

5-1-1978

# A Teaching System for the Development of Sequential Communication Skills for the Severely Retarded, Non-verbal Learner

Lorette Jean Marin Rubino  
*University of Nebraska at Omaha*

Follow this and additional works at: <https://digitalcommons.unomaha.edu/studentwork>

---

## Recommended Citation

Marin Rubino, Lorette Jean, "A Teaching System for the Development of Sequential Communication Skills for the Severely Retarded, Non-verbal Learner" (1978). *Student Work*. 2775.  
<https://digitalcommons.unomaha.edu/studentwork/2775>

This Thesis is brought to you for free and open access by DigitalCommons@UNO. It has been accepted for inclusion in Student Work by an authorized administrator of DigitalCommons@UNO. For more information, please contact [unodigitalcommons@unomaha.edu](mailto:unodigitalcommons@unomaha.edu).

Footer Logo

A TEACHING SYSTEM FOR THE DEVELOPMENT  
OF SEQUENTIAL COMMUNICATION SKILLS  
FOR THE SEVERELY RETARDED,  
NON-VERBAL LEARNER

A Thesis

Presented to the

Department of Special Education

and the

Faculty of the Graduate College

University of Nebraska at Omaha

In Partial Fulfillment

of the Requirements for the Degree

Master of Arts

by

Lorette Jean Marin Rubino

May, 1978

UMI Number: EP74303

All rights reserved

INFORMATION TO ALL USERS

The quality of this reproduction is dependent upon the quality of the copy submitted.

In the unlikely event that the author did not send a complete manuscript and there are missing pages, these will be noted. Also, if material had to be removed, a note will indicate the deletion.



UMI EP74303

Published by ProQuest LLC (2015). Copyright in the Dissertation held by the Author.

Microform Edition © ProQuest LLC.

All rights reserved. This work is protected against unauthorized copying under Title 17, United States Code



ProQuest LLC.  
789 East Eisenhower Parkway  
P.O. Box 1346  
Ann Arbor, MI 48106 - 1346

THESIS ACCEPTANCE

Accepted for the faculty of The Graduate College of the University of Nebraska at Omaha, in partial fulfillment of the requirements for the degree Master of Arts.

Graduate Committee

Name

Department

<i>John K. Brinkman</i>	<i>Communication</i>
<i>Lawrence M. Hilton</i>	<i>Special Ed.</i>

*James M. Wood*  
Chairman

*May 4, 1978*  
Date

## ACKNOWLEDGEMENTS

I want to express my sincere gratitude to all those who helped in the development of this thesis. I am particularly grateful to Dr. James M. Wood, Chairman, for his many hours of assistance in preparation and writing of this thesis.

The writer wishes to gratefully acknowledge Dr. Laurence Hilton and Dr. John Brillhart for their thoughtful and enthusiastic assistance. Their editorial assistance was particularly valuable during the writing of this thesis.

My appreciation to Michael Nuschy for assistance on the project.

Dr. Jean Muncy, Arlene Matkin, Ruth Sharp, and Anne Reim deserve special mention for their contributions during the early planning phases of the project.

This writer wishes to acknowledge those teachers and therapists working in the Maximal Opportunity Development Program of the Omaha Public Schools for their work with the children.

To my husband, Anthony Rubino, and my parents, Marty and Mary Marin, for their encouragement and support a final word of sincere appreciation is extended.

TABLE OF CONTENTS

	Page
ACKNOWLEDGEMENTS . . . . .	iii
LIST OF FIGURES . . . . .	v
Chapter	
I. INTRODUCTION . . . . .	1
Purpose of the Study . . . . .	2
Limitations of the Study . . . . .	4
II. REVIEW OF THE LITERATURE . . . . .	5
Review of Subject . . . . .	5
Research of Programs . . . . .	6
III. PROCEDURES . . . . .	18
Definition of Terms . . . . .	19
IV. THE SYSTEM . . . . .	21
Attending Skills . . . . .	21
Receptive Skills . . . . .	24
Preliminary Skills in Language Training . . . . .	35
Expressive Skills . . . . .	35
Signing . . . . .	46
Language Board Communication . . . . .	51
V. SUMMARY, DISCUSSION AND RECOMMENDATIONS . . . . .	59
REFERENCES . . . . .	63

LIST OF FIGURES

Figure	Page
1. "Comparison of Systems of Classification Relating Degree of Retardation to Measured Intelligence . . . . .	7
2. Kent's Recommended Sequence of Phases in Verbal Sections . . . . .	10

## Chapter 1

### INTRODUCTION

Our society places major emphasis on communication in both verbal and non-verbal modes. Communication is a key to living! Effective communication is a valued skill for any person. To be members of society who have grown and developed in a "normal" way, we become accustomed to speaking and listening without really contemplating the complexity of the task. In professional circles and indeed, in our society as a whole, attention to the skills involved in language development is growing in focus.

Hallet et al. (1) states that "Every individual in our society has a need to communicate with others (1:185)." Currently we see an increased trend to develop interpersonal relationships in rehabilitation through the use of touch. But, in spite of this trend, "little purpose is served by such an approach if the ability to understand, organize, and relate to symbols is lacking. It is through the process of symbolization that we learn to attach meaning to our environment (1:185)."

This investigator's purpose was to develop a system to help severely retarded persons develop communication skills. The system is geared to the individual learner and is to be altered accordingly. The materials used within the system are arranged in a suggested progression. A primary aim is to describe clearly a stated objective communicating the instructional intent of the investigator. Major emphasis shall be placed upon consistency in drilling. Goals shall be performed on a daily basis using the classroom teacher, and when available, aides as administrators of the system, in addition to the clinician or the specialist.



### Purpose of the Study

The purpose of this study is to develop a sequential communication system which is divided into expressive/receptive areas appropriate to the severely retarded learner. The key word here is "appropriate", since programs currently in use are often inappropriate for persons in this group. The system is based upon the investigator's experience which have extended over a period of three years during which a communication system for such a population of learners was developed.

It is of grave importance to meet the communication needs of the severely retarded person. Communicative skills will help these individuals cope more effectively within the environment and will make the tasks of persons on whom they rely easier. It becomes imperative, then, to acknowledge their specific skills or lack thereof. There is evidence from a review of various language acquisition programs that a lack of step-by-step procedures exists in administering programs to severe and profoundly retarded persons.

Inconsistency in goals and task sequences have been noted in many programs presently available. One such program developed by Kent (6) manifests numerous examples of sudden transitions from one specific phase of learning into another. For example, the phase 1.20 deals with motor imitation using the command "Do this." Such tasks include pointing to objects as well as to body parts, and following simple commands such as "stand up", "sit down", etc. The next phase of the program allows verbal instruction to aid in the identification of body parts; example: "Show me Tommy's nose." Her program fails to include more minute teaching steps which are essential to teach communication skills to the severely retarded learner.

Another program developed by Simmons and Williams (11) shows similar inconsistency. For example, step-by-step instruction is outlined for the teacher in the area of attending skills. Simple one-word verbal cues are used. In progressive sequence the child learns to increase the duration of eye contact upon being given continuous verbal cues. The approaching and final attending skill offered in the program becomes one of an ability to attend with a time lapse between the cue and the response. The learner is given the cue "When you hear the bell, turn the page." The sudden transition from an appropriate attending skill to one in which the task requires following a two-part direction in addition to the refined task of turning the page in a book is not well geared to the capabilities of many severely retarded individuals.

The Marshalltown Project Manual 11 (8) shows similar inconsistencies. This may be seen by examining their section on Communication. The program teaches the learner to produce vowel phonemes to be followed by various attending tasks such as listening to the trainer's voice as well as watching the eyes and mouth of the speaker. Research supports the contention that attending skills are prerequisite to both expressive and receptive modes of language comprehension (6:17-24).

It is clear from a cursory examination of widely used language programs that one is needed which will provide the teacher or clinician with step-by-step procedures designed to reduce or eliminate inconsistencies and sequencing problems. Such a program may also facilitate learning in persons handicapped in other ways as well.

The program is unique in terms of task and goal sequencing. The format for the system, as well as the techniques suggested, was based

upon the investigator's experience with groups of children enrolled in the Maximal Opportunity Development program in the Omaha Public Schools. The program will emphasize the uniqueness of the individual learner and does not hold to a strict sequence typical of a structured published and/or written program. It was designed for teacher use with performance centered baselines which may be altered by the teacher to meet the individual learner's needs.

#### Limitations of the Study

The study evolves from the investigator's experience spanning three years of work with retarded learners, and from research into current marketed language programs for the severely retarded person. The system presented must still be field-tested. This may be the topic of future research, but it is not of concern in this study. It should be regarded, therefore, as an empirical, creative system.

This study includes the use of a system of sequential, yet independent learning units. The idea of a programmed instructional unit was eliminated in favor of the notion of flexibility. The use of the word "system" allows for beliefs, order, facts and principles as well as the concept that many parts form a whole.

Such a concept is the instructional intent of the investigation. Each goal can then be modified to the specific learners for which this system is intended. This system was developed to provide a step-by-step learning process while simultaneously recognizing the individuality of the learner. Therefore, flexibility becomes a major factor within the system which allows for deviations and options by the specialist or teacher using it.

