons.

Teacher's initials: .....

Date of lesson: .....

Skill-centred group. Children absent (use first names): .....

Length of lesson. From ..... To .....

Please give a.brief resume of activities followed during the lesson by each child, including names of books read (say whether in part or whole) and short description of any other pursuits. b. amount of time spent on each activity by each child. c. your opinion of how the various books and activities were received by the children (could give any comments the children made). d. any other interesting information. Use children's first names.

Interest-centred group. Children absent (use first names): .....

Length of lesson. From ..... To .....

Brief resume (as for skill-centred group): .....

(The above took up a whole page, with the skill-centred group's information placed at the top of the page, and that for the interest-centred group half-way down the page.)



A.6. TEACHER QUESTIONNAIRE:

(This questionnaire was given to the session teachers when the sessions ended.)

Assessment of practical work: remedial reading teaching using interest- and skill-centred approaches.

Teacher making record: ..... Date: .....

Please answer the following questions as fully as possible.

1. What do you regard as the main advantages and disadvantages of the two approaches that you have been using in your practical work? Which approach, on the whole, do you feel to be the better one?
2. How did you feel about the two approaches before you started using them? For example, which did you think would probably help the child most in reading? Did you feel that you wanted one approach to work rather than the other?
3. How did your opinions about the two approaches change whilst you were using them? Which approach did you feel was helping the children most? Did your bias, if any, towards one or other of the approaches change?
4. What do you regard as the most important factors in remedial reading teaching?

(Questions 1 and 4 were each printed on a page on their own. Questions 2 and 3 were printed on the same page, question 2 at the top, question 3 half-way down.)

# A.7. INTERESTS QUESTIONNAIRE

(This questionnaire was given to the children in the Interest Group before sessions started)

<u>Question</u>	<u>Answer</u> (Record verbatim or circle appropriate answer)
1. What do you like doing best when you're not at school?	1. 2. 3.
2. a. Do you watch television, or not? b. How often do you watch it? Every evening?	Yes / No
c. Which programmes do you like most?	1. 2.
3. a. What games do you like best?	1. 2.
b. Do you support a football team, or not? Which one?	Yes / No
4. a. Do you ever go fishing, or not? b. How often do you go?	Yes / No
5. a. Do you do any painting or drawing at home, or not?	Yes / No
b. (If yes) Do you like drawing a lot or not?	Yes / No
c. How often do you do it?	
d. What do you draw (paint) ?	
6. a. Do you make things e.g. models.	Yes / No
b. (For girls) Do you do any sewing at home or not?	Yes / No
What do you sew?	
7. a. Do you collect things at all, or not?	Yes / No
b. What do you collect?	
8. a. Do you go to the cinema or not?	Yes / No
b. When did you last go?	
c. What's the nicest film you've seen?	
9. a. Do you like listening to music, or not?	Yes / No
b. What sort of music do you like listening to?	
c. Who are your favourite popstars?	1. 2. 3.

- d. Do you play any musical instruments or not? Yes / No
- e. What do you play?
10. a. Do you have games (toys) to play with  
at home or not? Yes / No
- b. Which is your favourite one?
11. When you go and play out, what games do  
you play?
12. a. Do you belong to any clubs, or not? Yes / No
- b. Which ones?
13. a. Do you have any pets or not? Yes / No
- b. What do you have?
- c. Do you like watching birds or not? Yes / No
- d. Do you like animals or not? Yes / No
- e. Which are your favourite animals?
14. a. Do you go to church or not? Yes / No
- b. Every Sunday?
15. What do you want to be when you leave school?
16. Is there anything else you're interested in  
that we haven't talked about?

APPENDIX B

INFORMATION ON MEASURING INSTRUMENTS

1. Attitude to Reading Questionnaire
2. The Neale Analysis of Reading Ability
3. Schonell Silent Reading Test A
4. Bristol Social Adjustment Guides

ATTITUDE TO READING: QUESTIONNAIRE NO. 1.

(This questionnaire was given before sessions started.)

Question	Information recorded (Tick appropriate category or record verbatim answer.)
1. Could you tell me first how old you are?	Age: .....
2. a. Do you have any brothers? (If yes:) How old are they?	No. of brothers: ..... Ages: .....
b. And do you have any sisters? How many do you have? How old are they?	No. of sisters: ..... Ages: .....
3. a. Can you tell me what work your father does? (If unemployed, ask what his last job was.)	Father's work: .....
4. a. What lessons do you like best of all at school?	1. 1st and 2nd choices 2. recorded
b. What lessons do you like least of all at school?	1. 2.
5. a. What book are you reading now in school?	Title: ..... Series: ...
b. How long have you been reading it for? (If child has difficulty in saying, ask, e.g. all this term, last term, just for the last week?)	v. recently: ..... few weeks: ..... from last term: .....
c. Would you say that you like this book a lot, a little or not really at all? (If child has difficulty in replying, add 'inbetween a lot and a little'.)	a lot: ..... inbetw. a lot & little: ... a little: ..... not really at all: .....
6. a. Can you tell me what you usually do when you go home after school?	1. Up to 3 activities 2. recorded 3.
b. And what do you do on Saturdays and Sundays? (For both a. and b., try to get up to 3 activities from the child.)	1. 2. 3.
7. a. Would you say that you do a lot of reading at home, some reading or none at all?	a lot: ..... some: ..... none at all: .....
b. Have you read anything at home during the past 2 weeks, or not? If yes:	some books: ..... one: ..... none: .....
c. What have you read?	Material read: .....
8. a. Does your mother sometimes hear you read and help you or not? If yes:	a lot: ..... a little: .. not at all: .....
b. How often does she do this?	
9. a. What about your father? Does he sometimes hear you read and help you or not? If yes:	a lot: ..... a little: ..... not at all: .....
b. How often does he do this?	

10. a. Do you have some books of your own at home or not? If yes: None: ..... 1-5: .....  
6-10: ..... 11-20: .....  
21-30: ..... 31-50: .....  
GT 50: .....  
b. About how many do you have?  
c. What sorts of things are they about? Sorts of books: .....
11. a. Do your parents have some books of their own, or not? If yes: None: ..... 1-5: .....  
6-10: ..... 11-20: .....  
21-30: ..... 31-50: .....  
GT 50  
b. About how many do they have?  
c. What sorts of things are they about? Sorts of books: .....
12. a. Would you say that your parents spend much, some or no time reading books? Father: much: .... some:..  
no time: .....  
Mother: much: .... some:..  
no time: .....
13. a. Do you read any comics, or not? If yes: Yes: .....  
No: .....  
b. Which ones do you read? Names: .....  
c. Do you get them every week, or just some weeks? Every week: .....  
Some weeks: .....  
d. Do you buy them or borrow them? Buy: ..... Borrow: .....
14. a. Do your parents read any newspapers, or not? If yes: Yes: .....  
No: .....  
b. Can you tell me what they are called? Names: .....  
c. Do they get them every day or just some days? Every day: .....  
Some days: .....
15. a. Do your parents read any magazines, or not? If yes: Yes: .....  
No: .....  
b. Which ones do they read? Names: .....  
c. Do they get them every week or just some weeks? Every week: .....  
Some weeks: .....
16. a. Do you ever go to your local library? If yes: Never: .....  
Used to: .....  
b. What was the last book you got out from there? Present, inactive: .....  
Active: .....  
c. When did you get it out?  
d. How often do you usually go there?
17. a. Do you take books home from school at all, or not? If yes: Not at all: ..... rarely:..  
Often/recently: .....  
b. What was the last book you took home? Name: .....  
c. When did you take it home?
18. a. Would you say that you like reading a lot, a little, or not really at all? A lot: .....  
Inbetw. a lot & a little:..  
A little: .....  
(If child has difficulty choosing between a lot & a little, alternative answer 'inbetween a lot & a little' is supplied.) Not really at all: .....

