Study of language needs of primary educable retarded children with major learning disabilities and of the implementation of supportive methods

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A STUDY OF LANGUAGE NEEDS OF PRIMARY EDUCABLE RETARDED
CHILDREN WITH MAJOR LEARNING DISABILITIES AND
OF THE IMPLEMENTATION OF SUPPORTIVE METHODS

by

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CHAPTER I

INTRODUCTION

Since man's linguistic abilities distinguish him from all other creatures, the study of his language is vital. It is imperative that the study include not only his abilities but even more so his needs.

Based on Heber's 1959 definition Schiefelbusch states,

There is general agreement that the two primary distinguishing features of mental retardation are subnormal intellectual functioning and inappropriate (maladaptive) social behavior. Language functions seem to be closely associated with each feature. That is, intelligence and language seem to be similarly influenced by the same antecedent factors and are evaluated by largely the same test items. Similarly, adaptive behavior is governed largely by the same factors that have been established communication behavior. There are apparently many functions that are common to both sets of behaviors.¹

Statement of Problem

The author as a teacher of primary educable mentally retarded children in a Special School system has had ample

opportunity to observe functions of both sets of behaviors.

Due to the fact that language functions are associated with inappropriate or maladaptive social behavior the author has tried to (1) discover the language needs of primary educable mentally retarded children in general, (2) obtain a better understanding of the needs of primary children in the specific system, and (3) implement a method or methods to alleviate the deficiencies and hopefully to fill some needs.

In order to accomplish this it was necessary:

1. to review research on the problems of speech and language development of the retardate;
2. to list specific disabilities; and
3. to review some programs or methods which could be implemented.

**Study of Problem**

In order to facilitate the study of the problem it is necessary to define some terms.

According to Carroll "a language is a structured system of arbitrary vocal sounds and sequences of sounds which is used, or can be used, in interpersonal communication by an aggregation of human beings, and which rather exhaustively catalogs the things, events, and processes in the
human environment." He went on to state that

When we talk, therefore, about the language of mental retardates, we are talking, or should be talking, about the system that they have learned that is, what sounds, words, and grammatical patterns they are able to use in speech communication. When we refer to the speech of mental retardates, we are referring, or should be referring, to the actual behavior of these individuals in using language, the amount of talking, the conditions under which talking is elicited, and so forth. Language is properly defined so as to include only vocal communication, including intonation and accent, but excluding so-called paralinguistic features such as gestures. But insofar as gestures may exhibit arbitrary, conventionalized patterns we may speak of gesture language. Speaking, listening, reading, writing and gesturing are thus names for activities utilizing an underlying language code.

A minimally sophisticated language user has to acquire three languages according to McCarthy. These are receptive language, inner language and expressive language. Receptive linguistic ability refers to the facility with which linguistic symbols are comprehended. Furthermore,

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Ibid., p. 43.

"Inner language ability refers to the facility with which linguistic symbols are manipulated internally."\(^5\) Finally he states that "expressive language ability refers to the facility with which ideas are translated into linguistic symbols."\(^6\)

Through the study of these languages the discovery of the necessary language functions was made and with it some types of impairment were reported. Spreen, in his review of research, states:

Most authors agree that no special type appears to be characteristic of the mental defective. Rather, all kinds of speech and language impairments known in normal and in other clinical groups are also observed in mental deficiency. The classification of 'retarded language development' is frequently applied as a general term, covering the whole range of language dysfunction from the severe alalia of a low-range defective to the poorly developed vocabulary of an intellectually subnormal person.\(^7\)

He did, however, state some language dysfunctions, i.e. on set of talking, including sign language; speech sound development which might include sound discrimination and acquisition of phonemes; and vocabulary, including concept attainment, association index, words per minute and

\(^5\)Ibid., p. 6. \(^6\)Ibid., p. 10. 

mean sentence length.