## Chapter II

### REVIEW OF THE LITERATURE

Two areas, receptive and expressive communication intervention, require research. Interesting literature has been written concerning the non-verbal severely retarded learner since the late 1960's.

It becomes evident from various reviews that a general confusion exists among many persons, professionals and nonprofessionals alike, about mental retardation--its nature, causes and so forth. Mental retardation is not a disease; rather, it is a condition which results from various circumstances occurring prior to, during or after birth. Robert M. Smith (12) in An Introduction to Mental Retardation defines mental retardation as a condition that does not occur in the same form, degree or due to the same circumstances. The American Association on Mental Deficiency (12:5-6) provides the following definition:

Mental retardation refers to subaverage general intellectual functioning which originates during the developmental period and is associated with impairments in one or more of the following: (1) maturation, (2) learning, and (3) social adjustment.

Establishing criteria for the classification of mental retardation has been a lengthy task for professionals for years. Most category schemes use some measure of intelligence as the principal criterion for establishing subgroups within the realm of mental retardation. A chart which illustrates some differences in criteria that exist can be found in Figure 1 (12:14).

Heber (12), in the Manual on Terminology and Classification in Mental Regardation provides descriptive definitions of subgroups of mental retardation:

(1) mild mental retardation: a term used to describe the degree of mental retardation present when intelligence testing scores range between 2 and 3 standard deviations below the norm; many educable retarded individuals function at this level; such children usually can master basic academic skills while adults at this level may maintain themselves independently or semi-independently in the community.

(2) moderate mental retardation: a term used to describe the degree of mental retardation when intelligence testing scores range between 3 and 4 standard deviations below the norm; many trainable individuals function at this level; such persons usually can learn self help, communication, social and simple occupational skills but only limited academic or vocational skills.

(3) severe mental retardation: a term used to describe the degree of mental retardation when intelligence testing scores range between 4 and 5 standard deviations below the norm; such persons require continuing and close supervision but many perform self help and simple work tasks under supervision, sometimes called dependent retarded.

(4) profound mental retardation: a term used to describe the degree of mental retardation present when intelligence testing scores are more than 5 standard deviations below the norm; such persons require continuing and close supervision but some persons may be able to perform simple self help tasks; profoundly retarded persons often have other handicaps and require total life support systems for maintenance (12:18).

The Bureau of Education for the handicapped, the agency responsible for the federal role in providing educational services for the severely handicapped, has published the following description:

Severely handicapped children are those who because of the intensity of their physical, mental, or emotional problems or a combination of such problems, need educational, social, psychological, and medical services beyond those which are traditionally offered by regular and special educational programs, in order to maximize their full potential for useful and meaningful participation in society and for self-fulfillment (13:470).

A definition does not solve problems; it is a necessary step in meeting needs. From these descriptions of the severe and profound classification of learners, literature concerning communication teaching skills was investigated in the areas of language, communication, developmental checklists, and so on. These subject areas are available for the general classifications of mental retardation;

Proponent(s)	95 90 85 80 75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0																							
Sarason and Gladwin (1958)	Mental Retardation								Mental Deficiency															
Gardner and Nisonger (1962)					Border-line Retarded				Mildly Retarded				Moderately Retarded				Severely Retarded							
Wechsler (1958)					Border-line Retarded				Moron				Imbecile				Idiot							
American Association on Mental Deficiency (1959, 1961a, 1961b)					Border-line Retarded (level 1)				Mildly mentally Retarded (level 2)				Moderately Retarded (level 3)				Severely Mentally Retarded (level 4)				Profoundly Mentally Retarded (level 5)			
American Educators	Dull Normal				Educable Mentally Retarded or Handicapped				Trainable Mentally Retarded or Handicapped				Custodial, Dependent or low grade											

Figure 1. Adapted from: Gelof, M.: "Comparison of Systems of Classification Relating Degree of Retardation to Measured Intelligence." American Journal of Mental Deficiency. Vol. 68, 1963 (12:14).

literature dealing directly with the severe and profound population presently being discussed is difficult to uncover; however, literature from years past covers a broad spectrum of mental retardation with greater emphasis being placed on the trainable and/or higher levels of retardation. Severe and profound individuals were then tagged with such terms as moron, vegetable, imbecile, and idiot to name a few. The index of the text by Rothstein, (9), lists "severely retarded" with a note: "see trainable mentally retarded." The discussion in the text classifies the word trainable in relation to the concept of "educability." In addition, the text generally treats other terms relating to the severely retarded as being equivalent to trainable.

On the basis of their needs, educators across the country have engaged in attempts to develop language checklists and programs for given populations of learners where the criteria meet the level of their student's needs. In the past few years, more and more language training programs have been developed in pursuit of techniques and goals in developing communication skills for these children.

It was noted in the statement of purpose that inconsistency in goals and sequence have been noted in many programs presently available. One such program is the LAP, that is, The Language Acquisition Program for the Retarded or Multiply Impaired (6). In a more complete review of Kent's program we see that it is composed of material geared to severely retarded children. It includes multiply impaired children as well. The program stresses individualized program planning and is divided into three areas:

1. Pre-verbal
2. Verbal Receptive
3. Verbal Expressive

The pre-verbal section stresses attending abilities and motor imitative tasks. Later sections, verbal receptive/expressive include the training of specific areas in expressive/receptive language abilities. The format of the LAP divides the sections into phases followed by phases into parts. A table representing the sequence of phases in verbal sections can be found in Figure 2. The program is designed to be used orally, manually, or with a combination of the two. The dominant feature is reinforcement. "Application of the principle enables the teacher or trainer to strengthen a desirable behavior by reinforcing it whenever it occurs (6:4)." The program encourages the use of a token system whereby the child will learn the meaning of the token and will exchange such tokens for an edible or a material good.

The use of tokens as a reinforcer for the severely retarded person is indefensible. These persons must first be introduced to a reinforcement program or schedule with the use of more powerful reinforcers. The reinforcers more commonly used as a starting point are those which reduce primary drives. The hunger drive is one of these: therefore, food is often used. The drawback to this reinforcer is twofold: first, the client must come to the learning task 'hungry.' This is not always possible in a therapeutic setting. Secondly, if the food is ingested immediately, a short time will produce drive reduction and diminish the effectiveness of the reinforcer (15:113-116).

Another reinforcer is social reward. While this reinforcer is known to be effective for learners in most categories, it is especially effective for the severely retarded. Physical contact such as facial stroking combined with verbal praise are highly reinforcing to most severely retarded persons. The LAP, although discussing variable



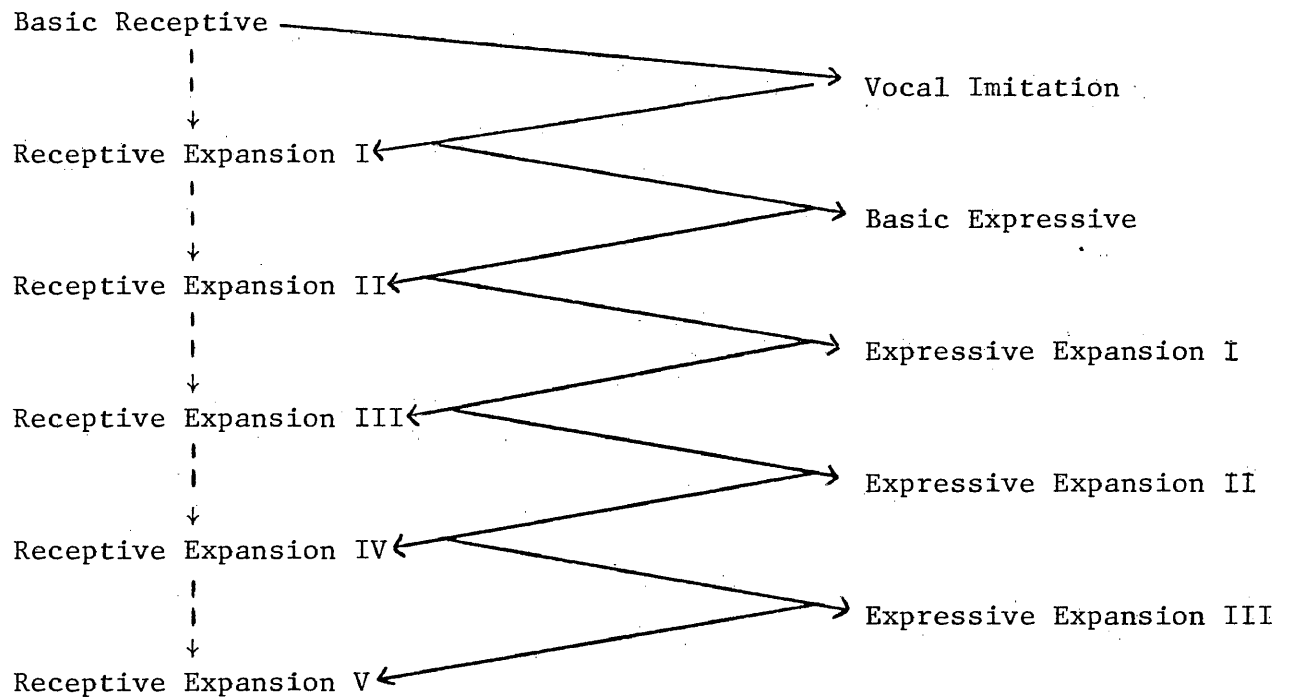
---

Sequence of Phases in Verbal Sections

---

RECEPTIVE

EXPRESSIVE




---

 Ideal Sequence

---

 Alternative Sequence

Figure 11. Recommended Sequence of Phases in Verbal Sections  
 (Reproduced from Louise Kent. A Language Acquisition Program for the Retarded or Multiply Impaired, Illinois: Research Press, 1974. (6:3).

reinforcers, includes token reinforcement, which is at best a secondary reinforcer, very early in the therapeutic program. For example, prior to attempts to learn language in a structured situation, a child must have established minimal attending abilities. The LAP puts attending skills in the Pre-Verbal section and requires the learner to remain seated with no interfering behaviors for a minimum of thirty seconds. Should interfering behaviors exist, the program outlines steps to eliminate such behaviors. Clinically, thirty seconds of continuous attending is too long for most profoundly retarded learners. Attending time, therefore, must be adjusted according to the capabilities of each learner.