Attitude to Reading Questionnaire No. 2, given at the end of the sessions consisted of the following questions from Questionnaire 1: questions 4, 5, 6, 7, 13, 16, 17, 18. The questions were asked in this order. (Reasons for asking only these questions in the second questionnaire are given in chapter 6.)

Attitude to Reading Questionnaire No. 3, given on follow-up of the children, consisted of the following questions from Questionnaire 1, asked in the order listed below: questions 4, 6, 7, 13, 10, 11, 12, 14, 15, 16, 17, 18.

### Literacy of the home

The questions given below from the Attitude to Reading questionnaire were taken as a measure of literacy of the home. On the right is shown the coding used for each question in analysis of the answers.

Question	Coding
8.a. Does your mother sometimes hear you read and help you or not?	Not at all: 1
b. How often does she do this?	Little: 2
	Lot: 3
9.a. What about your father? Does he sometimes hear you read and help you, or not?	Coding as above
b. How often does he do this?	
10a. Do you have some books of your own at home or not? If yes:	None: 1 1-5: 2 6-10: 3
b. About how many do you have?	11-20: 4 21-30: 5
c. What sorts of things are they about?	31-50: 6 more than 50: 7
11a. Do your parents have some books of their own, or not?	Coding as above
b. About how many do they have?	
c. What sorts of things are they about?	
12a. Would you say that your parents spend much, some or no time reading books?	Father No time: 1 Some: 2
	Much: 3
14a. Do your parents read any newspapers or not?	Mother: coding as above
b. Can you tell me what they are called?	No: 1 Yes: 2
c. Do they get them every day, or just some days?	
15a. Do your parents read any magazines or not?	Code as above
b. Which ones do they read?	
c. Do they get them every week, or just some weeks?	

These questions were asked at the start of the sessions and on follow-up. Questions 8 and 9 were not asked at the time of the follow-up.

### Expressed attitude to reading

The following questions were taken as a measure of expressed attitude to reading. These questions were asked at the start of the sessions.

Question	Coding used
4.a. What lessons do you like best of all at school?	Reading mentioned as a favourite lesson: 3
b. What lessons do you like least of all at school?	Reading not mentioned: 2
	Reading mentioned as a disliked lesson: 1
5.a. What book are you reading now in school?	a lot: 4
c. Would you say that you like this book a lot, a little or not really at all?	inbetween a lot & a little: 3
	a little: 2
	not really at all: 1
18a. Would you say that you like reading a lot, a little or not really at all? (For both qu.5 and qu.8, if child has difficulty choosing between a lot and a little, alternative answer 'inbetween a lot & a little' is supplied.)	Code as above

### Reading Habits

The following questions were taken as a measure of reading habits. These questions were asked at the start of the sessions, at the end of sessions, and on follow-up.

6.a. Can you tell me what you usually do when you go home after school?	Reading is mentioned as an out-of-school activity. Yes: 2 No: 1
7.a. Would you say that you do a lot of reading at home, some reading or none at all?	A lot: 3 Some: 2 None: 1
b. Have you read anything at home during the past two weeks, or not?	Some books: 3 One(or comics):2 None: 1
c. What have you read?	
13a. Do you read any comics, or not?	Reads comics: 2
b. Which ones do you read?	Does not read comics: 1
c. Do you get them every week, or just some weeks?	
d. Do you buy them or borrow them?	
16a. Do you ever go to your local library?	Active member: 4
b. What was the last book you got out from there?	Inactive member: 3
c. When did you get it out?	Used to be a member: 2
d. How often do you usually go there?	Never a member: 1
17a. Do you take books home from school at all or not?	Takes books home often/recently: 3
b. If yes: What was the last book you took home?	Rarely takes books home: 2
c. When did you take it home?	Never takes books home: 1



TABLE B. 1. DISTRIBUTION OF ANSWERS TO THE QUESTIONS ON READING HABITS

Question	Answer	Questionnaire 1 (start of sessions)		Questionnaire 2 (end of sessions)		Questionnaire 3 (follow-up)	
		No.	%	No.	%	No.	%
Reading mentioned as out-of-school activity	Not mentioned:	61	82	55	73	57	76
	Mentioned:	12	16	20	27	18	24
	Total:	73		75		75	
Child reads at home	Not at all:	29	40	22	29	11	15
	Some:	41	57	51	67	57	76
	Lot:	2	3	3	4	7	9
	Total:	72		76		75	
Recent home reading	Nothing:	29	39	21	28	21	28
	One book:	42	57	37	49	30	40
	Some books:	3	4	17	23	24	32
	Total:	74		75		75	
Library member	Never:	26	35	-		-	
	Inactive:	38	39	-		-	
	Active:	10	13	15	20	12	16
	Total:	74		76		73	
Child borrows books from school	Not at all:	41	55	45	60	21	29
	Rarely:	19	26	23	31	11	15
	Recently:	14	19	7	9	41	56
	Total:	74		75		73	
Child gets comics	No:	13	18	26	35	38	51
	Yes:	59	82	48	65	37	49
	Total:	72		74		75	

TABLE B.2. DISTRIBUTION OF ANSWERS TO QUESTIONS ON LITERACY OF THE HOME

Question	Answer	Questionnaire 1 (start of sessions)		Questionnaire 3 (follow-up)	
		No.	%	No.	%
Mother helps	Not at all:	31	44	Not asked	
	Little:	36	51		
	Lot:	3	4		
	Total:	70			
Father helps	Not at all:	47	68	Not asked	
	Little:	21	30		
	Lot:	1	1		
	Total:	69			
No. of own books	None:	12	17	4	5
	1-5	21	30	19	26
	6-10	14	20	16	22
	11-20	8	11	15	20
	21-30	9	13	5	7
	30	7	10	15	20
	Total:	71			
Parents' books	None:	29	48	11	18
	1-5	9	15	7	12
	6-10	8	13	5	8
	11-20	7	12	6	10
	21-30	6	10	9	15
	30	1	2	22	37
	Total:	60		60	
Father reads	Not at all:	27	41	19	32
	Some:	34	52	30	51
	Much:	5	8	10	17
	Total:	66		59	
Mother reads	Not at all:	33	49	19	31
	Some:	30	45	36	59
	Much:	4		6	10
	Total:	67		61	

TABLE B.2. continued

		No.	%	No.	%
Newspapers bought	No:	3	4	3	4
	Yes:	71	96	64	96
	Total:	74		67	
Gets magazines	No:	15	19	25	40
	Yes:	41	73	37	60
	Total:	56		62	