Similarly Ethel Curtis summarized the special deficiencies in language ability and habits of thinking. "Among these are the ability to reason, to do quantitative thinking, to remember things heard and seen and to discriminate between different things heard or seen."^8

The needs of the educable mentally retarded children are those of speech and language development which will help them reach their maximum potential of speaking skills. This, in turn, will foster more self-confidence, self-reliance, and self-respect which are necessary if these children, as adults, are to operate successfully and acceptably in their social and occupational environment.9

In order to ascertain a method or methods which could be implemented in the specific system the author has become familiar with reports of several language programs and studies.

The first was Kirk's experimental study of early education of mentally retarded children. "The purpose of the experiment was to determine the effects of preschool education on the social and mental development of young educable


mentally handicapped children." There were gains of significant differences in several areas and between the different groups in the study. Kirk summarized the conclusions by stating:

It would appear that, although the upper limits of development for an individual are genetically or organically determined, the functional level or rate of development may be accelerated or depressed within the limits set by the organism. Somatopsychological factors and cultural milieu (including schooling) are capable of influencing the functional level within these limits. This theoretical position appears to be the most tenable in the light of the evidence herein presented.

This acceleration of functional level or rate of development must be continued through the years of schooling which follow.

The following year Harrison reported on a "project designed to study the effect of nursery-kindergarten classroom experiences on the immediate and subsequent behavior and adjustment of educable mentally retarded children who are four to six years old. It is a four-year longitudinal, cross-sectional, overlap study." He described the classroom

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11 Ibid., p. 213.

12 Sam Harrison, "Integration of Developmental Language Activities with an Educational Program for Mentally Retarded Children," American Journal of Mental Deficiency, LXIII (1958-59), 967.
program as "designed to provide the opportunity for each child to develop physically, mentally, socially and emotionally to the fullest limits of his potentialities within the cultural context."\(^{13}\) "The language development aspect of the program is conceived of as one major means of contributing to the effectiveness of the classroom program."\(^{14}\) "There exists a real differential in language training needs of mentally retarded children."\(^{15}\)

Due to the fact that "language training for any child must begin with training of preverbal skills, the antecedents of language and speaking"\(^{16}\) Richardson organized the Child Study Center as an evaluation day nursery.

She reports:

For present purposes, we have skimmed over some of the research on language and thinking which demonstrate that:

1. Early exposure to a variety of experiences in looking and listening is important in language development.
2. Perceptual and preverbal experiences are requisite in primary learning.
3. Motor movements are closely related to perceptual development.

\(^{13}\)Ibid. \(^{14}\)Ibid. \(^{15}\)Ibid., p. 970.

4. There is a need for the development of motor patterns as well as perceptual patterns in language development.

5. The orienting response (attention) is an important source of internal mediators and can be trained.

6. Linguistic labels are also mediating processes in learning.

7. Language development is a part of and a result of primary learning.  

Therefore,

in order to assist the child in his task of orientation, his environment should be made pleasant, simple, and orderly in structure. The materials in our nursery are designed to attract his attention, to 'educate the senses,' and to allow manipulation by the child. Our goal is to assist him in his task of creating order in sensory input by presenting a carefully constructed sequence of experience which proceeds slowly, often painfully so for the teacher, from the concrete to the abstract.

"Montessori (1912) materials and techniques are used in the nursery because they are eminently well suited to the goals of training. They were originally designed for retarded children."  

She concludes by stating:

It is our own experience that early sensory-motor training, starting at the level of preverbal experience, is of major importance in the establishment of a language program for these youngsters. Current research certainly points in this direction, and the research literature contains many useful directives for the teacher. Applications of these often overlooked or not understood

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17 Ibid., pp. 152 & 153.

18 Ibid., p. 154.  

19 Ibid.
basic approaches to child training would greatly enhance the effectiveness of the work with young retarded children.20

Lastly, the preschool program for disadvantaged children initiated by Bereiter and Engelmann was examined. The method used in teaching these children seems to follow very closely the techniques of foreign language teaching as developed by linguists and which has been recommended by Carroll as a possible means of teaching the mental retardate.