Simmons and Williams (11) have designed a training model covering the pre-requisite skills for expressive and receptive language development and concept formation. They describe attending tasks presented in very small step-by-step components. Included are special tasks or detailed components of behavior based on the theory of allowing "the student to learn as much as he is able, as quickly as he is able." The semantic constituent, the data to be transferred, makes up the program of attending which is directed at children up to seven years of age. The program is representative of attending skills and offers data sheets for charting program implementation.

The program is divided in the following subdivisions:

- I Attending: Response to auditory non-verbal cue.
- II Attending: Response to name.
- III Attending: Establishes eye contact for one second.
- IV Attending: Attends for five seconds with continuous cueing.

V Attending: Attends with time lapse between cue and response.

The program offers specific criteria to determine when the student has completed one step and is therefore ready to move to the next step of the program. The successful performance of the task allows the learner to receive immediate reinforcement at various response levels.

Initially, the system offers appropriate levels of attending skill training and acquisition. The program breakdown, however, appears in the representation of the specific ways of implementing tasks. It also shows gaps in progressing from the rationale found in subdivision IV to subdivision V as stated above. Goal IV attempts completion of attending to the teacher for five seconds using the student's name as the continuous cue. The next step (V) attempts completion of attending with time lapse between the cue and the response as: given a book, a verbal cue, "When you hear the bell, turn the page" and an auditory cue of ringing the bell is used for this step. The jump between IV and V is tremendous as the learner is required to respond to his name, immediately followed by performing a two-part direction using a fine motor task. This is too complex for the profoundly retarded learner.

To be most effective, programs in Speech and Language training for the severely retarded learner should be based on individualized programs which allow flexibility in the modification and/or reduction of objectives. "One child may relatively easily, acquire a total skill in a period of one week--reflecting such criteria as two demonstrations per day. Another child may have to learn sequential steps to this same skill and practically, only achieve the goal of one

performance per day or every other day." This concept is prescribed in the Marshalltown Project covering Manual II (Communication) Behavioral Prescription Guide (8).

Supportive areas and reinforcing criteria reach the needs of the population of learners for whom this study deals. The authors of the Marshalltown Project use the goal of spontaneously or imitatively producing vowel sounds prior to steps involving attending abilities. Within the beginning stages of language acquisition, the learner must have achieved some specific attending skills as attending to the teacher, maintaining eye contact and so forth. In harmony, Kent (6) suggests that these attending behaviors are prerequisites for learning. Hallet et al., (1:186) take issue with this concept. They state that receptive language precedes expressive language; a child learns to communicate after he has learned to listen; then he begins to understand what he hears. Such a model is true of "normal" language development. Expression of words must be meaningful prior to being used. Inappropriate verbalizations often appear commonplace among the retarded learners and add to frustrations in communicative abilities. "This is why the establishment of a minimal basic language structure should precede intensive work on the refinement of speech (1:186)."

The behavioral objective in the curriculum as presented in The Illinois Program by Tawney and Hipsher (14) is to increase the level of language in children classified as retarded who emit no vocal or motor responses. They suggest growing from a one-to-one therapy situation to a group which includes varying numbers of class members. Here the concentration is centered upon close teacher/child contact. Specifically,

"Only when the child satisfies the criterion does he move on to the next more complex stage (14:3)."

Tracing a criterion, that is a single goal, from its inception to production, shows a step-by-step procedure completion criterion from one goal to another. By examining the statement, "only when the child meets the criterion for a given stage does he move on to the next, more complex stage (14:3)," it may be seen that the program allows no flexibility in teaching advancements in language. A sequence of teaching steps is necessary, but expansion of language achievement for the retarded learner should allow for freedom in a trial approach.

In Sontag (13:323), Hollis states "no matter what the handicapping condition may be, in order for teachers to be effective, they must be able to locate or develop at least one functional communication channel; that is, functional reception (sensory input) and expression (motor output)."

The means of achieving a criterion require the administration of various techniques, i.e. flexibility is considered in the development of goal sequencing. The statement by D. Harris (13:323), is exemplary:

"Exploration of augmentive non-speech or non-verbal communication for use with children who are severely motorically impaired is a dynamic, long-range process, one which requires commitment from the team of professionals and parents working with the child, and one which will involve a great deal of trial and error."

A program dealing in language development is the Distar Language/ an instructional system (2). This program is not designed for children of a particular age, racial, or ethnic group, and it is designed to teach basic language concepts to children who, for whatever reason, have not learned these concepts. The program is designed to take these

children one step at a time, teaching them first to use full statements such as "This is a \_\_\_\_\_" in identifying objects and then a variety of concepts that reside in familiar objects, such as color, shape, relative size, and class name. Upon completion of the Distar Language I Program, the child should be able to understand the language used by teachers to explain and discuss the concepts and skills that students are expected to master in school. It becomes clear from this program description, that Distar is not applicable to the severely retarded population. However, it has been shown to be appropriate for the trainable level of retardation.

Hatten, et al. (5) brings the "Emerging Language Program" designed for use by speech clinicians and speech educators. The program is geared to children with language disorders, ages two to ten years. Three primary approaches are employed within the program: single word level, two word utterances and transformations. The authors elaborate on the necessity of a sequential and practical program. Stressed is the appropriateness of the program for all language disordered children; however, such a statement is unquestionably not applicable to the severely retarded learner.

A recently published program, "The Environmental Language Intervention" (7) (ELI) program arose from the problems in early communication of over 300 children at the Nisonger Center, in Ohio since 1971. The ELI is an instrument to assess early expressive language through rules, context and generalization. The content consists of those semantic rules that comprise the first sentences of normally developing children. The ELI approximates the full environmental context of the language units by eliciting them with parallel linguistic and

nonlinguistic cues. Assessment is directed toward generalization by sampling the child's language in three production modes; imitation, conversation and play. The experimental population involved in the program includes TMR, preprimary EMR and unclassified language-delayed individuals. The program was developed in response to the lack of programs speaking to the previously stated objectives.

The ELI came in to being from a need for a language program covering a particular population of learners. Again, further need is reflected in the development of a language system for the severely retarded non-verbal learner.

This investigator has found the research literature to be filled with studies of various degrees of sophistication. Attempts have been made to specify characteristics of the retarded in terms of speech and language, attending skills, concept formation, and an array of additional factors. This investigator has summarized pertinent research literature and has pointed out those areas related to this paper.

Through this review it becomes apparent that many discrepancies exist among the literature which have focused on similar topics. A close inspection of the literature reveals many dissimilarities in terms of definitions of severe and profound mental retardation, and inconsistencies within the programs themselves has been revealed. Although this investigator has sought out literature covering similar variables, such studies are not comparable because the content and intended learners are different.

In summary, the survey of the literature has shown considerable disagreement about the characteristics of severe and profound mentally

retarded. This further highlights the need for a system geared strictly to the individual needs of the severe and profoundly retarded learner.



## Chapter III

### PROCEDURES

The purpose of this study was to devise a system for developing communication skills in the severe and profoundly mentally retarded. The learner with a severe language delay requires daily repetition of individually established goals. The necessity for continuous reinforcement of prescribed goals is influential in obtaining successes. The performance of a technique must remain consistent for goal achievement.

Each learning objective was written in such a manner as to clearly communicate instructional intent allowing little room for misinterpretation on the part of the teacher. The system was written in a step-by-step design allowing flexibility in communication programming on the part of the teacher. The described goal is followed by a suggested technique. The techniques are methods which may or may not prove to be suitable to the individual learner; however, the feeling of flexibility must again be reinforced. Each goal for a severely retarded learner is unique for that learner and the method of performing that goal is crucial to its success. The communication objectives were written in measurable terms so that progress by a child may be evaluated accurately.

The system was written in expressive and receptive modes of communication.

The receptive area includes steps in developing attending skills which are precursors to receptive and expressive communication training. Furthermore, emphasis was placed upon the areas of imitation and identification skills.