TABLE B.3. DISTRIBUTION OF ANSWERS TO QUESTIONS ON LIKING FOR READING

Question	Answer	Questionnaire 1 (start of sessions)	
		No.	%
Reading lessons	Disliked	4	5
	Not mentioned	57	77
	Favourite	13	18
	Total	74	
Liking for reading book	Not really	9	12
	Little to lot	37	50
	Lot	28	38
	Total	74	
Liking for reading	Not really	12	16
	Little to lot	35	48
	Lot	26	36
	Total	73	

TABLE B.4. CORRELATIONS BETWEEN INDIVIDUAL QUESTIONS AND TOTAL SCALE SCORES

Reading Habits (answers to questionnaires 1 and 2 combined)

	Spearman's r	N
1. No. of books read in last 2 weeks	.76	69
2. Amount child reads at home	.70	68
3. Member of library	.59	70
4. Takes schoolbooks home	.56	69
5. Reading mentioned as out-of-school activity	.46	69
6. Gets comics	.32	66

Liking for reading

1. Liking for reading	.89	62
2. Liking for reading book	.80	62
3. Reading mentioned as favourite/disliked lesson	.18	62

Literacy of the home

1. Number of parents' books	.75	60
2. Mother reads	.65	67
3. Father reads	.63	66
4. Number of children's books	.56	71
5. Mother helps	.48	70
6. Parents get magazines	.44	56
7. Father helps	.36	69
8. Parents get newspapers	.02	72

## B.2. THE NEALE ANALYSIS OF READING ABILITY

Further information on the Neale test not given in the main text is detailed here. An important reason for choosing the Neale test was that it is an individually administered test. Individual tests should give a more accurate assessment of reading ability than group tests. If the child is left to work on his own in a group, he may not concentrate properly, whereas if he is reading aloud on his own to an adult, he will probably try harder; and, if he is making no effort, this can be seen by the examiner and taken into account. Therefore, although it would take more time it was better to use an individual test to measure reading ability.

Amongst the more commonly used British individual tests are:

Burt's Re-arranged Word Reading Test (1938)  
Vernon's Graded Word Reading Test (1938)  
Schonell Graded Word Reading Test (1945)  
Holborn Reading Scale (1948)  
Neale Analysis of Reading Ability (1958, rev. 1966)  
Daniels and Diack Standard Test of Reading Skill (1958)

Out of the above, the Neale test was the most suitable. The Burt and Schonell tests are commonly used in schools, and might already have been taken several times by the children. The Holborn Scale is old and rather dull. It consists of short disconnected sentences, with no pictures to liven up the reading material: for example: "He was a very good boy to give you some of his sweets" and "My sister likes me to open my book and read to her". The Daniels and Diack test has no information on reliability and validity.

A description of the Neale test was given in the main text. The test has a number of deficiencies. Some passages are rather juvenile for the ten-year-olds who were taking part in the present investigation. For example, the first passage of Form A runs:

A black cat came to my house. She put her kitten by the door.  
Then she went away. Now I have her baby for a pet. (p.3)

Some passages are more suitable for girls than for boys, for example:

Father gave Pam a big box. Pam put it on the table. She looked in the box for a doll. (p.17)

Some of the words in the text are not commonly used by a lot of children. For example, in the passage just quoted, there is the word 'father'. Many children say 'Dad' or 'our dad', rather than 'father'. Thus, the test is not written in 'children's English'. In addition, parts of the test are out-dated. For example, one passage is about a milkman's horse and cart. Milkmen may have had horses and carts in the 1950's, when the test

was standardised, but there are few milkhorses and carts around now. 'The milkman's horse' is often read by children as 'the milkman's house'. The children expect milkmen to have houses but not horses.

These criticisms as to content may not in fact have much effect upon the score the child obtains when he takes the test. The backward readers tested seemed not to mind the babyish content of some of the passages. Nevertheless, the unsuitable content makes the test less pleasant for the examiner to administer. It seems absurd to expect these children to sit and read about milkmen's horses. It is an indictment of the situation as regards individual reading tests that in spite of these criticisms as to the content of the Neale test, it was still the most suitable individually administered test available and was therefore chosen for use in the study.

Difficulties that may arise in assessing progress by giving the same reading test twice have to be considered. First, the child may do better the second time he is given the test, because he has been given it once before, and can remember the contents of the test or feels more at ease in the test situation. Curr and Gourlay (1953) suggested that much of the improvement found to result from remedial reading teaching might simply be an artefact, arising from increased familiarity with the test situation and with test content.

To check on such practice effects with the Neale test, Netley et al. (1965) retested twice and then analysed results to see if there was significant improvement from the first tests to the repeat. Although mean scores were higher on the retests, differences were not significant. However, Netley et al. did not follow the test administration instructions precisely. Neale instructs that when the child makes an error, the examiner should correct the child; when the child refuses to try a word, the examiner should supply the word. Netley et al. say:

As a retest was to be made, the standard instructions given in the Manual (1963) were followed with one difference. When errors were made the correct answer was not provided. (Brit. J. Ed. Psych. 35, p.2)

Correcting the child may be the factor most likely to increase practice effect arising from familiarity with the test content. Because Netley et al. did not correct the child, their experiment does not show anything about the extent of practice effect from familiarity with test contents, when the test is properly administered. The experiment does show that no significant practice effect arises from familiarity with the test situation.

The Neale test has three parallel forms A, B and C. Practice effect from familiarity with test contents could be checked on by giving one form before the sessions, then repeating this form at the end of the sessions, and at the same time giving one of the other forms. If results from the form given twice were better than those from the form given only once, then practice effect would seem to be inflating test scores. However, it could be the case that the forms are not exactly equivalent in difficulty, and, if this were so, practice effects could be either obscured or exaggerated. Neale examined the extent to which the forms were parallel. She computed correlations between Form A and Form B, and Form A and Form C for 100 children, and obtained high coefficients of about .98. Also, for the normative data, the mean and spread of scores at each age were computed and correlations between the scores on two forms were calculated within each age group. Again satisfactory correlation coefficients were obtained. However, Neale herself pointed out that "the coefficient is probably boosted by the wide range of talent between 7 and 11 years" (Manual, p.13), this being indicated by the standard deviations. Moreover, two forms could correlate perfectly without being equivalent in difficulty.

Netley et al. also examined the equivalence of Forms A and B. They compared results for all Ss tested initially on Form A with those of all Ss tested initially on Form B, and also results from children who each took both Forms A and B. Netley et al. concluded that "The results of both correlations and tests between means indicate that Forms A and B are probably parallel. A possible exception to this conclusion is that Form B's Comprehension subtest may be somewhat easier than the Form A measure" (op.cit. p.6.). Form C was not examined at all. The criticism previously made of Netley et al.'s test - that it was not administered according to the Manual's instructions - again applies.

In order to check on both practice effects and the equivalence of the forms, the following design was used. In the test given before the sessions, one-third of the children tested were given Form A, one-third Form B and one-third Form C. Forms were randomly assigned to children.