Bereiter and Engelmann propose that "the problem of prescribing the content of a basic language training program is solved only by looking at language, not in terms of what is normal or expected but in terms of what is necessary."21

The book includes the specific strategies along with the basic statement forms and presentation patterns used by them in this program.

After concluding the review of these studies and programs along with the other research included in this paper the author has attempted to answer these questions:

1. What are some basic language needs of primary educable mentally retarded children?

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20 Ibid., p. 160.

2. What are the needs in this specific program?

3. Would it be profitable to use one method in implementing this program? Or several?

**Limitations**

The research, for the most part, pertained to primary educable mentally retarded children. However, due to the fact that many children in the specific system are entering school for the first time, a study of preschool programs seemed advantageous.

Because the language development of the retarded is compared to the normal, some theories of child development were reviewed.

The author by no means considered this review all inclusive. She realized that there has been and continues to be an increase in literature in this area. Therefore, updating will be constantly necessary. However, the research included here has aided the author in understanding and, for the present, solving the problem.
CHAPTER II

REVIEW OF RESEARCH

In order to know about the language development of children it has been necessary to study their intellectual development.

Although it has met with many critical comments the theory of Piaget seems outstanding.

"Piaget's theory deals with the process of intellectual development. The object of the theory is to trace the evolution of abstract thinking from its origins in the sensorimotor behavior of, infancy through the intermediate forms."¹

His distinctive techniques were devised to investigate cognitive processes. These have shown new facets of the thinking of normal children.

The theory postulates a sequence of intellectual developments. Since the important feature is the order of the steps and not the age at which they are attained, this approach can be applied to individuals whose rate

of development is extremely slow.  

His is a genetic approach seeking "to view the child as he proceeds through various biological and logical processes to mature thought."  

The importance lies in realizing that change does take place, that children can understand things at certain times, and that the period of full realization does not spring spontaneously at a moment's urgency but rather is built up through the experiential world of the young child.

Piaget classified the functions of child language in 6 year old children into two groups—the ego-centric and socialized. These groups are also divided into categories. Ego-centric speech is divided into: (1) repetition (echolalia)—child repeats words just to be talking, not to anyone or to make sense; (2) monologue—child talks to himself as though he were thinking aloud; and (3) dual or collective monologue—an outsider is always associated with the action or thought of the moment, but is not expected to attend or understand. Socialized speech is divided into: (1) adapted

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2Ibid.


4Ibid., p. 254.

information--child really exchanges his thoughts with others; (2) criticism--remarks specified in relation to a given audience to depreciate them; (3) commands, requests and threats--definite interaction between children; (4) questions--call for an answer; and (5) answers--to real questions.

This development takes place in a sequence of stages that are related to age. The four main stages are (1) the sensory-motor stage from birth to 2 years. This is a period of motor action, manipulation of objects in a trial-and-error pattern which results in the organization of a spatial field and more effective control of bodily movements; (2) the pre-operational stage is divided into two: the pre-conceptual (2-4 years) where child learns to imitate, learns language and understands meanings of signs but is egocentric; and the intuitive thought (4-7 years) when intelligent behavior tends to be limited to overt actions and thinking to perceptual factors; (3) concrete operations (8-11 years) concerned with actual operations but classification and qualitative sensation coordinate relations of temporal order with that of duration; (4) propositional or formal operations (11-14 years) ability to reason and coordinate the various logical operations into a single system. "Thought no longer
proceeds from the actual to the theoretical but starts from
the theory, so as to establish or verify actual relation­ships between things."  

Another theory of development which is often studied
and applied is that of Luria. His theory of word acquisi­
tion is substantially different from that of Piaget. His
emphasis is on the importance of the child's continuous in­
teraction with the adult world. He claims that speech emerges
from the mother naming objects and then giving orders and in­
structions. After observing the objects named by his mother
the child begins to name them and to organize his acts of
perception and his deliberate attention.

