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ABSTRACT

The experimental program in structured activities in perceptual training was said to have two main objectives: to train children in retention of visual and auditory images and to increase the children's motivation to learn. Eight boys and girls participated in the program for two hours daily for a 10-week period. The age range was 7.0 to 12.10 years, and the IQ range was 63 to 113. All members of the group were functionally unable to read from the Oral Reading Survey Test taken from the "Reader's Digest." The program exposed the children to multiple experiences that allowed them to retain both visual and auditory abstract word forms. Instructional materials and approaches used were various games, filmstrips, story telling, athletics, work sheets, records, perceptual learning aids, pictures for discussion, tactile and kinesthetic aids, and experience charts. The children were taught as a group, except for two weekly 30-minute sessions with each individual. A significant part of the experiment was thought to be the formulation of a global clue pattern that aided both recognition and recall. The first 52 words taught were those words to which the children had been exposed. An additional 48 words were words of comparison, and the last 50 words were the most common nouns used. A pretest posttest design indicated that the program was successful. (CB)

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STRUCTURED ACTIVITIES IN PERCEPTUAL TRAINING TO AID  
RETENTION OF VISUAL AND AUDITORY IMAGES

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TARGET AUDIENCE

1. All reading teachers.
2. Those teachers who have been frustrated by the non-reader.
3. Learning disability teachers.
4. Kindergarten teachers.
5. Supervisory and administrative personnel.

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OUTLINE OF PAPER: Structured Activities  
in Perceptual Training to Aid Retention  
of Visual and Auditory Images

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## I. ABSTRACT OF PAPER

### "Structured Activities in Perceptual Training to Aid Retention of Visual and Auditory Images"

This experiment will consist of eight boys and girls who cannot retain word images. Functionally, all members of this group were unable to read from the Oral Reading Survey Test taken from the Reader's Digest. The reading scores range from the child who can recognize no words on the list or even letter forms, to the child who can struggle at a 1.8 level of word recognition. This program will expose these children to multiple experiences which will allow them to retain both visual and auditory abstract word forms. They will have an enriched diet of diverse experiences to give them an adequate background for word retention. A most significant part of this experiment will be the formulation of a global clue pattern which will aid both recognition and recall. The first fifty-two words are those words to which he has been exposed and knows as a part of his experience. The forty-eight words are words of comparison and the last fifty words are the most common nouns used.

An adequate exposure to both the different words, and a structured clue pattern, as well as elements of student motivation and involvement will allow our children to retain both visual and auditory word images.

## II. E.R.A. BACKGROUND

The Early Remediation Approach to Self-Discipline represents the result of conferences between the administrative staff of the Department of Special Education and the Committee of the Chicago Teacher's Union as a part of the 1968 contract agreement. The basic plan provides for a group of specialized services which will be close to both children and teachers. The immediate support and the responsibility for the success of the program is the Master Teacher. Another feature is the utilization of a psychologist who tests the child after the child has been placed in the program. This program affords immediate placement for the disruptive child who cannot be placed in other special education facilities.

The Early Remedial Approach to Self-Discipline plan allows for early identification of the disruptive child. Thus, the child is diagnosed and an effective plan for remediation is started. Instruction due to the individual prescription and exposure to experiences of success give the child new strength to pursue and conquer his problem. A careful Evaluation will allow the staff to attempt to make an adequate placement for the child. Both parent and teachers work together in a program of home visitations and school visits. The classroom teacher makes a definite contact with both home and community in an attempt to gain both understanding and needed cooperation in helping this child.

The purpose of this program is to quickly identify and place these children in a special climate where they can gain both in self-image

and self-respect. Here growth becomes the expected rather than the impossible. So, the key goals in this approach are to enable the child to gain positive attitudes and to control his impulses. This climate attempts to develop the child's ability to relate to the peer group and to experience success in an individually-oriented approach to learning.