The expressive mode of communication points out developmental preliminary characteristics to be held by the learner to enable expressive development. The expressive area was then subdivided into the following divisions:

1. Oral Communication
2. Signing
3. Language Board Communication

Suggested techniques for the performance of each goal within the system were developed in accordance with each task presented.

#### Definition of Terms

The following definitions will enhance understanding of the system:

Interfering Behavior

--Behavior patterns exhibited by the learner such as head-weaving, body-rocking, hand-gazing, and so forth. These behaviors interfere with the skill of attending to stimuli provided by the teacher or other person.

Criterion

--Each activity has a suggested skill level to be met by the learner for goal achievement. This skill level is described as a ratio of successful attempts compared to total attempts. Criterion ratio varies with each goal difficulty. Criterion is based entirely upon task performance.

Midline and Sides

--Midline refers to the center of the body roughly corresponding to a point between the eyes and extending vertically to divide the body into right and left halves.

Sides refers to the right or left part of the body roughly corresponding to a point between the eyes and ears about 45° from midline.

Facial Awareness

--The learner may respond by a change of facial expression which is observed by the teacher. Expressions may include a grimace, a smile, and so forth.

Basic Body Part

--A basic body part refers to major body parts as mouth (not teeth), eyes (not eyebrows), nose (not nostrils), and so forth.

Common Objects

--Those objects (and pictures of--)  
familiar to the learner by frequent exposure. Examples of such objects are a cup, spoon, shoe, toothbrush, and so forth.

Common "Room" Objects

--Those common objects (and pictures of--)  
familiar to the learner by frequent exposure within the daily classroom setting. Examples of such objects are a chair, table, door.

## Chapter IV

### THE SYSTEM

The following system is to be used as a language guide serving both the classroom teachers and speech and language clinicians. The language objectives are expressed in measurable terms so that progress by a child can be accurately evaluated. The system follows a developmental sequence, yet should be adapted to the learner's individual abilities.

#### Attending Skills

- (1) Performance Task: The learner will sit in a chair for a minimum of five seconds with no interfering behaviors.

Evaluation: The learner is brought into the room; the teacher sits facing the learner. The learner remains seated with no interfering behaviors 100% of the time to meet the criterion. Minimum trials: 5

(Note to the teacher: Encourage a longer duration of attending time as appropriate to the individual learner.)

Suggested Technique: The learner is brought into the room. Begin the training of the attending skills by sitting in front of the learner and restrain his/her movements. Lock the learner's knees between the teachers knees. Reinforce quiet sitting with verbal praise. Should the learner leave his/her seat, bring him back and begin the technique again.

- (2) Performance Task: The learner will respond by looking at an object upon being cued.

Evaluation: The teacher sits in front of the learner at a close range. The teacher will hold up a brightly colored object at the teacher's own eye level and will give the verbal cue "look." The task will then be performed at the teacher's sides as well as midline. The learner will respond by looking at an object 100% of the time to meet the criterion. Minimum Trials: 10

- (3) Performance Task: The learner will respond by looking upon being cued.

Evaluation: The teacher sits in front of the learner at a close range. The teacher will begin the session using a brightly colored object held at the teacher's eye level. The teacher will give the cue "look." Alternate the remaining steps by removing the object out of eye range and give the verbal cue, "look" only. The learner will respond by looking 100% of the time to meet the criterion. Minimum Trials: 10

- (4) Performance Task: The learner will respond by looking at the teacher upon being verbally cued.

Evaluation: The teacher sits in front of the learner at a close range. The teacher gives the cue "look." The teacher may choose to use a sign for "look" as well to gain the learner's attention. The learner will respond

by looking at the teacher 100% of the time to meet the criterion. Minimum Trials: 10

- (5) Performance Task: The learner will respond to the command "look at me" (learner will comprehend "look me") upon being cued.

Evaluation: The teacher sits in front of the learner at a close range. The teacher will give the verbal cue "look at me." The learner will respond by looking toward the voice of the teacher 100% of the time to meet the criterion. Minimum Trials: 10

- (6) Performance Task: The learner will respond to the command "look at me" upon being cued.

Evaluation: The teacher sits/and, or stands at a distance facing the learner. The teacher will give the verbal cue "look at me." The teacher will move to the sides of the learner's eye range and will give the cue. The learner will respond by looking toward the voice of the teacher 100% of the time to meet the criterion. Minimum Trials: 5

- (7) Performance Task: The learner will respond by looking at self in a mirror upon being cued.

Evaluation: Given a verbal cue and a physical prompt, the learner will look at self in a mirror 100% of the time to meet the criterion. Minimum Trials: 5

Suggested Technique: The teacher will place a mirror in front of

the learner at a close range. The teacher will stand behind the learner holding his/her head toward the direction of the mirror. The teacher will reinforce learner's response of looking using the first name of the learner as "Bobby, Bobby,..."

- (8) Performance Task: The learner will respond by looking at self in a mirror upon being cued by the teacher.

Evaluation: Given a verbal cue, the learner will look at self in a mirror 100% of the time to meet the criterion.

Minimum Trials: 5

Suggested Technique: The teacher will place a mirror in front of the learner at close range. The teacher will sit beside or stand behind the learner. The teacher will point to the mirror and will give the verbal cue: "look \_\_\_\_\_" (and learner's first name).

#### Receptive Skills

- (1) Performance Task: The learner will display an awareness of the teacher's voice.

Evaluation: Without the aid of visual cues, the learner will demonstrate a response to the teacher's voice 100% of the time to meet the criterion. Minimum Trials: 5

Suggested Technique: During various times throughout the day, the teacher will talk to the learner. Look

for any mode of response. Examples:

- a. Learner will attend to the teacher's face.
- b. Learner will turn head toward the teacher's voice.
- c. Learner displays a facial awareness of the teacher's voice.

The learner will display an awareness of the teacher's voice to meet the criterion.

- (2) Performance Task: The learner will recognize his or her own name upon being cued by the teacher.

Evaluation: The learner will respond by looking when his or her first name is called 100% of the time to meet the criterion. Minimum Trials: 10

Suggested Technique: At a distance of approximately 15" from the learner, the teacher will perform the task at midline and sides of the learner. The teacher will give the cue "look \_\_\_\_\_!" (learner's first name). Reinforce with verbal praise.

(Note to the teacher: This goal should also be performed from a distance in which the learner is placed in a small group situation.)

- (3) Performance Task: The learner will imitate the teacher upon being given the command "Do this."

Evaluation: Given a simple motor movement by the teacher, the learner will imitate the movement 100% of the time to meet the criterion. Minimum Trials: 10



Suggested Technique: The teacher sits in front of the learner at close range. The teacher will say "look" to gain learner's attention. The teacher will give the cue "Do this" and will simultaneously perform the action. Should the learner not respond, begin the task using physical prompting.

Suggested Sequence: a. Hand clapping  
b. Lap tapping  
c. Head patting (one hand or two for response)  
d. Raise arms above head

Suggested Sequence for physically impaired:

- a. Smile
- b. Stick out tongue
- c. Kiss
- d. Close eyes
- e. Open mouth

(Note to the teacher: The key in this goal is for the learner to respond to the command "Do this" in using an appropriate imitation for the learner.)

(4) Performance Task: Given a model and a simple direction, the learner will imitate an action.

Evaluation: Given an action command by the teacher, the learner will imitate the action 100% of the time to meet the criterion. Minimum Trials: 10

Suggested Technique: The teacher sits in front of the learner at close range. The teacher will say "look!" to gain the learner's attention. The teacher will verbally state the command and will simultaneously perform the action.

Suggested Sequence: a. Stand up  
b. Sit down

- c. Come here
- d. Give it to me--
- e. Point to--
- f. Look at--

(Note to the teacher: The key in this goal is for the learner to respond in imitation of a command appropriate for the learner. The teacher may choose to reinforce the action using sign language and may also use physical prompting.)

- (5) Performance Task: The learner will follow a direction when verbally cued by the teacher.

Evaluation: Given a verbal direction by the teacher, the learner will perform the command 80% of the time to meet the criterion. Minimum Trials: 10

Suggested Technique: The teacher will sit in front or to the sides of the learner and will ask the learner to follow a direction.

- Suggested Sequence:
- a. Stand up
  - b. Sit down
  - c. Come here
  - d. Give it to me--
  - e. Point to--
  - f. Look at--

- (6) Performance Task: The learner will imitate the teacher upon being cued. (Waving bye-bye)

Evaluation: Given the gesture of waving bye-bye, by the teacher, the learner will imitate the movement 80% of the time to meet the criterion. Minimum Trials: 5

Suggested Technique: During an appropriate time of the day, the teacher will begin with physical prompting of the gesture and verbalizing "bye-bye."

(Note to the teacher: Encourage spontaneous and appropriate use of this gesture.)

- (7) Performance Task: The learner will react to negative stimuli in response to the teacher.

Evaluation: The learner will stop an inappropriate activity in response to the teacher 100% of the time to meet the criterion. Minimum Trials: Will vary from day to day.

Suggested Technique: The teacher will verbally reprimand inappropriate activities using negative stimuli as "no", "stop", "bad \_\_\_\_\_" (paired with the action, as "bad hands", etc.)