In the tests at the end of the sessions, the form initially given was repeated, and a new form was also given, as shown in the table below.<sup>I</sup>

TABLE B.5. THE NEALE FORMS GIVEN TO THE THREE GROUPS OF CHILDREN

	<u>At start of sessions</u>	<u>At end of sessions</u>	
	Test 1	Test 2	Test 3
Group 1.	A	A	B
Group 2.	B	B	C
Group 3.	C	C	A

If scores on Test 2 were significantly higher than scores on Test 3, then practice effect, arising from familiarity with the test contents, would seem to be inflating scores on the test given twice. If the forms are equal in difficulty, then, at each time of testing, children given different forms should obtain similar scores. Also, children each given two forms at the same time as on Tests 2 and 3, should obtain similar scores on the two forms. This in fact seems the better test of

<sup>I</sup> A simpler design could have been used, in that half the children could have initially been given Form A, and half Form B. However, there were sufficient subjects to make comparisons using all three forms, and therefore it seemed worthwhile to include Form C in the design, and so obtain information on the equivalence of this form with the other two forms. The design finally used is defective in that not all possible comparisons were made. For example, in a properly balanced design, half the children initially given Form A would have later been given Form B, and half Form C, whereas in the design used, all children initially given Form A were later given Form B. This was to keep the numbers in each cell sufficiently large. More tests could always be given to other children, to compensate for deficiencies in the present design, if the problem seemed of sufficient interest.

Another defect of the design is that in the testing at the end of the sessions, the form already given once was always given first, and the new form second. This could distort the results in two ways. First, there could be practice effects from taking two tests with a similar structure in such a short space of time. However, Netley et al.'s study adequately demonstrated that this type of practice effect did not noticeably alter results with the Neale test. Secondly, results could be distorted by fatigue from taking two tests straight after each other. The tests were given in the same order, in order to reduce variability. As the reading did not take very long, it was assumed that the children would not become over-tired.



equivalence of forms, as each subject acts as his own control. When groups of children given different forms are compared, then the groups could differ slightly in, say, age or intelligence, and this could affect test scores.

Results on practice effect were given in the main text, and will not be further discussed here. Results on the equivalence of the three forms are discussed below.

Results: equivalence of the three forms.

The three groups will be referred to, in line with the forms given, as AAB, BBC and CCA. Mean chronological ages and Full WISC scores of the three groups are given in table B.6. There were no significant differences between groups in terms of age or intelligence ( $F=2.32$ ,  $df=2,77$ , NS and  $F=2.04$ ,  $df=2,74$ , NS respectively).<sup>I</sup>

Scores obtained on the various Neale forms are shown in tables B.7. and B.8.

The Accuracy Measure. In all cases, the group taking Form C obtained the lowest mean score, although on Test 3, this was only by 0.1 of a month. On Tests 1 and 2, the group taking Form A obtained a lower score than the group taking Form B, but this was not so on Test 3. Differences between groups were significant for Test 1, ( $F=3.97$ ,  $df=2,77$ ,  $P<.05$ )<sup>I</sup> but not for Tests 2 and 3 ( $F=1.56$ ,  $df=2,75$ , NS and  $F=0.03$ ,  $df=2,76$ , NS respectively). A multiple range test carried out on the Test 1 scores, showed that scores on Forms B and C differed from each other significantly, but not on Forms A and B, or on A and C.

When two forms were taken by the same child at one time, lower mean scores were obtained on Form C than on either A or B. Scores on Form A and B were very similar. The differences between C and B, and C and A, were significant (correlated  $t$ ,  $t=3.5$ ,  $df=23$ ,  $P<.01$  and  $t=2.13$ ,  $df=24$ ,  $P<.05$  respectively).

The Comprehension Measure. Similar analyses were carried out, as with accuracy (table B.8.). On the initial test, group scores on Form C were lowest, on Form B highest, as with accuracy. However, these differences were not found on the retests, and the differences on the initial tests were not significant ( $F=0.54$ ,  $df=2,75$ , NS).

<sup>I</sup> The analysis of variance results are given in Appendix D.

In a comparison of results from giving the same child two forms at the same time, the children scored higher on Form B than on either A or C. Children taking Forms C and A scored higher on C. Scores on B and C differed at the 0.058 level (correlated t-test,  $t=2.00$ ,  $df=22$ ):

TABLE B.6. CHRONOLOGICAL AGE AND INTELLIGENCE SCORES OF THE THREE GROUPS

Group	Chronological Age			Full WISC score		
	No. of children	Mean	SD	No. of children	Mean	SD
AAB	30	10yrs 5mths	3.3mths	27	98.0	15.6
BBC	25	10yrs 5mths	3.7mths	25	90.5	12.5
CCA	25	10yrs 3.3mths	2.4mths	25	94.7	11.4

TABLE B.7. READING AGES (ACCURACY) OBTAINED BY THE THREE GROUPS AT THE 3 TIMES OF TESTING

Group	N	Test 1		N	Test 2 (repeated form)		N	Test 3 (new form)	
		Mean (in months)	SD		Mean (in months)	SD		Mean (in months)	SD
AAB	30	94.2	4.8	29	98.3	6.2	28	98.6	5.3
BBC	25	96.3	5.8	24	100.7	5.8	24	98.5	6.5
BCA	25	91.7	6.6	25	97.6	7.4	25	98.9	6.8

TABLE B.8. READING AGES (COMPREHENSION) OBTAINED BY THE THREE GROUPS

Group	N	Test 1		N	Test 2 (repeated form)		N	Test 3 (new form)	
		Mean (in months)	SD		Mean (in months)	SD		Mean (in months)	SD
AAB	28	94.2	8.5	28	102.2	10.8	28	103.6	8.6
BBC	25	94.4	7.8	24	103.2	9.2	23	101.2	10.1
BCA	25	92.1	9.3	25	102.8	9.3	25	100.6	8.8

Conclusions. From the comparison of scores obtained by groups randomly assigned different Forms, and from the comparison of children taking 2 forms at the same time, the following conclusions may be drawn. As far as comprehension is concerned, the three forms are roughly equal in difficulty. But this is not the case for accuracy. With this measure, Form C seems to be harder than both Forms A and B, but in particular harder than Form B. Form A may be slightly harder than Form B. It is important for examiners who use the Neale test to be aware of these differences between the forms, as otherwise changes in reading ability may be wrongly evaluated. Because practice effects are not evident, and because the forms are not equal in difficulty, then the best way to assess reading progress is to use the same form all the time, rather than swapping from one form to another supposedly equivalent one.

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### B.3. The Schonell Silent Reading Test A (Schonell 1960)

As explained in the main text, this test was given at the end of the sessions as a check on experimenter bias. The test consists of sets of short sentences, each set followed by a question which the child has to answer. Nine minutes are allowed for answering as many questions as possible. Answers are written down by the child. Separate norms are available, based on numbers of questions answered correctly, for boys and girls. No information is given on how these norms were arrived at.

The test was chosen as it is quick and easy to administer. It covers a sufficient spread of reading ability to be suitable for all the children involved in the study. The norms cover from 6 yrs. 9 mths to 12 yrs. 8 mths. The "Southgate Group Reading Tests", for example and the various ones from the National Foundation for Educational Research take longer to administer and, in addition, each test covers a more limited range of ability. For example, Test 1 of the Southgate Tests covers reading ages from 5 to 8 years, Test 2 from 7 to 9½ years. Both tests would have had to be used to cover the range of reading ability of the children in the study, and even then the ceiling of the harder test is not high enough.

