Teaching Reading to Educable Mentally Handicapped Students.

Reading instruction for educable mentally handicapped students requires the use of flexible learning strategies and teaching techniques for basic sight word training; instruction in phonic analysis, structural analysis, and contextual analysis; comprehension lessons; and fluency development. Sample techniques (for fluency development) include imitative reading, repeated readings, chunking, paired readings, and neurological impress. (DB)
TEACHING READING TO EDUCABLE MENTALLY HANDICAPPED STUDENTS

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The ideas for teaching reading presented in this paper are directed toward the educable mentally handicapped student. This student according to the American Association on Mental Deficiency possesses subaverage intellectual functioning and deficits in adaptive behavior (Grossman, 1977). In general, the educable mentally handicapped student is characterized as slow in intellectual ability, immature, slow to learn and deficient in receptive and expressive language skills. Deficiencies in intellectual and language skills lead to problems in reading.

With regard to reading, the student is slow in comparison with students of normal intelligence of this same age in locating facts, recognizing main ideas, drawing inferences, drawing conclusion, and using word attack skills. Although, educable mentally handicapped students are slow in learning, they can master some basic reading skills and, as Askov and Otto (1985) point out, reading programs should be specifically designed to meet their needs. These programs should be well structured and teacher directed. Moreover, the major goal of such programs should be to help students acquire skills that will enable them to function as independently as possible in the society.
Developing Vocabulary

An important aspect of learning for EMH students is that of developing a basic sight vocabulary. Because these students tend to have difficulty in language development and concept development, it is not sufficient to simply expose students to a new word a few times and discuss the word with them. The EMH student must experience the word in as many ways as possible.

In addition, teachers of EMH students should focus on teaching students words which will be essential to their well being and survival in the society. Students should be familiar with proper nouns that they must encounter in everyday life such as the names of streets, stores, people, and places. It is also advantageous for the students to know and recognize the names of basic concrete objects such as foods, utensils, and household equipment. Words which focus on basic survival, such as stop, go, hot, walk, yes and no, should also be stressed in the reading programs of EMH students.

Further, it is essential that basic sight vocabulary development for EMH students center on words and concepts which students can grasp. Many abstract words are difficult for the student to comprehend. Therefore, teachers would be better off investing time in the survival and concrete words rather than focusing to any extent on words such as democracy, loyalty and unity.
The use of basal reader programs is usually not appropriate for teaching new words to EMH students. The problem lies in the fact that basal readers tend to introduce new words too frequently and they do not provide enough repetition of new words for the needs of these students. Teachers who work with EMH students must search out or develop instructional activities which allow their slow learners ample exposure to new words and repeated opportunities to have varied experiences with new words. Such activities are needed if the students are to develop visual memory of a word and understand the meaning of the word.

Some recommended methods of teaching sight words to EMH students adapted from Ekwall Shawker (1985), include:

1. Having students utilize as many senses as possible in learning a new word. For example, with a word such as lemon, students might taste, touch, see and smell the fruit.

2. Having students identify as many characteristics and physical attributes of a word as possible.

3. Using the language experience approach which uses the oral language and the experiences of students for writing stories on charts. This approach encourages the student to use language and to increase their sight word vocabularies.

4. Using oral language as much as possible thorough activities such as reading to students, storytelling, and talking to students, thereby providing many experiences with new words.

5. Using the kinesthetic approach which requires students to hear, say, trace and write a new word.
Teaching Decoding Skills

Although, learning sight words through a whole word. Look and say method is a fundamental approach for handicapped students (Polloway, et al., 1985), this approach should be followed by instruction which teachers students some decoding skills for attacking unfamiliar words. Important decoding skills include phonics analysis, structural analysis, and contextual analysis. Once students have established a sufficient store of sight words, teachers can utilize these words as a basis for introducing and teaching decoding skills.