(Note to the teacher: The key in this goal is for the learner to display response to negative stimuli. Response would be a facial grimace; stopping the action and so forth.)

- (8) Performance Task: The learner will identify common objects in response to the teacher's cue.

Evaluation: The learner will give, eye point and/or point to common objects in response to the teacher 50% of the time to meet the criterion. Minimum Trials: 8

Suggested Technique: The teacher will sit to the side or in front of the learner and will place one common object in front of the learner. (Gradually build the amount of objects used, adding one at a time.) The teacher will ask the learner to look at, give, or point to the object; using a cue appropriate to the learner. "Give it to me" should be used prior to

"Point to" if both are appropriate for the learner. Suggested objects: ball, cup, spoon, shoe.

- (9) Performance Task: The learner will demonstrate the ability to touch his or her body part in imitation of the teacher.

Evaluation: Given a model and verbal cue, the learner will imitate the teacher in touching a basic body part 50% of the time to meet the criterion. Minimum Trials: 10

Suggested Technique: The teacher will sit in front of the learner. The teacher will point to his or her body part and will simultaneously give the verbal cue, "Touch \_\_\_\_\_," (body part) or "point to \_\_\_\_\_." (body part)

Suggested Technique for physically impaired:

The teacher may choose to use cues as "look at \_\_\_\_\_" (body part) or use a simple action with the body part as "open mouth" or "close eyes" etc.

(Note to the teacher: The key in this goal is body part identification in imitation of the teacher.)

- (10) Performance Task: The learner will identify appropriate basic body parts when given a verbal cue by the teacher.

Evaluation: The teacher will verbally ask the learner to identify a body part using a technique appropriate to the

learner 75% of the time to meet the criterion.

Minimum Trials: 4

- (11) Performance Task: The learner will identify pictures of common objects when cued by the teacher.

Evaluation: The learner will point to and/or look at picture(s) (gradually build beginning with one picture) in response to the teacher's cue 50% of the time to meet the criterion. Minimum Trials: 4

Suggested Technique: Place the picture(s) in front of the learner. The teacher will give the cue "point to \_\_\_\_\_" or "look at \_\_\_\_\_." Increase the amount of pictures used as appropriate to the learner.

- (12) Performance Task: The learner will correctly discriminate between two common objects when cued by the teacher.

Evaluation: Given a display of two common objects, the learner will be able to correctly discriminate between them 100% of the time to meet the criterion. Minimum Trials: 4

Suggested Technique: The teacher will place two common objects in front of the learner to be spaced approximately 12" apart. The teacher will ask the learner to give, point to or look at a designated object.

(Note to the teacher: Increase pairs of objects used if appropriate to the learner. Record accordingly.)

- (13) Performance Task: The learner will correctly discriminate between two pictures of common objects when cued by the teacher.

Evaluation: Given a display of two pictures of common objects, the learner will be able to correctly discriminate between them 100% of the time to meet the criterion. Minimum Trials: 2

Suggested Technique: The teacher will place two pictures of common objects in front of the learner to be spaced approximately 12" apart. The teacher will ask the learner to give, point to, or look at a designated picture.

(Note to the teacher: Increase pairs of pictures used if appropriate to the learner. Record accordingly.)

- (14) Performance Task: The learner will follow a one-step direction as cued by the teacher.

Evaluation: Without the aid of gestures, the learner will demonstrate the ability to follow a one-step direction 75% of the time to meet the criterion. Minimum Trials: 4

Suggested Technique: The teacher will sit in front of or to the side of the learner. The teacher will verbally ask the learner to follow a one-step direction.

Suggested Sequence:

- a. Stand up
- b. Sit down
- c. Give me the \_\_\_\_\_
- d. Touch the \_\_\_\_\_

Physically impaired: a. Look at the \_\_\_\_\_

(Note to the teacher: The key in this goal is for the learner to receptively understand and follow a one-step command.)

- (15) Performance Task: The learner will follow a two-step direction when cued by the teacher.

Evaluation: Without the aid of gestures, the learner will demonstrate the ability to follow a two-step direction 75% of the time to meet the criterion. Minimum

Trials: 8

Suggested Technique: The teacher will sit in front of/or to the side of the learner. The teacher will verbally ask the learner to follow a two-step direction.

- Suggestions:
1. Stand up, then sit down
  2. Touch your head, then feet
  3. Walk to the window, then clap hands
  4. Give me the cup, then the spoon

Physically impaired:

1. Look at the \_\_\_\_\_ and then the \_\_\_\_\_.

(Note to the teacher: The key in this goal is for the learner to receptively understand and follow a two-step direction.)

- (16) Performance Task: The learner will find a common object placed under a towel as cued by the teacher.

Evaluation: Given a verbal and visual cue by the teacher, the learner will demonstrate the ability to remove a common object placed under a towel 75% of the time to meet the criterion. Minimum Trials: 4

Suggested Technique: The teacher will sit to the side of/or in front of the learner. The teacher will say "look" and will place a common object under a towel. The teacher will say "find the \_\_\_\_\_."

(Note to the teacher: The learner has previously learned to give to or point to objects. The amount of objects may be increased to aid in further developing object identification.)

(17) Performance Task: The learner will identify common "room" objects as cued by the teacher.

Evaluation: Given a verbal cue by the teacher, the learner will demonstrate his/her ability to identify common "room" objects 75% of the time to meet the criterion.

Minimum Trials: 4

Suggested Technique: The teacher will sit in front of the learner and will give the verbal cue "point to", "look at \_\_\_\_\_, "show me \_\_\_\_\_."

Suggestions: 1. Table  
2. Chair  
3. Door  
4. Floor  
5. Lights  
6. Window

(18) Performance Task: The learner will identify pictures of common "room" objects as cued by the teacher.

Evaluation: Given a visual and verbal cue by the teacher, the learner will demonstrate the ability to identify pictures of common "room" objects 75% of the time to meet the criterion. Minimum Trials: 8



(19) Performance Task: The learner will demonstrate the use of common objects as cued by the teacher.

Evaluation: Given a visual and verbal cue by the teacher, the learner will demonstrate the ability to perform the appropriate action with common objects 75% of the time to meet the criterion. Minimum Trials: 4

Suggested Technique: The teacher will sit in front of the learner and will hold up the object. The teacher will give the cue "look \_\_\_\_\_ (and the name of the object, as look, comb)." The teacher will hand the object to the learner and say "show me what to do."

Suggestions: 1. Comb  
2. Brush  
3. Toothbrush  
4. Washcloth  
5. Spoon  
6. Cup

(20) Performance Task: The learner will demonstrate the use of pictures of common functional objects as cued by the teacher.

Evaluation: Given a visual and verbal cue by the teacher, the learner will demonstrate his or her ability to use the common functional objects as displayed in pictures 75% of the time to meet the criterion.

Minimum Trials: 8

## Expressive Skills

### Preliminary Skills in Language Training

- (1) Performance Task: The teacher will document developmental preliminary expressive responses. A checklist is suggested for documentation.

Evaluation: Given a day to day situation, the teacher will become aware of the level of expressive responses.

1. Tongue is at normal position within the mouth.
2. Lip mobility: The learner is able to purse his/her lips together.
3. Jaw mobility: The learner is able to move his/her jaw in normal movements.
4. Strong cry.
5. Cry varies in volume, length, and pitch.
6. Displays normal sucking reflex.
7. Swallows normally.
8. Begins spontaneous vocalizations other than crying.
9. Cries in response to hunger, pain, frustrations, etc.
10. Demonstrates spontaneous vocalizations for pleasure.
11. Repeats the same sound/or sounds while cooing or babbling.
12. Begins to use other signs for pleasure, smiles, laughs, etc.
13. Vocalizes various sounds.
14. During play times appropriate to the learner, he/she will vocalize and/or show expressive signs of pleasure.

15. Babbles in longer durations.

16. Little or no drooling.

#### EXPRESSIVE

(1) Performance Task: The teacher will document developmental preliminary expressive responses. A checklist is suggested for documentation.

Evaluation: Given a day to day situation, the teacher will become aware of the level of expressive responses.

1. The learner will babble, frequently repeating many of the same sounds.

(Note to the teacher: The key is to become aware of the sounds or approximations of sounds the learner is eliciting.)

(2) Performance Task: The learner will imitate his/her own sounds as cued by the teacher.

Evaluation: Given a verbal cue by the teacher, the learner will imitate his/her own sounds produced by the teacher 75% of the time to meet the criterion. Minimum

Trials: 8

Suggested Technique: The teacher will sit at close range to the learner. The teacher will give the cue " \_\_\_\_\_ " (use a common sound elicited by the learner.)

(Note to the teacher: The key in this goal is to build imitative sound skills beginning with the learner's own sound.)

(Note to the teacher: The following performance tasks for vowel

imitation were selected on the basis of their common usage. Once developed, proceed to more vowel sounds.)

(3) Performance Task: The learner will imitate the vowel sound "o".

(As in "go".)

Evaluation: Given an exaggerated verbal cue by the teacher, the learner will imitate the vowel sound "o" 75% of the time to meet the criterion. Minimum Trials: 8

Suggested Technique: The teacher will sit at close range to the learner. The teacher will give the cue "o" displaying the sound using an exaggerated mouth movement.