According to the idea of the Russian psychologist,
L. S. Vygotsky, Luria holds that:

the principal mental functions, such as complex percep­
tion or intelligent memorization, voluntary attention or
logical thinking, do not represent inborn properties of
personality. These complex processes are formed in the
course of the child's development and that they are ac­
counted for by the methods and means of organization of
activity which arise and are adopted by the child in the
course of its manipulations with real objects and in its
intercourse with adults, rather than by inborn capacities
(which are, of course, of great importance as well).  

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6Gloria F. Wolinsky, "Piaget and the Psychology of
Thought: Some Implications for Teaching the Retarded,"
American Journal of Mental Deficiency, LXVII (1962-63),
252-53.

7A. R. Luria, "Psychological Studies of Mental Defi­
ciency in the Soviet Union," in Handbook of Mental
The behavior of man, which always bears a reflex character, in the broad sense of these words (each action being invariably a response to certain conditions arising in his interrelation with the outer world), is at the same time a conscious and voluntary nature. This, first of all, means that a human being responds with this or another action to the verbal instructions of the people with whom he is associated; he orients himself in the surrounding reality with the help of language, through which he systematizes his impressions, realizes his own actions, and, what is particularly important, subordinates his behavior to verbally formulated intentions.8

By observing the transition from positive to inhibitory reactions when instructions are changed and by noting both the speed and correctness of reaction of the child, we can judge the mobility of the nervous processes.

Whether one accepts the primary stages of Piaget or the socialization process of Luria, it is apparent that the period of word acquisition constitutes a transition from the more dependent state of infant life to a more exploratory and active relation with the world. "It is also apparent that the interaction between the infant and the adults in his environment play an important part in the nature of the child's language learning."9

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8Ibid., p. 371.

9Richard L. Schiefelbusch, "The Development of Communication Skills," in Language and Mental Retardation Empirical and Conceptual Considerations, eds., Richard...
As quoted in Chapter I, McCarthy states that in order to become a minimally sophisticated language user one has to acquire three languages. Therefore the following research studies on the three languages as applied to the educable mentally retarded have been reviewed.

Receptive Language

According to McCarthy this "refers to the facility with which linguistic symbols are comprehended."¹⁰

This area is sensory and therefore is the beginning of language.

The mentally retarded child may have a hearing loss which would affect his auditory perception.

Luria claims that in order to be able clearly to perceive oral speech and to form the necessary system of language, the child must naturally, possess a keen, irreproachable ear. Therefore, a relatively slight deterioration of the sense of hearing, which in the adult is easily compensated by his guessing, owing to his good knowledge of the language, and which thus remains practically imperceptible, proves to be fatal to speech formation if it occurs in early childhood. In this case the child perceives only insufficiently differentiated sounds which

do not group into distinct systems of phonemes; the child does not discern the phonetic cues (sometimes very delicate), which are of signaling importance; the words which the child does perceive prove to be greatly distorted and inarticulate, words having a like phonetic contour (for example, 'whiskers' and 'whispers') are mixed up; thus, the necessary system of language is not assimilated.\textsuperscript{11}

Due to the speech and hearing problems of institutionalized educable mentally retarded children Rittmanic\textsuperscript{12} made a study to develop an effective oral language program for the classroom. The aim was to develop speech sound discrimination ability, increase oral language usage and prevent minor speech defects. Many audio-visual teaching aids were used. The consonant sounds were presented during speech improvement lessons which were once each day for fifteen to twenty minutes. Also included were story time, diversion activities, discussions and review of story. At the end of a three month period the children improved in oral language, were more aware of sound differences, and it was felt that this was a workable and practical program.