The E.R.A. child is very difficult to teach. He is not used to trusting adults and using them as valid sources of information. He usually is hostile toward adults and school in general. Generally, he lacks the important associative experiences which aid in abstract learning. He confuses kindness for weakness in the teacher. He feels that school values are not his values. He may express fantasies on many different levels. He is usually vindictive and definitely does not want to be handled or fondled by the teacher. His own peer group is an important barrier toward adjustment to learning. He often has no internal sense of time. He is poor in judging valid relationships and lacks the ability to maintain attention. He lacks test know-how and may possess memory disorders. He usually approaches problem solving in an inductive rather than deductive form. He usually is better using connotative, descriptive words than in using conjunctions and verbs. He sees things which are concrete much easier than he does something in the abstract. He learns better by doing.

The E.R.A. class has from eight to twelve children in its population. These children range from six to twelve years in chronological age. The class usually is kept at about three years in age difference.



The younger classes range from six to nine years and the older classes range from nine to twelve years. The majority of E.R.A. classes require the child to have an I.Q. of 80 or above. If the child is tested and his intelligence is not that high, he is placed in an E.R.A.-E.M.H. class or a brain-injured E.R.A. class.

The child has a saturation of services. He has his health Aide. If he needs medical aid, the E.R.A. Teacher-Nurse arranges either a clinic appointment with parental approval, or the parents arrange for him to go to the family doctor. He is tested in achievement by the Master Teacher and in depth by the E.R.A. Psychologist. While in a climate of non-competative atmosphere, he is then able to participate in all of the other activities which the school offers such as gym, library, field trips, school assemblies, camping and part-time placement in regular classes. This attendance in regular classes, of course, will be governed by behavior while attending.

After the child has successfully been phased out, and has experienced a certain amount of success in regular classes, a committee which includes either the school principal or assistant principal, Supervisor or Master Teacher E.R.A., adjustment teacher, E.R.A. classroom teacher, the Teacher-Nurse and the E.R.A. Psychologist determine when the child returns to a regular classroom.

Many different key features make this program a unique one. This program can remove a disruptive child from the regular room without psychological testing. The child is tested after he is placed in the

program. Children are treated and remediated at an earlier age so that the ratio of success is much better with the younger child. E.R.A. classes are small; never more than twelve children. Children are placed in a program where there is a high ratio of success experiences. Learning is functional and relevant to the experience of the child. The self-image of the child grows because he is learning that home and school are working together to help him. He feels that he is important and worthwhile. He is given special help in the fields of motor and perceptual development, mental health, with special enrichment in remediation and tutoring. He is motivated because the programs include success experiences, are relevant and usually are game oriented.

However, even in a specialized program such as E.R.A. we encounter one problem that we find very difficult. This is the case of the child who cannot remember sight words from day to day. Discipline in E.R.A. is always a challenge and the demands of individualized instruction present the teacher with a dilemma. He or she cannot give this child a sufficient amount of time to effectively meet his needs. If the child is served, the class suffers and vice versa. So, our special service teachers were sent in to attempt to meet this need. The original purpose of the special service is to relieve the regular teachers so that home and school communication can take place. We also attempted to use them as tutors. This did not seem to work. These teachers could teach primary reading, but needed in-service training to effectively teach perceptual skills and reading readiness skills. This is the reason for



the formation of this experiment in perceptual training. Those of us in this panel felt that many of our students did not learn because they felt no motivation to do so. The concept of reading was not as important as many other intrinsic factors in their lives. From their apparent rejection of what the school offered in abstract ideas, grew the idea of ignorance due to lack of key associations. But, what was even more important was the lack of identification and interest with these associations. Our feeling was that if we could expose them to many different vicarious experiences, we could give them previously unknown experiences as well as reinforce those experiences which were too weak to recall except when specific special clues were introduced. From this thinking came the idea of a pattern of recall which would differ for specific words but would contain some clues common to all.

### III. RATIONALE, OBJECTIVES AND GOALS

#### A. Rationale

The rationale for this experiment was gathered from the significant contributions of certain outstanding individuals in the field of special education such as Kephart, Barsch and Frostig as well as the educational experiences of the contributing members of this panel.