Phonic Analysis

Phonic Analysis is a skill for decoding and recognizing new words which utilizes sound-symbol correspondencies. This skill allows students to figure out the pronunciation of a new word. The ability to analyze a word according to its sound elements requires knowledge of letters of the alphabet as well as some skill in auditory and visual discrimination.

As with all students, if EMH students are to be able to make appropriate visual and auditory discriminations, teachers may have to provide activities to develop skills in these areas. In the area of visual discrimination, for example, a teacher may allow students to select the one letter, shape or word in a row which differs from the others in the row. An auditory discrimination activity may consist of having a student identify the one word in a list of words pronounced by the teacher which has a different beginning sound from
the others. A comprehensive list of activities for developing visual and auditory discrimination skills is presented by Burns, Ross and Roe (1984).

Once students have the necessary visual and auditory skills, teachers can introduce phonic elements and methods of analyzing words phonetically. Sequences for introducing phonics skills have been suggested by various authors (Polloway, et. al, 1985), (Ortan, 1964), (Carmine and Silbert, 1979). A representative sequence for presenting phonics skills as suggested by Dale Johnson is presented below (Burns, Ross and Roe, 1984).

**Single Consonants**

Set 1: - d, n, l, m, b  
Set 2: - p, f, v, r, h, k, y, s, z, t  
Set 3: - j, w, z, x, q(u), g

**Consonant Clusters**

Digraphs: sh, t, ch, ng, ph

**Double Consonants**

ss, ll, rr, tt, mm, nn, ff, pp, cc, dd, gg, bb, zz

**Single Vowels**

i, a, o, u, e
Vowel Clusters

Set 1: io, ea, au, ee, ai, au
Set 2: oo, ou, oi, ay
Set 3: ia, oa, ie, ue, iou, ui

Consonant Blends

Consonant plus/consonant plus r, s, plus consonant

Patterned irregularities

Knee, knife, knew, bomb, comb, lamb

Syllabication

VCV (Vowel-Consonant-Vowel) ba/by
VCCV (Vowel-Consonant-Vowel) nap/kin
VC/e (Vowel-Consonant-Vowel) a/ble

(Burns, Ross, and Roe, 1984)

Phonic skills may be presented in the same sequence for EMH students as for regular students. However, the pace for introducing and providing practice in a particular phonic skills must be adjusted to the needs and abilities of the learners. Naturally, slow learners will require more time to deal with each skill area than learners who are not mentally handicapped.
Structural Analysis

Structural analysis skills can also be useful for EMH students in decoding words and in understanding the meanings of words. The area of structural analysis primarily involves analyzing words according to prefixes, bases or root words, and suffixes. Compound words and contractions may also be analyzed structurally. Skill in structural analysis enables students to decode unfamiliar words by using units which are larger than single letters or letter blends. Moreover, the emphasis on identifying word parts which have meaning helps students in word comprehension.

Suggestions for teaching structural analysis skills can be helpful to teachers. It is recommended, especially in working with slow learners, to teach the relatively simple strategy of reading a word a part at a time (Carmine and Silbert, 1979). For example, the word unclean is read un + clean. In Direct Instruction Reading Carmine and Silbert present a sequence for introducing affixes. Compound words, for example, snowman, rainfall, football, and mailman, may be introduced after students have learned the words which make up the compound word. A contraction group with a common can be introduced after students know the base word for the group. Special strategies can be introduced, in addition, to help students discriminate words whose endings change when a suffix is added, for example (hope + ing or hop + ing).

Structural analysis is an essential word recognition strategy that aids reading fluency. Teachers of slow learners can assist
their students through introducing various elements of structural analysis and allowing sufficient time for students to practice and understanding the concepts taught. One criticism of many commercial materials in the area of structural analysis generally is that they do not allow enough opportunities for repetition, practice and reinforcement of skills. If this criticism is true for normal learners one can imagine how much more necessary it is for teachers to provide appropriate instruction and practice for slow learners.