Jones and Spreen, using earphones under masking conditions tested the effects of meaningfulness and abstractness on word recognition. The S's were thirty-six educable retarded children in the University of Iowa Hospital School.

The present study considers the importance of the same three word parameters on auditory recognition in educable retarded children. This subject group was selected in an attempt to examine the relationships between mental age, chronological age, and word recognition.¹³

The finding that in this group of children MA is not related to the ability to perceive and repeat one-syllable nouns is in agreement with the earlier observations that performance on this task is not related to intelligence in normal adults or in adult defectives. It also seems that for this group chronological age is not an important variable.¹⁴

The language development methods in the prolonged pre-academic program were described by Curtis. The children were from the Wayne County Training School; had a CA range of 7 to 12 years and a MA range of 5 to 8 years. The language skills were taught through verbalization of experiences and training of thinking habits.

This guided group conversation, especially necessary to offset the unavoidable regimentation in an institution


¹⁴Ibid., p. 989.
and make up for previous environmental deprivation, is interwoven with games and activities designed to develop contributing mental functions, such as reasoning, quantitative thinking, auditory and visual memory and discrimination.\textsuperscript{15}

With the knowledge that the comprehension of linguistic symbols is extremely important the need for strengthening the sensory area must be accepted. Although the studies cited were with institutionalized educable retardates the need of effective oral language, verbalization of experiences and training of thinking habits are the same—though perhaps to a lesser degree—for educable retarded children in a special school system.

\textbf{Inner Language}

"Inner Language refers to the facility with which linguistic symbols are manipulated internally."\textsuperscript{16}

This is the area of the thinking, association, memory, and reasoning which is quite deficient in the retardate.

\textsuperscript{15}Ethel Curtis, "Building Toward Academic Readiness in Mentally Deficient Children," \textit{American Journal of Mental Deficiency}, XLVIII, No. 2 (October, 1943), p. 187.

Prehm\textsuperscript{17} in a study of paired-associate learning performance compared ninety-six retarded and ninety-six normal public school children. This comparison was made at two levels of meaningfulness and two levels of task difficulty. The retarded S's had a CA range of 106-188 mos., a MA range of 63-145 mos., and an IQ range of 51-83. The CA range for the normal S's was 99-190 mos., the MA range was 108-225 mos., and the IQ range was 93-140. The statistical analyses indicated that: the normal S's were significantly superior in performance than the retarded S's, the meaningful paired-associates were learned by normal S's in significantly less trials than the nonsense paired-associates at the high difficulty level, there was no significant effect on the performance of the retarded S's by meaningfulness, and a significantly higher number of trials were required to reach criterion on the high difficulty list than on the low difficulty list. In summarizing the study Prehm states:

The data from this investigation indicates that mentally retarded children learn at a slower rate than do normal children. Future research in this area should attempt to isolate those factors which might be responsible for this performance deficit. For example, future research might attempt to determine if the retardate is deficient

\textsuperscript{17}Herbert J. Prehm, "Associative Learning in Retarded and Normal Children As a Function of Task Difficulty and Meaningfulness," American Journal of Mental Deficiency, LXX, No. 6 (May, 1966), pp. 860-65.
In learning and integrating response items, in associating responses to stimuli, or in both phases of paired-associate learning.\(^{18}\)

In a similar study Milgram and Furth\(^{19}\) tested the response competition in paired-associate learning of educable and trainable retarded children. The subjects were twenty educable retarded children in Special Classes in D.C. Public Schools. Their CA range was 8 to 11 yrs., the MA range was 5.5–6 yrs., and IQ range on Binet was 60–75. The fifty-one trainables were from Forest Haven Training School in Maryland. Their CA range was 11–25 yrs., the MA range was 4–7 yrs., and IQ range was 25–45. The twenty normals were attending a summer nursery school, had a CA range of 3–5 yrs., with no recorded IQ's but assumed average. Also used was the Furth and Youniss sample (1964) which contained forty first grade children with a CA range of 6–7 yrs., and a median IQ of 118 on Pitner–Cunningham Primary Mental Test. One half of each group was placed in the Neutral Task condition and the other half in the Interference Task condition. The overall results were that:

\(^{18}\)Ibid., p. 865.