The child with any kind of learning disability must be evaluated in the different areas of developmental growth. Raymond Barsch states that the basic consideration in future growth of this child must be considered in those areas of motor, sensory and perceptual development. Each moving organism must, in order to progress, have established visual space, auditory space, tactile and kinesthetic space relationships. Coordination is a manner of coordinates which allow us the ability to move and experience our environment utilizing abilities in the field of motor, sensory, perceptual development. Communication on an abstract level must be the cumulative efforts of success in each of the previous levels. Thus, communication is the understanding of one's own space world in relationship to the space world of others in our environment.

The population of this experimental class consists of eight children who have displayed behavior symptoms to the point of disrupting the regular class. E.R.A. children are activity oriented and hyperactive many times to the point of perpetual motion. We sought a way to channel all of the diffused energy that was seemingly wasted outside of school activities.

If we assume that the child is a sensory-motor perceptual organism, then another coordinated thought must be that there is not only a developmental progression from a lower to a higher level, but also an interdependency of the success in the higher level on achievement in the previous levels.

If the above is true, then another assumption is that retraining in the perceptual field and the reading readiness field can aid the non-reading child to experience success in the field of cognition of which reading is one of the modes of communication.

#### B. Objectives

The major objective of this program is to enable our children to retain both visual and auditory images. Word recognition exercises done the previous day are forgotten by these children. Another important objective of this program is to motivate these children through improving self-image, release of tension and exposure to success experiences. Another important objective was to stimulate learning through various kinds of vicarious experiences. This was an important coordinate in the success of this program. The experimental children's inability to retain images was felt to be the result of either lack of exposure or insufficient exposure. This hypothesis, of course, is subject to attack by those who postulate brain damage, but many of the learning obstacles in E.R.A. are caused by cultural differences. Another objective of this program was to establish an effective model of attacking and solving the problem

of the child who doesn't retain symbolic images. This model would enable the E.R.A. Program to reach these children through the different special service teachers who reinforce and aid the regular E.R.A. teacher. Another significant objective was the changing of negative attitudes toward self and others through behavior modification techniques. Perhaps the ultimate aim dependent on all of the others is to help children to aspire, and through successful achievement, to become more independent.

C. Goals

The goals of the broader objectives should complement those objectives.

1. To prescribe an effective remediation program for each child.
2. To arrange a profile of the strengths and weaknesses of each child.
3. To train and retrain existing deficits in motor, perceptual and reading readiness areas.
4. To train children to have a correct set and attitude for learning.
5. To teach word recognition and primary reading skills through the use of experience charts and special word lists.
6. To use a clue pattern which is psychologically sound for structure.
7. To successfully teach and make each child feel that he is important.
8. To improve each child's mastery of vocabulary.

9. To insure each child of a positive self-image.
10. To effectively change the ratio of success experiences to failure.
11. To enable our special service teachers to meet the needs of these children.
12. The changing of both child and teacher behavior in relationship to each other.

#### IV. PRESCRIPTIVE PROFILE FOR A MODEL SUBJECT IN THE EXPERIMENT

The ultimate significance in the prescription is that the problems of each child are clearly outlined in the areas of perception, reading readiness and primary reading. This allows for each to receive remediation which is functional accompanied by an individualized program which is different for each child's program. The diagnostic testing then is the first important step in the program. The diagnostic testing took two weeks to complete from September 8 to September 20th.

The E.R.A. psychologist administered individual intelligence tests to each child. This was followed by the Bender-Gestalt. Each child, where the need was indicated by the Bender, was given the Frostig Visual Perception Test. Each child was given the Wepman Auditory Perception Test and the Peabody Individual Achievement Test. The master teacher gave the Word List Test, and the Informal Oral Reading Survey taken from "The Graded Reader's Digest". Mr. Orloff directed the giving of the "Kephart Perceptual Motor Survey". The demonstration teacher, who was the special service teacher, Chris Johnston, recorded the number of alphabet letters known by each subject.

The experimental population consisted of children either in a present E.R.A. class or on the waiting list for one of these classes. The control group came from E.R.A. classes in other schools in area C in Chicago, Illinois. These children were disruptive, either hyperactive or hypoactive, and had a history of negative behavior patterns. The criteria



for selection was disruption of regular classrooms, inability to read from the Reader's Digest pre-primer and registering a score of less than 2-0 in the Peabody Individual Achievement Test in the word recognition sub-test.