The norms for the Schonell test are out-dated, but this was unimportant, as it was not the absolute level of performance that was of primary interest, but rather the similarity of performance on the group test and on the individual tests.

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- Schonell, F.J. (1960) Diagnostic and Attainment Tests.  
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- Southgate, V. (1959) Southgate Group Reading Tests.  
London: Univ. London Press.

#### B.4. A Brief Description of the Bristol Social Adjustment Guides. (Stott 1974)

The Bristol Guides consist of two main scales: Unract, an under-reacting form of maladjustment, and Ovract, an over-reacting form of maladjustment. Stott states that Unract and Ovract should not be regarded as 'fundamental dimensions', as there could be different reasons for children showing a particular sort of maladjustment; but that the distinction between Unract and Ovract is worth making, because interaction between the various types of maladjustment occurs almost exclusively within the two divisions.

Unract consists of three core syndromes.

1. Unforthcomingness. This is essentially a "deficiency of effectiveness-motivation (or self assertion) resulting in a failure to master apprehensiveness about facing new situations or tasks" (Bristol Social Adjustment Guides. Manual, Fifth Edtn., p.11).
2. Withdrawal. This consists of "an indifference about human affiliations or a set defensiveness against them". (op. cit.).
3. Depression. This is "basically a lack of response to the stimuli to which children normally respond, without apprehensiveness or social withdrawal as described above". (op. cit.)

Ovract consists of two core syndromes.

1. Hostility. This is characterised by moody, sullen and defensive behaviour. Also, in common with Inconsequence, it consists of aggressive and provocative behaviour.

The hostile child may signal his desire to break (or not to form) an affectional relationship by refusing to respond to signals of friendliness. ...He may also set out to destroy the relationship by aggressive or provocative acts. (op. cit.)

2. Inconsequence. A child who shows "Inconsequent" Behaviour in learning tasks:

acts by trial-and-error, or guessing: and since this is ineffective he becomes discouraged and possibly antagonistic. He avoids such tasks by a gamut of displacement activities. (op. cit.)

## APPENDIX C

### Excerpts from Session Accounts

Mrs. Lowry. Session 1.

#### Skill Group:

Introduced children to Griffin & Dragon Pirate Reading Scheme using the Griffin Pirate pre-readers. Each child able to read each pre-reader. Spent about 30 minutes altogether on pre-readers. Children seemed very enthusiastic about this reading scheme, and were pleased to have easily dealt with the pre-readers.

Spent about 15 minutes on simple vowel sounds and making up three-letter words with each vowel. Also tested first 100 words. Kevin had difficulty after first few lines. Others got most correct.

Kevin the odd one out. He is in the remedial class and not with the others. Is very quiet. Spent longer with him than the others.

#### Interest group:

First time I had met the children. We spent most of the lesson talking (with me listening!). They told me of their interests (mainly Nature) and about their neighbourhood. Stephen and Paul see each other out of school - especially on Friday nights when they watch the late-night horror film at Paul's house while both sets of parents are out. Chose books to borrow. Macdonald Library 'Under the Sea', 'The Desert', 'Story of Cars'. All three seemed very enthusiastic about relating their reading to interests. Looking forward to trips out.

Mrs. Lowry. Session 8.

#### Skill Group:

20 minutes spent on the rule of 'e' on the end of words. Using the lists made last time, we each drew up new lists for these sounds.

Continued with Pirate reading scheme. Mark read Dragon book B3. Colin read B4 and B5 up to p.29. - still very keen to race ahead. Enjoys his reading. Michael - B1 up to p.30. Kevin A4 up to p.21.

#### Interest group:

Most of the lesson on Tutankhamen. I took books and pictures on the discovery of the tomb, told them how it had been found and when. Looked at plan of the tomb and photographs of the exhibits from British Museum exhibition. Enjoyed the photographs of the mummy. Paul keen to do written work on this. Andrew borrowed a book on volcanoes, Stephen on Bees, Paul on dinosaurs, and Karl a 'Far West Reader'.

Mr. Williams. Session 5

Skill Group:

First half-hour: Reading. Children reading New Interest books (in part) individually and reading to me in turn. Carol reading Racing to Read Book 2 (in part).

Second half-hour: Dictation. Children write words to my dictation containing 'long' and 'short' vowel sounds (revising last week's work) and words with either the long 'u' or the long 'oo' sound. (rude, food etc.) The children seemed to confuse the spelling of these sounds, hence our doing this.

The kids particularly like the dictation (they call it a "test", which they seem to like!) especially when nonsense words are included (boogaloo).

Interest Group:

Children shown how to play two simple one finger chords on guitar.

Using the tune "Skip to my Lou", we made up our own verses. The children wrote out their own 'songs'. This lasted the whole hour and was so much enjoyed that I had a job to get rid of them at the end of the lesson!

Mrs. Burns. Session 19.

Skill Group:

Visit to fire station - necessary to keep the peace as this group were very upset and annoyed at not being included in any outings.

Interest group:

Talk, write and draw about the fire station visit.

Write letter of thanks to be posted, with illustrations.

Tracy read a story from "I Can Read" series, Yvonne read Beginning Books - "Dr. Dolittle".

Mrs. Field. Session 11.

Skill Group:

We commenced with lists of words which sounded like 'hot', 'jug', 'fed'.

Stephen, Kevin and Wendy were very quick. Claire however, did not make any contribution. They then copied these words into their spelling books.

The children proceeded to continue working at their Comprehension Cards - involving finding the answers in a Nipper Book which they had to read and recording the suitable answers.

Each child read individually from their current Nippers reading book.



Interest group:

Discussion - Carole told us about her London trip yesterday. The main object of the visit was to see the Chinese Exhibition. Carole found it boring ... She wrote a short paragraph about Westminster Abbey to attach to the wedding pictures.

Nigel had done many drawings of farm animals and equipment - combine harvester, muck spreader, pig and sheep weighing machine, a silo and a piece of equipment used when examining sick animals. He labelled all of these this morning.

Graham agreed to describe the Police training their dogs. He spent ages on the illustration - using the new fibre-tip pens I had brought for him to use.

Carole pressed out her Daisy dolls and dressed them. She then proceeded to write about their outfits - one, her favourite, was a wedding ensemble. ...All the children pleaded with me to stay and read a story. I spent the time... reading part of "The Twins and the Snarling Witch."

Mrs. Beeton. Session 14.

Skill Group:

Group asked if they could begin session by reading to me. Jeanette read well obviously enjoying her book. Maria found some words difficult, and so it was suggested that she should read a few pages to herself, taking more time to build the difficult words before reading aloud. Kevin read slowly and carefully, trying hard to make as few mistakes as possible. Cheryl began like an express train, guessing wildly, making many simple mistakes. I asked her to start again, to look carefully at the words, to read slowly and to listen to what she was saying. Reading more deliberately, she made better progress, but she was obviously impatient with herself, wanting to complete each page in the quickest time possible. During the session, words ending in -ly presented a problem, so the group made lists of words ending in -ly. Had tended to write e.g. lade instead of lady, ugle instead of ugly.

Second half-hour: Word lists continued followed by several games of word lotto.