The Interference Tasks were more difficult than the Neutral Tasks, but the trainable retardates and four year old normals found both tasks equally difficult, while there was a highly significant difference for the six year old normals, and a difference approaching significance for the educable retardates. The trainable retardates and four year old normals were not significantly different from one another. The educable retardates resembled their MA normal controls, but were superior to the trainable retardates.²⁰

There seems to be a relationship between susceptibility to interference and a combination of MA and IQ variables according to these data.

Smith, Means, and Fishkin state:

We know that words can be used by the mentally subnormal to facilitate learning, learning transfer, and other mental processes. Also, we know that forcing mentally retarded S's to label may be necessary to insure that naming will play a role in the retarded S's learning. This suggests that retarded S's often do not use words spontaneously as aids to learning. The reasons for this are not clearly understood.²¹

This study was made with institutionalized mentally retarded S's. It was to study the effects that enforced naming of stimulus and response had upon learning and transfer of learning. The results were that forced naming of problem related cues facilitated learning and that practice in naming

²⁰Ibid., p. 852.

cues had transfer values. Increasing physical stimulus did not facilitate learning and candy reward did not affect learning or transfer.

In a similar study, Borkowski and Johnson obtained results that "indicated that retarded and MA groups utilized mediational associations to the same degree. Only a Low MA-Low IQ deficit was found in contrasting the mediational abilities of normals and retardates."22

Knowing that words and their proper use is so important, Jordan brought out the dilemma that primary teachers face.

If he does not take time to build the basic verbal skills which the children really need before starting formal reading instruction, reading will probably be labored and lose much of its meaning. On the other hand, if an appreciable amount of time is spent in language activities, will these slow-learning children ever catch up to the point they might have reached had the same amount of time been spent in intensive reading instruction?23

Her study of fifty-one experimental and forty-nine control subjects from first grade classes in a district without special classes was done to throw some light on this


question. The subjects ranging in IQ's from 60 to 85 were randomly divided into two groups. One group was placed in a special class with a special teacher. The other group remained in the regular school with no changes at all. These groups were studied for four years. "The fact remains that the four-year learning patterns of the two groups strongly suggest an advantage for the special class subjects."24

As the effects of verbal readiness on reading were investigated in the previous study, this study by Milgram and Furth tried to find just what influence language has on concept attainment. The subjects were sixty-four retardates from special classes and private institutions who lived at home. The thirty normals attended five schools. They were matched according to MA. There were three types of tasks: (1) the Sameness tasks; (2) the Symetry tasks; and (3) the Opposition tasks. The results confirmed their predictions:

The retarded performed more poorly in the discovery and application of a language relevant concept that was within their realm of comprehension, but performed as well as normals in solving problems where perceptual rather than verbal modes of solution were assumed to be more suitable.25

24 Ibid., p. 22.

An analysis of word association was performed by Semmel, Barritt, Bennett and Perfetti with twenty institutionalized retardates, twenty Public School retardates, and twenty normals matched according to CA. The retardates ranged in CA from 10 to 14 years with IQ's from 60 to 80.

The results revealed the highest level of same-form-class (paradigmatic) responding in the older normal S's and the lowest incidence of paradigmatic responses in the institutionalized retardates. The equal MA normal and public school retarded subjects produced an intermediate number of paradigmatic responses. A significant interaction was found between sub-groups and grammatical form class of responses.26

Bijou and Werner in a vocabulary analysis compared brain-injured retardates to those of the familial type.