**Contextual Analysis**

Contextual analysis is a decoding skill which relies on the use of context clues. Clues may be syntactic or semantic. Syntax refers to proper word order in a sentence and semantics refers to word meaning.

Students may learn to utilize both syntactic and semantic clues in recognizing words. Syntax clues allow students to make inferences regarding the possible pronunciation of a word. The next word in the sentence "Mary ran to the ________," for example, must be a noun. A verb or a pronoun would not be acceptable. The second type of context clue, the meaning or semantic clue, further limits the number of possible words that can come next in a sentence. Although, the next word in the sentence "John threw away the ________ must be a noun, only certain nouns would make sense in this sentence. Nouns such as sky, school, or ocean, would not be appropriate.
Teachers should encourage EMH students to use context as a clue to unknown words. The idea of using context clues can be introduced through oral activities in which the teacher reads a sentence aloud, leaving out certain words, and asks the students to complete the sentences. From oral activities, students can gradually move into utilizing context clues with written contexts. The use of context clues helps students to make educated guesses about the identity of an unknown word. Context clues should be used in conjunction with phonics and structural analysis. When all decoding skills are used in combination, students may be able to decode a word more quickly than when using only one decoding method.

**Teaching Comprehension Skills**

The ultimate goal of all reading should be comprehension of what is read. Obtaining meaning from the printed page and being able to respond to that meaning is essence of reading. Polloway et al. (1985) point out that handicapped students' difficulty in understanding abstract concepts and generalizing information often affects their ability to comprehend written material. Therefore, the reading program for EMH students must emphasize comprehension skills. Further, it is important that the program focus on concepts and ideas which the students can assimilate into their present knowledge structures.

Perhaps, the most important instructional strategy used in teaching reading comprehension is questioning. Literal, interpretive, and critical understanding of written passages are
important areas to be developed in reading. Literal comprehension refers to being able to retrieve ideas which are directly stated. Interpretive comprehension refers to the ability to read between the lines. It is the process of deriving ideas that are implied rather than directly stated in passage. Critical reading involves evaluating written material. Questioning is used to ensure that students are thinking and comprehending at the literal, interpretive and critical levels.

As with normal students, teachers may begin comprehension instruction with EMH students by reading stories out loud and discussing the content of the stories with the students. It is important that the story content presents ideas which are within the grasp of the students. Discussion can focus on questions that ask students to provide information relative to what was read. EMH students should be encouraged as much as possible to share orally their knowledge and understanding of story content. After learning to respond to material presented orally, students can begin to respond to appropriate material which they can read.

The ability to recall or recognize facts from a text involves literal comprehension. After hearing or reading the sentence "The woman wore a red hat," a student might be asked to give the color of the hat. At the literal level, students might be asked to give not only details, but directions, main ideas, and sequences directly stated in passages. The literal level of comprehension is considered the lowest level of comprehension. It is important, therefore, for teachers to challenge students to think and respond at the high levels of comprehension, namely, the interpretive and
EMH students can be taught to think at higher comprehension levels with proper instruction and guidance (Askov and Otto, 1985). Polloway et al. (1985) suggest that if properly guided and questioned, slow learners can learn to make inferences from material read. Caskey (1970) reported that teachers have more influence than students' intellectual levels have on developing higher level comprehension skills. However, teaching EMH students to respond at higher comprehension levels may not be an easy task. Using literal information to learn to make higher level decisions does not come easy for EMH students. To begin to think at higher levels these students must be carefully guided by questions that help them to make inferences, draw conclusions, identify relationships or make evaluations. Teachers have to ask students to make choices and to support their choices based on story content. Students must also be encouraged to verbalize and describe their thoughts.

Suggestions are available to teachers who are concerned with moving slow learners into higher reading skills. Teaching EMH students to paraphrase is an important first step toward developing the slow learners' ability to think beyond the literal level according to Askov and Otto (1985). A student who is able to put an author's statement into his own words is demonstrating real understanding of the author's idea. Carmine and Silbert (1979) present a number of sample lessons which can be helpful in teaching higher level comprehension skills to slow learners. Specific directions are given, for example, for lessons to guide students...
to name an event, object or attribute when a description is given and to help students predict what will happen next in a story based on preceding events.