Interest Group:

First half-hour: Group continued writing out recipes. David had found an easier recipe for rock cakes and so he decided to scrap the one he had started in favour of the new one. Andrew completed his recipe for chocolate hedgehogs. Diana mounted her recipe for jam tarts and started a design for the cover. Lisa began writing out her recipe for chocolate krunchies, which she had found in one of the recipe books.

Second half-hour: Andrew mounted his recipe and decorated the card. Lisa mounted and decorated her finished recipe. Diana completed her design. David continued to write his recipe.

Group called together ten minutes before the end of the session to discuss the next practical cookery lesson - jam tarts. Lisa promised to bring a rolling-pin. David suggested using clean milk-bottles, if we were unable to acquire rolling pins. Diana wrote out a list of ingredients to be purchased from the shop. Andrew promised to try to bring his recipe for gingerbread men for the next session.

Mr. Copland. Session 10.

Skill Group: (approach not implemented properly).

No reading today because John is very upset. His mother was found in a telephone box with no clothes on. She had disappeared the night before, she was found by the children on the way to school. He obviously couldn't concentrate. General conversation by the group was punctuated by distressing comments by John about the preceding night's happenings.

It was quite a cheerful session nevertheless - we even sang a few songs! But John is in great difficulty - he needed attention - I gave it and Dominic walked out of room in disgust. He came back and we finished the session with a story.

Showed the photographs at end of lesson - they were obviously rather pleased with their efforts.

Interest Group:

Showed photographs of the area to group and we devised titles for them and a few captions. Used overhead projector for story development, and again went over place names etc. Decided which photos each person would need for individual book. This took a great deal of time.

APPENDIX D

Additional Tables

The Pilot Study:

- D.1 Chronological age and degree of retardation before and after sessions for the eight primary school children.
- D.2 Reading ages (comprehension) and verbal and performance intelligence quotients for the eight primary school children.

The Main Experiment:

- D.3 T-tests between boys' and girls' scores on the WISC
- D.4 Reading Habits scale scores for boys and girls.
- D.5 Social adjustment: significance of differences from norms.
- D.6 Information on the ten children left out of the final sample.
- D.7 T-tests between the Interest Group's and the Skill Group's WISC scores.
- D.8 Comparability of children with IQs of 100 or less in the Interest Group and the Skill Group.
- D.9 T-tests on intelligence and reading habits, for children with IQs of 100 or less in the Interest Group and the Skill Group.

Results for the Comprehension Measure of the Neale test:

- D.10 Improvement in reading ability, during the sessions, of the Interest Group and the Skill Group.
- D.11 Improvement of children of different levels of verbal intelligence.
- D.12 T-tests between the Interest Group's and the Skill Group's improvement, for different levels of intelligence.
- D.13 Improvement of boys and girls, in the Interest Group and the Skill Group.
- D.14 T-tests on improvement made by boys and girls, in the Interest Group and the Skill Group.
- D.15 Correlations with progress in reading during the sessions, for comprehension.
- D.16 Practice effects: reading ages on a repeated and new form of the Neale test (comprehension)
- D.17 Experimenter bias: the comprehension measure
- D.18 Analysis of variance with the teacher as the independent variable and progress as the dependent variable.
- D.19 The advantages and disadvantages of interest sessions and skill sessions, as cited by the teachers.
- D.20 Analysis of variance of chronological age of the three groups given different Neale forms.
- D.21 Analysis of variance of Full WISC scores of the three groups.

- D.22 Analysis of variance with Neale form as the independent variable, reading age (accuracy) as the dependent variable.
- D.23 Analysis of variance, with Neale form as the independent variable, reading age (comprehension) as the dependent variable.
- D.24 Causes of poor reading ability
- D.25 Socio-economic distribution in the borough.
- D.26 The relationship between socio-economic groups and social class, for the chief economic supporter of the household.

The Pilot Study

TABLE D.1. CHRONOLOGICAL AGE AND DEGREE OF RETARDATION BEFORE AND AFTER SESSIONS FOR THE EIGHT PRIMARY SCHOOL CHILDREN

Child's name	Age at start of sessions (in yrs.mths)	Retardation (accuracy)	
		Before sessions (in yrs.mths)	After sessions
Peter	10.5	3.4	3.8
Philip	10.7	4.1	3.11
Keith	10.7	2.11	2.10
Paul	10.8	3.8	3.10
Susan	9.8	2.9	2.11
Ellen	11.3	4.5	4.4
Sandra	10.10	3.3	3.2
Wendy	9.3	2.2	2.1

TABLE D.2. READING AGES (COMPREHENSION) AND VERBAL AND PERFORMANCE INTELLIGENCE QUOTIENTS

Child's name	Reading age (comprehension)		Verbal IQ	Performance IQ
	Before sessions (in yrs.mths.)	After sessions		
Peter	6.11	7.4	69	76
Philip	7.3	6.9	85	90
Keith	8.8	7.10	100	117
Paul	8.5	8.2	94	93
Susan	7.3	6.8	81	79
Ellen	7.3	7.4	72	58
Sandra	7.6	7.10	94	100
Wendy	7.1	7.6	97	76
Mean:	7y.6m.	7y.5m.	86.5	86.1
SD:	7.7m	6.3m	11.7	17.9

The Main Experiment

TABLE D.3. T-TESTS BETWEEN BOYS' AND GIRLS' SCORES ON THE WISC

	t	df	P
Full scale	3.16	75	<.01
Verbal scale	3.86	75	<.001
Performance scale	1.54	75	NS

TABLE D.4. READING HABITS SCALE SCORES FOR BOYS AND GIRLS

	No.	Mean	SD
Boys	38	22.2	4.58
Girls	36	24.71	4.76

TABLE D.5. SOCIAL ADJUSTMENT: SIGNIFICANCE OF DIFFERENCES FROM NORMS

	$\chi^2$	Boys df	P	$\chi^2$	Girls df	P
Unract			NS	6.99	2	<.05
Ovract	8.42	2	<.05			NS
Unforthc.			NS	5.06	1	<.05
Withdrawal			NS			NS
Depression			NS	15.13	1	<.01
Hostility	3.04	1	NS			NS
Inconseq.	11.8	2	<.01			NS

(Where necessary cells were combined to ensure that the expected numbers in each cell were always equal to five or more).