(4) Performance Task: The learner will imitate the vowel sound "oo".

(As in "boo".)

Evaluation: Given an exaggerated verbal cue by the teacher, the learner will imitate the vowel sound "oo" 75% of the time to meet the criterion. Minimum Trials: 8

Suggested Technique: The teacher will sit at close range to the learner. The teacher will give the cue "oo" displaying the sound using an exaggerated mouth movement.

(5) Performance Task: The learner will imitate the vowel sound "ah".

(As in "blah" or "law".)

Evaluation: Given an exaggerated verbal cue by the teacher, the learner will imitate the vowel sound "ah" 75% of the time to meet the criterion. Minimum Trials: 8

Suggested Technique: The teacher will sit at close range to the learner. The teacher will give the cue "ah" displaying the sound using an exaggerated mouth movement.

- (6) Performance Task: The learner will imitate the vowel sound "E."  
(As in "eat.")

Evaluation: Given an exaggerated verbal cue by the teacher, the learner will imitate the vowel sound "E" 75% of the time to meet the criterion. Minimum Trials: 8

Suggested Technique: The teacher will sit at close range to the learner. The teacher will give the cue "E" displaying the sound using an exaggerated mouth movement.

- (7) Performance Task: The learner will imitate the vowel sound "i."  
(As in "eye.")

Evaluation: Given an exaggerated verbal cue by the teacher, the learner will imitate the vowel sound "i" 75% of the time to meet the criterion. Minimum Trials: 8

Suggested Technique: The teacher will sit at close range to the learner. The teacher will give the cue "i" displaying the sound using an exaggerated mouth movement.

- (8) Performance Task: The learner will imitate the vowel sound "A."  
(As in "ate.")

Evaluation: Given an exaggerated verbal cue by the teacher, the learner will imitate the vowel sound "A" 75% of the time to meet the criterion. Minimum Trials: 8

Suggested Technique: The teacher will sit at close range to the learner. The teacher will give the cue "A" displaying the sound using an exaggerated mouth movement.

(Note to the teacher: The following performance tasks for consonant imitation were selected on the basis of developmental patterns. Once developed, proceed to more consonant sounds.)

- (9) Performance Task: The learner will imitate the consonant sound "m."

Evaluation: Given an exaggerated verbal cue by the teacher, the learner will imitate the consonant sound "m" 75% of the time to meet the criterion. Minimum Trials: 8

Suggested Technique: The teacher will sit at close range to the learner. The teacher will give the cue "m" displaying the sound using an exaggerated mouth movement.

- (10) Performance Task: The learner will imitate the consonant sound "b."

Evaluation: Given an exaggerated verbal cue by the teacher, the learner will imitate the consonant sound "b" 75% of the time to meet the criterion. Minimum Trials: 8

Suggested Technique: The teacher will sit at close range to the learner. The teacher will give the cue

"b" displaying the sound using an exaggerated mouth movement.

- (11) Performance Task: The learner will imitate the consonant sound "p."

Evaluation: Given an exaggerated verbal cue by the teacher, the learner will imitate the consonant sound "p" 75% of the time to meet the criterion. Minimum Trials: 8

Suggested Technique: The teacher will sit at close range to the learner. The teacher will give the cue "p" displaying the sound using an exaggerated mouth movement.

- (12) Performance Task: The learner will imitate the word "ma-ma."  
(Or alternative word such as mommy.)

Evaluation: Given a visual and exaggerated verbal cue by the teacher, the learner will imitate the word "ma-ma" 75% of the time to meet the criterion. Minimum Trials: 8

Suggested Technique: The teacher will sit in front of/or to the side of the learner. The teacher will display a picture of the learner's Mother (when appropriate and/or available) and will give the cue "mama" using an exaggerated mouth movement.

- (13) Performance Task: The learner will imitate the word "da-da."  
(Or alternative word such as daddy.)

Evaluation: Given a visual and exaggerated verbal cue by the teacher, the learner will imitate the word "da-da" 75% of the time to meet the criterion. Minimum Trials: 8

Suggested Technique: The teacher will sit in front of/or to the side of the learner. The teacher will display a picture of the learner's Father (when appropriate and/or available) and will give the cue "dada" using an exaggerated mouth movement.

(14) Performance Task: The learner will imitate the word "eat."

Evaluation: Given a verbal cue by the teacher, the learner will imitate the word "eat" 75% of the time to meet the criterion. Minimum Trials: 8

Suggested Technique: During an appropriate time of the day, the teacher will display the learner's lunch or symbolic picture of lunch and will give the cue "eat."

(15) Performance Task: The learner will imitate the gesture of waving and/or the word "bye-bye."

Evaluation: Given a visual and verbal cue by the teacher, the learner will imitate the gesture and/or the word for "bye-bye" 75% of the time to meet the criterion. Minimum trials: 8

Suggested Technique: During an appropriate time of the day, the teacher will perform the action of waving



bye-bye while giving a verbal cue.

(Note to the teacher: The teacher may choose to use physical prompting. This goal should be performed at appropriate times of the day.)

- (16) Performance Task: The learner will use the gesture and/or the word "bye-bye" in a daily situation.

Evaluation: Without the aid of a model, the learner will use the gesture and/or the word "bye-bye" appropriately 50% of the time to meet the criterion. Minimum Trials: 4

- (17) Performance Task: The learner will imitate the word "drink."

Evaluation: Given a verbal cue by the teacher, the learner will imitate the word "drink" 75% of the time to meet the criterion. Minimum Trials: 8

Suggested Technique: During an appropriate time of the day, the teacher will display the learner's milk or symbolic picture of a drink and will give the cue "drink."

- (18) Performance Task: The learner will imitate the word "toilet."

Evaluation: Given a verbal cue by the teacher, the learner will imitate the word "toilet" (bathroom, etc.) 75% of the time to meet the criterion. Minimum Trials: 8

Suggested Technique: During appropriate times of the day, the teacher will display a picture of a toilet and will give the verbal cue.

(19) Performance Task: The learner will imitate the word "cup."

Evaluation: Given a verbal cue by the teacher, the learner will imitate the word "cup" 75% of the time to meet the criterion. Minimum Trials: 8

Suggested Technique: During appropriate times of the day, the teacher will display the learner's cup or a symbolic picture of a cup and will give the cue "cup."

(20) Performance Task: The learner will imitate the word "spoon."

Evaluation: Given a verbal cue by the teacher, the learner will imitate the word "spoon" 75% of the time to meet the criterion. Minimum Trials: 8

Suggested Technique: During appropriate times of the day, the teacher will display a spoon or a picture of a spoon and will give the verbal cue.

(21) Performance Task: The learner will imitate the word "shoe."

Evaluation: Given a verbal cue by the teacher, the learner will imitate the word "shoe" 75% of the time to meet the criterion. Minimum Trials: 8

Suggested Technique: The teacher will use the learner's own shoe or another or a picture of a shoe and will give a verbal cue.

(22) Performance Task: The learner will imitate the gesture and/or word "yes."

Evaluation: Given a visual and verbal cue by the teacher, the learner will imitate the gesture and/or word "yes" (head nod) 75% of the time to meet the criterion.

Minimum Trials: 8

Suggested Technique: The teacher will sit in front of the learner at close range. The teacher will say "look" to gain the learner's attention. The teacher will say "do this" paired with the head shake gesture for "yes."

(Note to the teacher: The teacher may choose to use physical prompting. This goal should be performed at appropriate times of the day.)

(23) Performance Task: The learner will imitate the gesture and/or word for "no."

Evaluation: Given a visual and verbal cue by the teacher, the learner will imitate the gesture and/or word "no" (head shake) 75% of the time to meet the criterion.

Minimum Trials: 8

Suggested Technique: The teacher will sit in front of the learner at close range. The teacher will say "look" to gain the learner's attention. The teacher will say "do this" paired with the head shake gesture for "no."

(Note to the teacher: The teacher may choose to use physical prompting. This goal should be performed at appropriate times of the day.)

(24) Performance Task: The learner will select the correct picture as cued by the teacher.

Evaluation: Given a visual and verbal cue by the teacher, the learner will select the correct picture 75% of the time to meet the criterion. Minimum Trials: 4

Suggested Technique: The teacher will sit to the side of the learner and will place a minimum of two pictures in front of the learner. Give the cue "Show me the \_\_\_\_\_."

- (25) Performance Task: The learner will respond to the question, "What do you want?"

Evaluation: Given a visual and verbal cue by the teacher, the learner will select the correct picture 50% of the time to meet the criterion. Minimum Trials: 2

Suggested Technique: The teacher will sit to the side of the learner. The teacher will place a minimum of two pictures in front of the learner and will give the cue "What do you want?" The learner will verbally respond to the cue.

- (26) Performance Task: The learner will continue to develop his/her expressive vocabulary.

Evaluation: Given a day to day situation, the learner will continue to develop his/her expressive vocabulary with the following words:

milk	pants	chair
water	shirt	table
juice	dress	bus
fork	sock(s)	door
plate	coat	

- (27) Performance Task: The learner will combine two or more words as cued by the teacher.

