

## **CHAPTER - 2**

### **REVIEW OF THE RELATED LITERATURE**

## 1. Reading Accuracy

In the coming years, school life may become harder for those children who are having problems with language. It is absolutely clear after seeing the curriculum being taught in the schools that primary school children cannot progress and achieve appropriate attainment targets without adequate attainment in the language.

During the last twenty years there has been increasing recognition of the considerable value of studying the errors or 'miscues' made by pupils during oral reading. Miscues are valuable because they reflect the underlying processes and strategies used by readers to comprehend a text. Goodman was one of the earliest research workers in this field (Goodman, 1965; 1967). Together with many other reading specialists, Goodman has always been a strong proponent of a psycholinguistic model of reading. This describes reading as an integral part of the reader's total language processes. Using such a model, oral reading errors are not seen as random guesses, but as sensible attempts at extracting meaning from a text. One worker usefully summarises this position, describing reading errors as "..... calculated responses cued by print or sentence context ....." (Barr, 1978, p 214). Most research workers in this field seem to agree that readers are relying on at least three cues systems within the text (eg. Southgate-Booth, et.al., 1981; Clay, 1982; Arnold, 1982, 1984; Pumfrey, 1985). These are :

- (a) the syntactic or grammatical system;
- (b) the semantic or meaning system, and
- (c) the grapho-phonetic or letter-sound system.

All three systems contribute towards the reader's active search for meaning.

The technique of studying these errors has become known as 'miscue analysis.' Goodman devised a 'miscue inventory' in an attempt to make the technique more objective (Goodman and Burke, 1972). The inventory was a method of scoring miscues according to strict criteria of proximity to the target word. This original inventory was highly complex and time consuming to administer. Consequently other researchers have developed simplified versions although even the use of these simpler inventories can be

a demanding task. ( Burke, 1976; Moyle, 1979; Arnold, 1982, 1984). Whichever inventory is used, the basic procedures remain similar. The errors or miscues made by a particular reader to a specified text are recorded. Each miscue is then awarded three scores. These are for the syntactic and semantic acceptability of the miscue and its grapho-phonetic proximity of the target word. Means and percentages of such scores and their inter correlations then provide a useful profile of the type of strategies being used by readers to predict and decode text. Patterns of miscue reflect reader-text interactions. These patterns are affected by the match between reading attainment and text difficulty.

Some workers, however, have reservations about a miscue scoring system that assumes the data obtained to be ordinal or even interval in nature when they could well be only nominal (eg. Potter, 1982).

In word-recognition, it has been shown that the magnitude of contextual facilitation effects is a function of decoding skill. When the target word in a discrete trial experiment is degraded so as to make the speed of reading of good and poor readers equivalent, the good readers show as large a contextual effect as the poor readers. Increases in word difficulty show a consonant pattern of performances (Perfetti, 1985; Stanovich, 1984; 1986a; 1986b). Some of these studies were carried out using a tachistoscopic presentation, which is a rather different process to that of normal reading. The above results led Stanovich to propose the theory of 'Compensatory Processing' in reading. This states that information can be drawn from any one process (or system) in order to compensate for deficiencies in another. Thus, poor knowledge of the letter-sound system leads to increasing reliance on the syntactic and semantic systems. Evidence to support this theory comes from Blaxall and Willows (1984). They studied the nature and quality of miscues according to variations in the difficulty level of the text. They observed that increasing reliance on the grapho-phonetic system paralleled increasing linguistic complexity of the text. Thus uncertainty about the syntactic and semantic cue systems produced greater reliance on the grapho-phonetic system. These findings would be related to whether the child was reading at independent, instructional or frustration level (Betts, 1957). More recent support for the 'compensatory processing' theory comes from a study of the word-recognition and spelling skills of 17 dyslexic and a control group of grade 2 and 3 pupils matched on reading and spelling tests (Bruck, 1988). Work with dyslexic groups and individuals in the U.K. also provided additional support from a cognitive developmental perspective (Snowling, in press).

A final area for consideration is to what extent the type of quality of miscues,



produced during oral reading, can indicate the degree of comprehension of a text. Again, there is controversy in this field. Goodman (1969) and Golinkoff (1975) both claim that children who produce miscues of a poor linguistic quality are also poor comprehenders. Beebe (1979) also supports this viewpoint.

Other researchers have reached rather different conclusions. Guthrie (1973) worked with a small number of poor readers and found that although many of these children were poor comprehenders, they made effective use of syntactic information.

In summary, the research literature indicates complex relationships between the nature and quality of a child's oral reading errors and his comprehension of a particular text. The exact nature of these relationships remain unclear.

The brief literature review demonstrates that several issues are in need of some clarification.