TABLE D.6 INFORMATION ON THE TEN CHILDREN LEFT OUT OF THE FINAL SAMPLE

Variable	Mean	SD	No.
Initial reading age:			
accuracy:	91.6 mths	7.04	10
comprehension:	91.7 mths	12.01	9
Chronological age	125 mths	3.16 mths	10
Full WISC	95.44	11.41	9
Verbal WISC	99	7.62	9
Performance WISC	92.11	14.8	9
Unract (class teacher's assessment)	3.44	2.7	9
Ovract (class teacher's assessment)	7.56	7.16	9

TABLE D.7 T-TESTS BETWEEN THE INTEREST GROUP'S AND THE SKILL GROUP'S WISC SCORES

	t	df	P
Full WISC	1.22	67	.23
Verbal WISC	0.74	67	.46
Performance WISC	1.27	67	.21

TABLE D.8 COMPARABILITY OF CHILDREN WITH IQs OF 100 OR LESS IN THE INTEREST GROUP AND THE SKILL GROUP

	Interest Group			Skill Group		
	No.	Mean	SD	No.	Mean	SD
Verbal IQ	22	86.82	9.06	20	87.65	10.17
Reading Habits Score	22	22.46	4.14	19	23.17	5.03

TABLE D.9 T-TESTS ON INTELLIGENCE AND READING HABITS FOR CHILDREN WITH IQs OF 100 OR LESS IN THE INTEREST GROUP AND THE SKILL GROUP

	t	df	P
Verbal IQ	0.28	40	.78
Reading Habits	0.49	39	.62

Results for the Comprehension Measure of the Neale Test

TABLE D.10 IMPROVEMENT IN READING ABILITY DURING THE SESSIONS, OF THE INTEREST GROUP AND THE SKILL GROUP

	No.	Improvement Mean (in months)	SD	t	df	P
Interest Group	35	8.57	6.65	0.50	66	.62
Skill Group	33	9.42	7.34			

TABLE D.11 IMPROVEMENT OF CHILDREN OF DIFFERENT LEVELS OF VERBAL INTELLIGENCE

	No.	Verbal IQ more than 100 Mean	SD	No.	Verbal IQ 100 and less Mean	SD
Interest Group	13	11.38	7.57	22	6.91	5.57
Skill Group	13	11.69	9.01	20	7.95	5.8

TABLE D.12 T-TESTS BETWEEN THE INTEREST GROUP'S AND THE SKILL GROUP'S IMPROVEMENT, FOR DIFFERENT LEVELS OF INTELLIGENCE

Group	t	df	P
Verbal IQ more than 100	0.09	24	NS
Verbal IQ 100 and below	0.59	40	NS



TABLE D.13 IMPROVEMENT OF BOYS AND GIRLS, IN THE INTEREST GROUP AND THE SKILL GROUP

	No.	Boys Mean (in months)	SD	No.	Girls Mean	SD
Interest Group	18	9.0	7.56	17	8.12	5.72
Skill Group	16	11.19	6.02	17	7.76	8.23

TABLE D.14 T-TESTS ON IMPROVEMENT MADE BY BOYS AND GIRLS, IN INTEREST GROUP AND SKILL GROUP

Groups compared	t	df	p
Boys in IG and boys in SG	0.92	32	NS
Girls in IG and girls in SG	0.15	32	NS

TABLE D.15 CORRELATIONS WITH PROGRESS IN READING DURING THE SESSIONS, FOR COMPREHENSION

Variable	No.	r	signif.	Test
Verbal WISC	74	.21	.05	Pearson
Performance WISC	74	.06	NS	Pearson
Ovract (session teacher)	68	.31	.01	Spearman
Inconsequence (session teacher)	68	.24	.05	Spearman
Ovract (class teacher)	75	.15	NS	Spearman
Inconsequence (class teacher)	75	.20	.05	Spearman
Unract (class teacher)	75	.17	.1	Spearman
Unract (session teacher)	68	.00	NS	Spearman
Initial reading age	75	-.20	.05	Pearson
Reading in sessions	68	.17	.1	Spearman

TABLE D.16 PRACTICE EFFECTS: READING AGES ON A REPEATED AND NEW FORM OF THE NEALE TEST (COMPREHENSION)

(N = 76)	Reading Age	
	Mean (in months)	SD
Repeated form	103.0	9.45
New form	101.9	9.1

The comprehension scores on the form that had already been given once were slightly higher than on the new form. This could indicate a very slight practice effect on the comprehension measure. However, the difference between the repeated and new forms was not significant (correlated t-test), and would not seem large enough to be worth worrying about.

TABLE D.17 EXPERIMENTER BIAS: THE COMPREHENSION MEASURE

	No.	Reading Age	
		Mean (in months)	SD
Interest Group	24	102.6	10.09
Skill Group	23	104.4	9.59

The difference between groups is in the same direction as on the accuracy measure and on the Schonell test, and therefore this provides further evidence in support of the view that experimenter bias was not affecting results.

TABLE D.18 ANALYSIS OF VARIANCE WITH THE TEACHER AS THE INDEPENDENT VARIABLE, AND PROGRESS AS THE DEPENDENT VARIABLE

Progress (accuracy)					
Source	DF	Sum of squares	Mean squares	F ratio	Prob.
Between groups	9	69.6273	7.7364	.643	.756
Within groups	68	817.8214	12.0268		
Total	77	88.4487			

TABLE D.18 CONT'D

Progress (comprehension)					
Source	DF	Sum of squares	Mean squares	F ratio	Prob.
Between groups	9	332.4681	36.9409	.761	.653
Within groups	65	3156.6786	48.5643		
Total	74	3489.1467			

TABLE D.19 THE ADVANTAGES AND DISADVANTAGES OF INTEREST SESSIONS AND SKILL SESSIONS, AS CITED BY THE TEACHERS

Interest sessions			
Advantages	No. of teachers	Disadvantages	No. of teachers
1. More motivation (in part from choosing own books)	4	1. Novelty wears off, interests fade	3
2. Lack of boredom	1	2. Ephemeral interests, kids not concentrating	3
3. May set higher standards	1	3. Difficulties of getting logical development, keeping records, knowing what has and has not been covered	2
4. May concentrate better	1	4. Progress not so discernible	
5. Children free to choose	1	5. May give books that are too difficult	1
6. Greater flexibility	1	6. Kids can avoid their difficulties	1
7. Increases child's sense of responsibility	1	7. May draw rather than write	1
8. Feeling of success	1	8. May copy text	1
9. Good relationships	1	9. May browse rather than read	1
10. Not being tied to reading scheme	2	10. May be difficult to get sufficient range of books of right level on particular interests	1
11. Following interests	1		
12. May look at a lot of books	1		

TABLE D.19 CONT'D

Skill sessions

Advantages	No. of teachers	Disadvantages	No. of teachers
1. Teachers, child & parent can see progress being made	5	1. Kids can become bored (with the repetition in schemes). Orderliness to boredom	2
2. Teacher and child know what to do	2	2. May get stuck on a book	1
3. Satisfaction with achievement	1	3. Unsuitable material	2
4. Easy to keep track of progress	1	4. One scheme too confining	2
5. Motivation from wanting to get on to the next book	1	5. Easy for children to compare progress	1
6. Well-structured in difficulty	1	6. Phonics as 'babyish'	1
7. Phonic work helpful	1		
8. Can direct first aid at specific problems	1		

These advantages and disadvantages were given by the session teachers in the questionnaires they filled in at the end of the sessions.