Evaluation: Given a visual and verbal cue by the teacher, the learner will combine two or more words in an appropriate manner 50% of the time to meet the criterion.

Minimum Trials: 2

### Signing

- (1) Performance Task: The learner will imitate the sign for "ma-ma."  
(Or alternative word such as mommy.)

Evaluation: Given a model and verbal cue by the teacher, the learner will imitate the sign for "ma-ma" 75% of the time to meet the criterion. Minimum Trials: 8

Suggested Technique: The teacher will sit in front of the learner. The teacher will display a picture of the learner's Mother (when appropriate and/or available) and will give the sign for "ma-ma" paired with the verbal cue. The teacher may choose to say "Do this" and then perform the above cue.

- (2) Performance Task: The learner will imitate the sign for "da-da."  
(Or alternative word such as daddy.)

Evaluation: Given a model and verbal cue by the teacher, the learner will imitate the sign for "Dad" 75% of the time to meet the criterion. Minimum Trials: 8

**Suggested Technique:** The teacher will sit in front of the learner. The teacher will display a picture of the learner's Father (when appropriate and/or available) and will give the sign for "Dad" paired with the verbal cue. The teacher may choose to say "Do this" and then perform the above cue.

(3) **Performance Task:** The learner will imitate the sign for "eat."

**Evaluation:** Given a model and verbal cue by the teacher, the learner will imitate the sign for "eat" 75% of the time to meet the criterion. **Minimum Trials:** 8

**Suggested Technique:** During an appropriate time of the day, the teacher will display the learner's lunch or a picture symbolic of the concept "eat" and will give the sign for "eat" paired with the verbal cue.

(4) **Performance Task:** The learner will imitate the sign for "bye-bye."

**Evaluation:** Given a model and verbal cue by the teacher, the learner will imitate the sign for "bye-bye" 75% of the time to meet the criterion. **Minimum Trials:** 8

**Suggested Technique:** This goal should be performed at appropriate times of the day. The teacher will stand a few feet in front of the learner. The teacher will wave bye-bye while giving the verbal cue. Another aid may choose to stand

behind the learner and physically prompt the gesture.

(5) Performance Task: The learner will imitate the sign for "drink."

Evaluation: Given a model and verbal cue by the teacher, the learner will imitate the sign for "drink" 75% of the time to meet the criterion. Minimum Trials: 8

Suggested Technique: During an appropriate time of the day, the teacher will display a drink or a picture symbolic of the concept "drink" and will give the sign for "drink" paired with the verbal cue.

(6) Performance Task: The learner will imitate the sign for "toilet."

Evaluation: Given a model and verbal cue by the teacher, the learner will imitate the sign for "toilet" (may choose to say bathroom) 75% of the time to meet the criterion. Minimum Trials: 8

Suggested Technique: During appropriate times of the day, the teacher will make the sign for "toilet" while verbally using the word. Reinforce the use of the sign while in the proper facility.

(7) Performance Task: The learner will imitate the sign for "cup."

Evaluation: Given a model and verbal cue by the teacher, the learner will imitate the sign for "cup" 75% of the time to meet the criterion. Minimum Trials: 8

Suggested Technique: The teacher will hold up a cup or a picture

symbolic of the cup. The teacher will make the sign while giving the verbal cue for "cup."

(8) Performance Task: The learner will imitate the sign for "spoon."

Evaluation: Given a model and verbal cue by the teacher, the learner will imitate the sign for "spoon" 75% of the time to meet the criterion. Minimum Trials: 8

Suggested Technique: The teacher will sit in front of the learner. The teacher will hold up a spoon or a picture symbolic of the spoon. The teacher will make the sign for spoon while giving the verbal cue. Many choose to perform this goal at lunch time.

(9) Performance Task: The learner will imitate the sign for "shoe."

Evaluation: Given a model and verbal cue by the teacher, the learner will imitate the sign for "shoe" 75% of the time to meet the criterion. Minimum Trials: 8

Suggested Technique: The teacher will hold up a shoe or a picture symbolic of the shoe. (May choose to use the learner's own shoe.) The teacher will make the sign for "shoe" while giving the verbal cue.

(10) Performance Task: The learner will imitate the sign for "yes."

Evaluation: Given a model and verbal cue by the teacher, the learner will imitate the sign for "yes" (head nod or



the sign) 75% of the time to meet the criterion.

Minimum Trials: 8

Suggested Technique: The teacher will sit in front of the learner. The teacher will present a question requiring the "yes" response and will present the sign immediately following the question. As, "do you want this cookie-----" present the sign for "yes" and reinforce by giving the learner the cookie.

(Note to the teacher: Perform goal at appropriate times of the day as time to go home, go to the bathroom, etc.)

(11) Performance Task: The learner will select the correct picture given a choice of at least two.

Evaluation: Given a visual and verbal cue by the teacher, the learner will select the correct picture 75% of the time to meet the criterion. Minimum Trials: 4

Suggested Technique: The teacher will sit to the side of the learner. The teacher will place a minimum of two pictures in front of the learner. The teacher will give cue "Show me the \_\_\_\_\_" paired with the sign of the desired picture.

(12) Performance Task: The learner will respond to the question "What do you want?"

Evaluation: Given a visual and verbal cue by the teacher, the learner will select the correct picture 50% of the time to meet the criterion. Minimum Trials: 2

Suggested Technique: The teacher will sit to the side of the learner. The teacher will place a minimum of two pictures in front of the learner. The teacher will say "What do you want?" The learner will respond by signing his/her choice.

(13) Performance Task: The learner will continue to develop his/her expressive vocabulary using signing.

Evaluation: Given a day to day situation, the learner will continue to develop his/her expressive vocabulary using sign language with the following words:

milk	dress	chair
water	pants	table
juice	shirt	bus
fork	socks	door
plate	coat	

Goal shall be performed with 75% accuracy to meet the criterion. Minimum Trials: 4

(14) Performance Task: The learner will combine words using two or more signs.

Evaluation: Given a visual and verbal cue by the teacher, the learner will combine two or more signs in an appropriate manner 50% of the time to meet the criterion. Minimum Trials: 2

#### Language Board Communication

(1) Performance Task: The learner will look at/or point to a picture

of his/her mother. (Use a word the child has been exposed to-- ma-ma, etc.)

Evaluation: Given a model and visual cue by the teacher, the learner will look at/or point to a picture of his/her Mother 75% of the time to meet the criterion. Minimum Trials: 8

Suggested Technique: The teacher will sit to the side of the learner placing the language board in front of them. The teacher will display a picture of the learner's Mother (when appropriate and/or available). The teacher will give the cue "look at ma-ma" or "point to ma-ma."

(2) Performance Task: The learner will look at/or point to a picture of his/her Father. (Use a word the child has been exposed to-- da-da, etc.)

Evaluation: Given a model and visual cue by the teacher, the learner will look at/or point to a picture of his/her Father 75% of the time to meet the criterion. Minimum Trials: 8

Suggested Technique: The teacher will sit to the side of the learner placing the language board in front of them. The teacher will display a picture of the learner's Father (when appropriate and/or available). The teacher will give the cue "look at daddy" or "point to daddy."

- (3) Performance Task: The learner will look at/or point to a picture symbolic of the concept "eat."

Evaluation: Given a model and visual cue by the teacher, the learner will look at/or point to a picture symbolic of the concept eat 75% of the time to meet the criterion. Minimum Trials: 8

Suggested Technique: During an appropriate time of the day, the teacher will display a picture symbolic of the concept "eat" on the language board. The teacher will give the cue "look at/or point to" the picture symbolic of a meal.

- (4) Performance Task: The learner will look at/or point to a picture symbolic of the concept "bye-bye."

Evaluation: Given a model and visual cue by the teacher, the learner will look at/or point to a picture symbolic of the concept "bye-bye" ex. school bus; action of waving, etc. Goal shall be performed with 75% accuracy to meet the criterion. Minimum Trials: 8

Suggested Technique: During an appropriate time of the day, the teacher will display a picture symbolic of the concept "bye-bye" on the language board. The teacher will give the cue "look at" or "point to" the picture symbolic of the concept "bye-bye."

- (5) Performance Task: The learner will look at/or point to a picture symbolic of the concept "drink."

Evaluation: Given a model and visual cue by the teacher, the learner will look at/or point to a picture symbolic of the concept "drink" (cup, glass, juice bottle, etc.) This goal shall be performed with 75% accuracy to meet the criterion. Minimum Trials: 8

Suggested Technique: During an appropriate time of the day, the teacher will display a picture symbolic of the concept "drink" on the language board. The teacher will give the cue "look at" or "point to" the picture of the concept "drink."

- (6) Performance Task: The learner will look at/or point to a picture of a toilet.

Evaluation: Given a model and visual cue by the teacher, the learner will look at/or point to a picture of a toilet 75% of the time to meet the criterion. Minimum Trials: 8

Suggested Technique: During appropriate times of the day, the teacher will display a picture of a toilet on the language board. The teacher will give the cue "look at" or "point to" the picture.

- (7) Performance Task: The learner will look at/or point to a picture of a cup.