In conclusion, the definitions of brain-injured children were found to be superior quantitatively as well as qualitatively to those of non-brain-injured mentally deficient children. Brain-injured children as compared with non-brain-injured children have a wider range of vocabulary. They employ less frequently the immature type of definitions in terms of use; their definitions are less simple and, considered as wholes, of better quality.27

In their study of the learning of English morphology in 160 educationally subnormal children, Lovell and Bradbury


27 Sidney W. Bijou and Heinz Werner, "Vocabulary Analysis in Mentally Deficient Children," American Journal of Mental Deficiency, XLVIII (April, 1944), 366.
hypothesized:

(a) the ability of such children to inflect, derive, and analyse compound words improves little between 8 and 15 years of age and is generally below that of first graders; (b) there is a significant relationship between reading age and the inflection of lexicon words; (c) there is a significant relationship between IQ and the inflection of nonsense words, but little relationship between reading age and the inflection of such words. These hypotheses were confirmed. 28

These English children were comparable to the educable retarded in the United States and ranged from 8 to 15 years of age.

Smith in testing the creative thinking abilities of educable retardates obtained these results.

When analyses of variance procedure was used, the normal S's exceeded the mentally retarded children on 12 of the 14 verbal creativity factors beyond the .05 level of significance.

Controlling for intelligence alone erased all of the differences between the groups irrespective of the verbal or nonverbal creativity factor studied. Similar outcomes were found when achievement and mental age were individually controlled. 29

Hermelin and O'Connor compared the short term memory of twelve severely subnormal institutional children and


twelve normal children. They were matched for CA and MA. The subnormal children had a mean CA of 12 to 18 years; mean MA of 6 years 10 months for the older group and of 5 years 8 months for the younger group; and mean IQ of 46 for the older group and of 47 for the younger group. The normal children were scholastically average but no IQ was reported. The results were as expected, immediate memory in normal children was better than that of subnormals of like mental age. Older children also did better than younger ones. When no additional material is interpolated between presentation and recall, the scores of normal children remain constant up to a 12 seconds delay, while those of the subnormals decline.30 Normal and subnormal children matched approximately for mental age, were compared on a measure of immediate memory. A faster decay rate in subnormals than in normals was found. Input of material additional to that to be remembered produced interference and immediate memory decay. While for normal children interpolated unfamiliar words proved a more effective interference than familiar ones, the reverse was true of the subnormal subjects.31

These studies seemed to confirm the slow development of retarded children. Thomas appropriately summed them up in these words:

... in language ability, mentally retarded children most nearly approximate a level consistent with their


31 Ibid., p. 125.
mental age. This is true of both their ability to produce language and the quality of the language itself. Language power correlates closely with maturation, basic intelligence, and the experiential background of the individual.32

Expressive Language

Expressive language, according to McCarthy, "refers to the facility with which ideas are translated into linguistic symbols. It not only includes the common end products of speech, writing, and gesture, but processes intermediate between the message to be encoded and the end products."33

Schlanger, in explaining Fairbanks' communication model, states that it changes stress from the verbal production or 'talker' aspects of communication to at least an equal stress on the listener role. It also focuses on the feedback of the communicator and the reinforcement he receives from the listener. Listening controls a person's output and is used constantly. As development occurs, language operates at various levels of efficiency, dependent as it is on organic completeness and social, emotional, and intellectual factors. The output may


vary from nonmeaningful babbling and jargon through various gradations of meaningfulness.34

Thus Rittmanic in his study pointed out that:

... in order to develop the oral language abilities of mentally retarded children, it would seem that maximum use should be made of listening and talking. This emphasis has not been present in the education of the retarded to date and a basic study of this approach has not been done in order to understand how this emphasis can be used.35

And Thomas summed it up by stating that "since conversation is a skill mentally retarded individuals will rely heavily upon as adults, it is one which should be developed in the school program."36


CHAPTER III

SUMMARY AND CONCLUSION

As has already been noted in this paper the speech and language defects of the educable mentally retarded are the same—though perhaps more numerous—as those of normal children.