TABLE D.20 ANALYSIS OF VARIANCE OF CHRONOLOGICAL AGE OF THE GROUPS GIVEN DIFFERENT NEALE FORMS

Source	Df	Sum of squares	Mean squares	F ratio	F Prob.
Between groups	2	47.48	23.74	2.32	.105
Within groups	77	788.41	10.24		
Total	79	835.89			

TABLE 21 ANALYSIS OF VARIANCE OF FULL WISC SCORES OF THE THREE GROUPS

Source	Df	Sum of squares	Mean squares	F ratio	F Prob.
Between groups	2	728.98	364.49	2.04	.138
Within groups	74	13248.24	179.03		
Total	76	13977.22			

TABLE D.22 ANALYSIS OF VARIANCE WITH NEALE FORM AS THE INDEPENDENT VARIABLE, READING AGE (ACCURACY) AS THE DEPENDENT VARIABLE

Dependent variable	Source	Df	Sum of Squares	Mean Squares	F ratio	F Prob.
Reading age (first testing)	Between groups	2	260.4408	130.2204	3.975	.023
	Within groups	77	2522.2467	32.7565		
	Total	79	2782.6875			
Reading age (second testing)	Between groups	2	132.7802	66.3901	1.558	.217
	Within groups	75	3196.0531	42.6140		
	Total	77	3328.8333			
Reading age (third testing)	Between groups	2	2.0353	1.0177	.027	.974
	Within groups	74	2837.4971	38.3446		
	Total	76	2839.5325			

TABLE D.23 ANALYSIS OF VARIANCE, WITH NEALE FORM AS THE INDEPENDENT VARIABLE, READING AGE (COMPREHENSION) AS THE DEPENDENT VARIABLE

Dependent variable	Source	Df	Sum of Squares	Mean Squares	F ratio	F Prob.
Reading age (first testing)	Between groups	2	78.5313	39.2657	.534	.588
	Within groups	75	5510.5071	73.4734		
	Total	77	5589.0385			
Reading age (second testing)	Between groups	2	13.9400	6.9700	.072	.931
	Within groups	74	7165.7743	96.8348		
	Total	76	7179.7143			
Reading age (third testing)	Between groups	2	138.0136	69.0068	.824	.443
	Within groups	73	6116.3416	83.7855		
	Total	75	6254.3553			

#### D.24 CAUSES OF POOR READING ABILITY

In the initial school questionnaire, the head or class teacher was asked: "What do you think are the main causes of this child's poor reading ability?" The question was answered for 47 children. More than one reason was given for some children.

1. Poor reading ability was attributed to home background for seventeen children. For ten of these seventeen children, lack of books and reading practice in the home was specifically mentioned.
2. Thirteen children were said to 'lack innate ability' or to be of low intelligence. Of these thirteen, eight had intelligence quotients below 90 on the WISC, three between 90 and 99, and two had IQs of 100 or above. Thus, according to results from the intelligence test, five of the children were wrongly classified by the teachers as being of low intelligence.
3. Eleven children were said variously to be not interested, to lack concentration or application, to be lazy.
4. Five children were said to lack confidence, and four children were said to have emotional difficulties.

5. Two children were said not to retain easily.
6. Two children were described as having difficulties with phonics.

TABLE D.25 SOCIO-ECONOMIC DISTRIBUTION IN THE BOROUGH. (THESE FIGURES ARE TAKEN FROM THE 1971 CENSUS (THE 10% SAMPLE, WARD LIBRARY) SMALL AREA STATISTICS.)

Socio-economic group	No. of households (by socio-econ. group of head)	%
1	107	4.4
2	197	7.8
3	22	.9
4	64	2.6
5	134	5.5
6	258	10.7
7	33	1.4
8	130	5.4
9	788	32.5
10	245	10.1
11	169	7.0
12	78	3.2
13	2	.1
14	2	.1
15	0	0
16	2	.1
17	194	8.01
Total	2421	

TABLE D.26 THE RELATIONSHIP BETWEEN SOCIO-ECONOMIC GROUPS AND SOCIAL CLASS,  
FOR THE CHIEF ECONOMIC SUPPORTER OF THE HOUSEHOLD

These figures are taken from 'Social Trends' (Central Statistical Office, 1974) p.97.

Socio-economic group	Thousands	Percentage of total chief economic supporters of household						
		Social Class						
		I	2	3NM	3M	4	5	Unclassified
I	681		3.6		0.1			
2	1366		6.0	0.3	1.0	0.2		
3	137	0.8						
4	625	3.4						
5	936		5.1					
6	133			0.7				
7	2306			10.8		1.9		
8	363			0.2	0.4	1.3		
9	613				3.4			
10	4247				23.4			
11	2077					11.4		
12	1167						6.4	
13	686		1.0	0.3	1.9	0.5	0.2	
14	146		0.8					
15	131		0.7					
16	209				0.1	1.1		
17	1338							7.4



APPENDIX E

Miscellaneous Information

1. A Note on the Analysis of Results
2. Hypotheses concerning Sub-groups of Children
3. Publishers who Contributed Books
4. The Different Rewards sought through Learning

### E.1 A Note on the Analysis of Results

Results were analysed using the "Statistical Package for the Social Sciences" (McGraw-Hill, 1970) and the later updates. The University of Manchester 7600 and 1906A computers were used, by means of the link from Keele University. A few analyses were carried out on the ICL 4130 computer at Keele University. The Mann-Whitney U-tests were carried out on this computer, as well as the analysis of covariance (see Chapter 12). The analysis of covariance was carried out using a BMD package from the Department of Mathematics, Portsmouth Polytechnic.

### E.2 Hypotheses concerning Sub-groups of Children (see Chapter 6)

These hypotheses concern poor readers, who do not have other severely incapacitating problems and who are given extra help with reading in withdrawal groups, by experienced teachers.

1. Girls who attend interest sessions will improve reading ability more than girls who attend skill sessions.
2. Boys who attend interest sessions will improve reading ability more than boys who attend skill sessions.
3. Children of average or below average intelligence who attend interest sessions will improve reading ability more than similar children who attend skill sessions.
4. Children of above average intelligence who attend interest sessions will improve reading ability more than similar children who attend skill sessions.
5. Quiet, shy children who attend interest sessions will improve reading ability more than similar children who attend skill sessions.
6. Children who are aggressive and troublesome who attend interest sessions will improve reading ability more than similar children who attend skill sessions.

### E.3 Publishers who Contributed Books

Thanks must be given to the following publishers who very kindly contributed a number of children's books to the project. These books proved to be of very great assistance to both the teachers and the children.

E. J. Arnold & Son Ltd., Leeds

Hulton Educational Publications Ltd., Amersham, Bucks

Oliver & Boyd, Edinburgh

Tom Stacey Ltd., Birmingham.

University of London Press Ltd., London.

#### E.4 The Different Rewards sought through Learning

The items listed below represent the different reward categories in Dunn-Rankin et al.'s (1969) analysis of "Reward Preference Patterns in Elementary School Children" (Int. J. Educ. Sci. 3, p.61).

##### Adult Approval

1. Teacher writes 100 on your paper.
2. Teacher writes 'A' on your paper.
3. Teacher writes 'Perfect' on your paper.
4. Teacher writes 'Excellent' on your paper.

##### Competitive Approval

1. Be first to finish your work.
2. The only one that can answer a question.
3. Have only your paper shown to the class.
4. Have your paper put on the bulletin board.

##### Peer Approval.

1. Students ask you to be on their team.
2. Friends ask you to sit with them.
3. Classmates ask you to be class leader.
4. Friends ask you to work with them.

##### Independence Rewards.

1. Be free to do what you like.
2. Be free to go outside.
3. Be free to play outside.
4. Be free to work on something you like.

##### Consumable Rewards.

1. A package of bubble gum.
2. A candy bar.
3. An ice cream cone.
4. A soft drink.

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