## **2. Aural and Reading Comprehension**

Comprehension is considered to be a complex activity consisting of broad highly subskills. There are three main modes of text presentation for comprehension (oral, silent and aural/teacher read). Interesting comparisons have been made between the two specific modes and their relative effectiveness for comprehension. Conflicting opinions have emerged regarding degree of similarity in processing between the two receptive modes of listening and reading. Curtis (1980) and Wilkinson (1980) when compared the listening and oral reading performance of young children (6 to 9 yrs.) found that the listening comprehension of these children was significantly superior to their oral reading. However, Smiley et al. (1977) found the skill of listening and reading more similar.

Patel (1982) in his study into listening comprehension in Gujarati of pupils of Class V of Central Gujarat found that :

- \* there were no sex differences with regard to listening comprehension.
- \* the pupils of age group ten were found to be superior in listening comprehension to the pupils of other age groups.
- \* There was a positive relationship between listening comprehension and listening habits.

Shivapuri (1982) in his investigation into pupil's comprehension of English found that there was no difference in comprehension scores for two sexes.

Gaur (1982) in his study on reading ability in relation to achievement revealed that speed of reading comprehension and achievement affected the students achievement whereas age and gender did not influence the speed of reading, comprehension and vocabulary of the students.

Interesting comparisons can be made between the two specific receptive modes and their relative effectiveness for comprehension. There are conflicting opinions as to the degree of similarity in processing between the two receptive modes of 'listening' and 'reading'. Two large studies have compared the listening and reading performances of young readers aged between six and nine years. (Curtis, 1980; Wilkinson, 1980). They found that the listening comprehension of these children was significantly superior to their reading comprehension. They concluded that their subjects were inhibited from obtaining meaning whilst reading, by their poorly developed reading subskills. Other reports however suggest that the skills of listening and reading are more similar. Smiley et.al. (1977) found amongst her 6 - 9 year old subjects, that good readers were good listeners and poor readers were poor listeners. Research amongst older children support this latter finding (Kintsch and Kozminsky, 1977; Smiley et.al., 1977). It seems that a child's level of reading fluency is a relevant variable in any such comparisons.

### **3. The Issues of Gender difference in Reading**

The issue of gender differences in reading is very much debated. One cannot arrive at any firm conclusion. Some studies (Maccoby and Jacklin, 1974; Orlow, 1975; Fairweather, 1976; Witelson, 1977; Bank et.al. 1980; Agarwal, 1981; Bleakly et.al. 1988 and Raoy, 1987) showed significant difference in favour of girls, while other concluded in favour of boys (Finn, 1976; Gunderson, 1976; Keys, 1987 and Eccleston, 1990) and some reported no gender difference in reading (Gaur 1982, Hogrebe et.al. 1985 and Read and Pumfrey, 1992).

It has been suggested in many early studies (1920-1950) that development of language skills proceeds more rapidly for girls than for boys. When these early studies were reviewed by the more recent writers. It was found that some recent workers in this field have reached the conclusion that the difference between boys and girls in their language development may now be much smaller or even now existent than was earlier thought to be the case. (Maccoby and Jaklin, 1974).



Some early studies found that girls matured faster in linguistic development during early childhood and performed better than boys in reading at primary stage (Maccoby, 1966). At the same time there were some other studies which gave counter evidence showing that boys had a better knowledge of words than girls (Templin, 1957) or showing no difference in the performance of boys and girls (Strikland, 1962). It has been assumed that the reading superiority of girls may be due to cultural factors rather than cognitive factors (Fairweather, 1976). When language ability was taken into consideration, it was found that at low ability levels, the performance of girls in syntax was superior to that of boys, but that at high abilities it was just the reverse (Loban, 1963).

Witelson (1977) proposed that the brain is more diffusely organised in girls, thus is less prone to cerebral dyfunctions such as reading retardation or dyslexia. This finding is also indicative of a gender difference in cerebral organisation that hemisphere specialization for spatial processing is developed in the boys by the age of five but not till thirteen in girls. The following factors have been adduced to explain the gender differences manifested in reading (Dwyer, 1974; Johnson and Greenbarun, 1980 and Bank et.al. 1980).

- \* physical maturity (girls mature faster than boys).
- \* sex relevant content
- \* teaching style
- \* female teacher bias
- \* discriminatory treatment and
- \* differential response.

Among Asian children there is no clear evidence of differential performance on reading assessment (Taylor and Hegarty, 1985). It has been found that girls wish to enter further education to a greater extent than boys do (Gupta, 1977). Another study conducted on 86, 7-8 year old children found no sex difference in reading comprehension (Fletcher and Pumfrey, 1988). A reading attainment gender interaction which was significant at the .05 level, revealed that at high reading attainment levels the boys performed better. In another study, no significance was found on different miscue scores (grapho-phonetic, semantic and syntactic) of boys girls even after taking into consideration their reading attainment levels (Pumfrey and Fletcher, 1969).

From the above studies gender differences seem to be influential in the fields of language in general and reading in particular. The maturational and psychological differences between boys and girls may also effect their verbal abilities during the early years of schooling. There is still a need for in-depth research within each single culture to investigate which sex-related reading differences are consistent and valid in that particular society/culture. It is therefore appropriate to incorporate this variable.