**Fluency**

The ability to read through printed passages continually and smoothly may improve reading ability generally. Allington (1983); Dowing (1982), and Smith (1982) emphasize the importance of having many opportunities to read and the need for practice in developing fluency. Such practices are believed to be particularly important for students who have difficulty learning to read. A few fluency development strategies are presented below. Researchers who have studied the effects of using fluency strategies with students indicate evidence of improved fluency and word recognition as well as enhanced comprehension (Samuel, 1979; Oshea, Sindelar, and Oshea, 1985, Herman, 1985).

**Imitative Reading**

With imitative reading, the teacher reads a segment of a text aloud while the student follows along silently. When the teacher has finished reading the segment, the student tries to echo or imitate what the teacher has said. This technique aims to improve word recognition ability. (Henk, Helfedt, and Platt, 1986).

**Repeating Readings**

The repeated readings strategy involves having a student read aloud repeatedly sections of a text containing high frequency words
(Samuels, 1979). Each reading is timed and then recorded on a chart or graph. The student can then compete with himself by trying to better his own reading rate. In order to increase his reading rate, the student must recognize words without having to slow down to sound them out.

**Chunking**

Another fluency strategy, chunking or phrase reading, can be used to gradually expand students' units of analysis in reading. With this technique, the teacher selects familiar reading passages and divides them into phrase groups by using a pencil to make slash marks directly in the text. At first, the number of words per phrase group might be limited. As students master these smaller phrase groups, some of the slash marks can be erased so that larger phrase groups remain.

Teachers can also write the phrase on flashcards for drill and practice. The phrase are initially presented in the sequence in which they appear in the passage. Later, phrase cards can be re-ordered and flashed randomly. This procedure encourages students to memorize words and to increase their sight vocabularies. Brazo, Schmelzer and Spires (1983) present a comprehension discussion of the chunking strategy.

**Paired Readings**

In paired reading, two students read the same text aloud in unison (Henk, Helfedt, Platt, 1986). Students should be placed
together according to their general reading level and their ability to work with one another. When one student falters in reading, his partner is there to lend assistance. Paired reading helps to increase oral fluency.

**Neurological Impress Method**

The neurological impress method is a system in which the student and teacher read a passage aloud in unison. The student sits slightly in front and to one side of the teacher as both hold the text. The teacher reads slightly faster and louder than the student, pointing to words as they are read. The teacher's voice is directed at the student's ear so that the words are seen, heard, and spoken at the same time. It is suggested that the neurological impress method be used ten to fifteen minutes per day for maximum of eight to twelve hours (Heckeman, 1986). The multisensory nature of the neurological impress method is believed to help impress the fluid reading patterns of the teacher on to some students through modeling.

**Conclusions**

Reading instruction for educable mentally handicapped students should present a variety of reading skills, and flexible learning strategies and techniques. Basic sight word training; instruction in phonic analysis, structural analysis and contextual analysis; comprehension lessons; and fluency development can all be incorporated into the instructional programs of EMH students. In working with slow learners, it is suggested, however, that instruc-
tion progress more slowly and develop more gradually than with students who are not slow. Moreover, rather than thinking that students will gain learning incidentally, teachers of EMH students need to plan systematic, direct instruction. Teachers should also allow for ample repetition in skills practice, and they should insure that materials are not too demanding for students in terms of vocabularies and ideas presented.
BIBLIOGRAPHY


Carmine, Douglas and Jerry Silbert. Direct Reading Instruction, Columbus: Charles E. Merrill, 1979.


Levin, Joel. "Inducing Comprehension in Poor Readers: A Test of a Recent Model." Journal of Educational Psychology.