Evaluation: Given a model and visual cue by the teacher, the learner will look at/or point to a picture of a cup

75% of the time to meet the criterion. Minimum

Trials: 8

Suggested Technique: The teacher will display a picture of a cup on the language board. The teacher will give the cue "look at" or "point to" the picture.

- (8) Performance Task: The learner will look at/or point to a picture of a spoon.

Evaluation: Given a model and visual cue by the teacher, the learner will look at/or point to a picture of a spoon 75% of the time to meet the criterion. Minimum

Trials: 8

Suggested Technique: The teacher will display a picture of a spoon on the language board. The teacher will give the cue "look at" or "point to" the picture.

- (9) Performance Task: The learner will look at/or point to a picture of a "shoe."

Evaluation: Given a model and visual cue by the teacher, the learner will look at/or point to a picture of a shoe 75% of the time to meet the criterion. Minimum

Trials: 8

Suggested Technique: The teacher will display a picture of a shoe on the language board. The teacher will give the cue "look at" or "point to" the picture.

(10) Performance Task: The learner will look at/or point to a picture symbolic of the concept "yes."

Evaluation: Given a model and visual cue by the teacher, the learner will look at/or point to a picture symbolic of the concept "yes" 75% of the time to meet the criterion. Minimum Trials: 8

Suggested Technique: The teacher will display a picture symbolic of the concept for "yes" on the language board. The teacher will give the cue "look at" or "point to" the picture.

(11) Performance Task: The learner will look at/or point to a picture symbolic of the concept "no."

Evaluation: Given a model and visual cue by the teacher, the learner will look at/or point to a picture symbolic of the concept "no" 75% of the time to meet the criterion. Minimum Trials: 8

Suggested Technique: The teacher will display a picture symbolic of the concept for "no" on the language board. The teacher will give the cue "look at" or "point to" the picture.

(12) Performance Task: The learner will select the correct picture given a choice of at least two.

Evaluation: Given a visual and verbal cue by the teacher, the learner will select the correct picture 75% of the time to meet the criterion. Minimum Trials: 4

Suggested Technique: The teacher will sit to the side of the learner. The teacher will place a minimum of two pictures on the language board and will give the cue "look at" or "point to" the\_\_\_\_\_.

(13) Performance Task: The learner will respond to the question "What do you want?"

Evaluation: Given a visual and verbal cue by the teacher, the learner will select the correct picture 50% of the time to meet the criterion. Minimum Trials: 2

Suggested Technique: The teacher will sit to the side of the learner. The teacher will place a minimum of two pictures on the language board and will give the cue "What do you want?" The learner will respond by looking or pointing to the picture he/she wants.

(14) Performance Task: The learner will continue to develop his/her expressive vocabulary using the language board.

Evaluation: Given a day to day situation, the learner will continue to develop his/her expressive vocabulary using the language board with the following words:

milk	dress	chair
water	pants	table
juice	shirt	bus
fork	socks	door
plate	coat	

Goal shall be performed with 75% accuracy to meet the criterion. Minimum Trials: 4



(15) Performance Task: The learner will combine pointing to/or looking at two or more pictures on the language board.

Evaluation: Given a visual and verbal cue by the teacher, the learner will combine pointing to/or looking at two or more pictures on the language board in an appropriate manner 50% of the time to meet the criterion.

Minimum Trials: 2

## Chapter V

### SUMMARY, DISCUSSION AND RECOMMENDATIONS

#### Summary

This investigator has provided classroom teachers and speech clinicians with a system of receptive and expressive communication training skills for severe and profoundly retarded persons. The need for the system was recognized through the review of literature as well as through personal experience with such persons in the Omaha Public Schools. Definitions of severe and profound mental retardation were investigated. Frequent inappropriate and inconsistent use of such definitions was identified.

The system for the development of sequential communication skills was presented in a step-by-step manner. It was divided into the following categories: 1. Attending Skills; 2. Receptive Skills; 3. Preliminary Expressive Skills; 4. Expressive Skills.

The importance of flexibility in providing goals for the learner was stressed. The flexibility to adapt to the learner is an integral part of the design of this system.

#### Discussion

As educators, classroom teachers, and speech and language clinicians we are aware that the needs of a child who is handicapped are much more complex than "teaching" in the traditional form. As educators of the severe and profound population, we are in constant search for new techniques and methods to help a child reach his full potential.

Considering the numerous handicapping conditions encountered within this population, the communication skills within an educational program become a challenge. Because of this, no one system will meet the needs of all learners. Therefore, in dealing with the non-verbal severely retarded child, forms of non-oral communication are a definite alternative. The pros and cons of oral or non-oral encoding techniques must be weighed by the teacher.

The severe and profoundly retarded child will need help to acquire language skills. We must remain aware of the complex problems the severely retarded child has in processing stimuli. As educators of this population, we will be concerned with the very rudiments of communication.

Establishment of a daily routine may also help the severely retarded learner develop communication skills. He will learn that his physical comfort is often attended by certain activities that occur on a routine basis. As Vanderheiden wrote, "Like communication itself, communication programming is a daily, interactive process which must be adaptable to changing situations and needs (13:333)."

Each time the learner uses a signal in any way, reinforcement of some sort is essential. She may not possess oral language skills, but she is still communicating! This non-oral communication could include a broad spectrum of non-verbal behavior such as facial expressions, natural gestures, and so forth.

Signs may be used as an alternate form of communication. Some severe and profoundly retarded learners are candidates for basic sign language.

Another communication strategy is the use of the language board. Many of these learners may learn the skill of pointing and/or eye pointing.

The severely retarded child who makes vocal utterances may be encouraged to expand this skill into the use of oral language.

### Recommendations

This system was developed to provide a step-by-step learning process while simultaneously recognizing the individuality of the learner. The investigator suggests the expansion of goals as necessary to the total system. The exploration of various techniques in goal performance is encouraged. The teacher should feel free to make modifications in the performance tasks as flexibility is a major factor in the system.

The system is now undergoing field-testing. It is hoped that other researchers will subject it to field-testing and report their findings.

## REFERENCES

## REFERENCES

1. Anderson, R. M., and J. G. Greer (Eds.). Educating the Severely and Profoundly Retarded. Baltimore: University Park Press, 1976.
2. Engelmann, Siegfried, Osborn, Jean and Therese Engelmann. Distar Language I--An Instructional System. Chicago: Science Research Associates, Inc., 1969.
3. Firling, J. D., "Functional Language for a Severely Handicapped Child: A Case Study", Kansas State University, 1976.
4. Gray, Burl, and Bruce Ryan. A Language Program for the Nonlanguage Child. Illinois: Research Press, 1973.
5. Hatten, John, Goman, Tracy and Carole Lent. Emerging Language. Westlake Village: The Learning Business, 1973.
6. Kent, Louise R. Language Acquisition Program for the Retarded or Multiply Impaired. Champaign: Research Press, 1974.
7. MacDonald, J. D. and M. Nickols. Environmental Language Inventory. Columbus: The Ohio State University Press, 1974.
8. Roecker, Vicky L., and others. The Marshalltown Project: Manual IIa, Communication. Marshalltown: Department of Special Education.
9. Rothstein, Jerome H. Mental Retardation. New York: Holt, Rhinehart and Winston, 1962.
10. Schiefelbusch, R. L., and L. Lloyd, (Eds.). Language Perspectives: Acquisition, Retardation, and Intervention. Baltimore: University Park Press, 1974.
11. Simmons, Vickie, and Irene Williams. Steps Up to Language for the Learning Impaired. Volume One: Attending. Tucson: Communication Skill Builder, Inc., 1976.
12. Smith, Robert M. An Introduction to Mental Retardation. New York: McGraw-Hill Book Company, 1971.
13. Sontag, E., (Ed.). Educational Programming for the Severely and Profoundly Handicapped. Reston: The Council for Exceptional Children, 1977.
14. Tawney, James W., and Lee Wright Hipsher. Systematic Instruction for Retarded Children: The Illinois Program. Danville: The Interstate Printers & Publishers, Inc., 1972.
15. Travers, Robert M. W. Essentials of Learning: An Overview of Students of Education. New York: The MacMillan Company, 1963.

16. Webster, Daniel. New World Dictionary. Cleveland and New York:  
World Publishing Company, 1959.

## VITA

Lorette J. Marin Rubino, or "Sam" as she is commonly known, was born September 1, 1953, in Bakersfield, California. Her elementary and secondary education was obtained at Mary Star of the Sea in San Pedro, California.

After graduating from high school in May, 1971, Sam attended Creighton University in Omaha, Nebraska. She graduated in May, 1975, with a Bachelor of Arts Degree in Speech Pathology.

In July, 1975 Sam married Anthony Rubino, a student at the Creighton School of Dental Science. In the fall of 1975, she began working for the Omaha Public Schools as a speech and language clinician in the Maximal Opportunity Development Program. The Program is geared to the severe and profoundly retarded all of which are physically impaired. Sam's role is one of evaluating and monitoring speech and language goals within the daily setting for the entire population of learners. Her thesis is a direct outgrowth of her work in this position. During this time, Sam began her graduate studies at the University of Nebraska at Omaha.

Sam will receive her Master of Arts Degree in Speech Pathology in May, 1978 from the University of Nebraska at Omaha.