These would include defects in receptive language or sensory defects. The range of these defects, as has been reported, could stem from a lack of development from as far back as the birth of the child. Luria states that "the effect produced by an early disturbance of a certain function depends primarily on the role played by this function in the general mental development of a child, as well as on the period of development during which the given disturbance occurred."¹ He went on to explain that a slight loss of hearing in early childhood could prove fatal to speech formation. Visual or motor defects or a combination of any of these defects

could also be the cause of delayed or defective speech and language.

There could also be defects of inner language or the internal manipulation of the linguistic symbols. Included would be defects in thinking, association, memory, vocabulary development and definition of abstract terms. Research generally indicates that labels seem to improve the memory of retardates and that verbal mediators is a promising technique for improving inner linguistic ability in the retarded.

Another area of defects could be that of expressive language. These defects might range from delayed speech and language through defects of articulation, sentence structure and length, using sequential order, etc., to the effects of the verbal behavior of adults on the child and vice versa.

"It is of far greater importance, it seems to me, to study the behavior of the retarded rather than to search for the ever-elusive cause until we can demonstrate that etiology plays a significant role in the learning capacity or learning potential of the child" states Wepman.²

Spradlin indicates:

I would like to suggest that no single section could begin to sketch either the terminal behavior or the desired steps in a language training program and its concomitant evaluation procedures. These will come only from long intense work by those engaged in developing language training programs. Such programs will inevitably involve a tremendous amount of shaping through trial and error.³

Upon completing a study of the research contained in this paper, the author examined some language programs and the methods included in them. This was done in order to ascertain the profitableness of these programs and methods and to discover which, if any of these, could possibly be implemented into this specific system to alleviate the present problem.

Harrison's four year developmental program was to insure:

1. An atmosphere conductive to free verbal and non-verbal expression.
2. An attitude of acceptance of functioning language level.
3. Provision of those kinds of spontaneous and controlled experiences for individual and groups of children which will encourage oral communication.
4. Recording to facilitate evaluation of growth in

speech and language and to implement planning. 4

Kirk's Preschool Experimental Study was "to determine the effects of preschool education on the social and mental development of young educable mentally handicapped children." 5

Richardson's Evaluation Day Nursery made use of Montessori materials as the basic method. However, "the emphasis is on training the motor bases of behavior" 6 which included posture, the development of laterality and directionality, body image, perceptual skills (auditory, visual, and kinesthetic).

The linguistic approach used by Bereiter and Engelmann 7 for teaching disadvantaged children was for the purpose of increasing language experiences and developing the

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4 Sam Harrison, "Integration of Developmental Language Activities with an Educational Program for Mentally Retarded Children," American Journal of Mental Deficiency, LXIII (1958-59), 967.


ability to carry on a dialog.

The language program in this specific system was then examined as to how it fills the needs of primary educable retarded children.

First of all, specific speech problems are taken care of by a full time speech therapist who works very closely with the teacher.

An abundance of Montessori materials have been used along with Developmental Learning Materials. These have aided in the development of perceptual skills including auditory, visual and kinesthetic skills.

Audio-visual materials are also frequently used. These include the controlled reader, language master, filmstrip projectors, overhead projectors, tape recorders, earphones, and the cards, filmstrips, transparencies, etc. that go with them.

In view of these facts it is the conclusion of the author that the one area in which implementation is necessary is that of oral language.

Although the program has included oral language it would appear that a linguistic approach somewhat like that of Bereiter and Engelmann might be the implementation needed in this program now.
Since "linguistic and psycholinguistic theories suggest that the primary unit in language behavior is the sentence frame—or more generally, the utterance frame: the pattern in which the parts of an utterance fit" the author has concluded that the Bereiter and Engelmann approach is the best type. This is because their teaching consists of two basic statement forms and four basic presentation patterns.

Therefore, it is hopeful that this implementation will aid in alleviating problems and allow these children to better meet the requirements of the community in which they live.

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