Within the experimental group many different forms of behavior and achievement were noted. The chronological ages ranged from 7-0 to 12-10. The I.Q. scores ranged from 63 to 113. This group consisted of five boys and three girls. From the Frostig Visual Perceptual Test the psychologist noted that the perceptual ages in the group ranged from 5-0 to 10+. Scores in the Peabody Achievement Test went from 0.9 to 1.8 in Word Recognition. Four members of the group knew all the letters of the alphabet and four did not. Not one of the group could pass the first test in the pre-primer Informal Inventory. The raw scores in the Kephart Perceptual Motor Survey ranged from 71 to 83.

All of the subjects in the experimental group needed some remediation in using perceptual skills. Four members of the group needed intensive individual guidance in mastering these skills. Two members of the group needed exercise in auditory discrimination.

Behavior patterns differed from the extremely shy withdrawn child to the active aggressive behavior which disrupts the learning situation. Our children were among the lowest achievers in their rooms. They displayed no apparent interest in reading or working with symbols. Even the withdrawn child showed evidences of being explosive under regular classroom social interaction.

All of the children showed negative self-images and were reported to be failure prone by their respective teachers. Many had serious conflicts in the home environment. One child had moved four times in one year. All of the children had a history of absenteeism which reinforced their inability to progress in school.

This paper will show one individual profile or prescription for one child in the experimental group.

#### Prescriptive Profile for Subject G

This child was 8-1 month in chronological age at the time of testing in September. He scored an I.Q. of 84 on the WISC which was given by the E.R.A. psychologist. This boy showed twelve errors in the Wepman Auditory Discrimination Test. He scored nine errors while taking the Bender-Gestalt. The norm data for his age was four errors. The Frostig Visual Perceptual Survey indicated the following perceptual ages: Figure-ground, 7-0; Form Constancy, 5-6; Position in Space, 7-0; and Spatial Relationships, 6-6. He scored a raw score of 73 when he took the Kephart Perceptual Motor Survey. An evaluation of this survey showed difficulty in perceptual motor match, form constancy, form perception and rhythmic writing. He scored 1.8 in the Word Recognition subtest of the Peabody Individual Achievement Test. He knew some primer words and recognized twenty words in the Special Word List. This youngster was intensely verbal, hostile toward authority figures and extremely aggressive toward members of his peer group. Past records show home problems which set the

tone for his responses in school. This boy demanded a great amount of attention from his teacher. At times he was very rude and extremely stubborn. He can't seem to play fair in games and hates to be a loser! He had a great deal of trouble in gaining peer group approval. He is inconsistent in his attitude toward the teacher. Sometimes he will be demanding her complete attention and at other times he will act as though she is not in the room. He will ignore her or any other authority figure when he is corrected or disciplined. Sometimes he becomes very enthusiastic about his work but cannot seem to learn from past mistakes.

His initial response to the experimental group and teacher was extremely aggressive toward both teacher and peer group alike. His prescription indicates a significant deficit in auditory discrimination. He needs to listen to short poems and rhyming word exercises. He needs to sing different songs which will help both rhythm and auditory discrimination. He needs to recognize figure-ground relationships in sounds and in music. He should be exposed to different sounds of home, neighborhood and school. In the perceptual area he needs training in space figure-ground relationships, perceptual motor match, form constancy and position in space. Individual work sheets and individual instruction in listening are essential for this child. These sheets should illustrate the sounds of the medial vowels such as o, u, e and i, a and o. The work sheets should also include exercises with beginning and ending consonant sounds such as d, k, p, t, f, th, v and th.

His teacher seems to feel that this boy needs a strong male figure for sex identification. There is a lack of a father figure in the home environment.

After the completion of the eight-week special program, the following things were noted concerning both the behavior and achievement of this child. He showed a growth of word knowledge in the Special Word List of 128 words. He outstripped his control group peer by 131 words. He shows a good knowledge of beginning and ending consonant sounds. He was learning some short and long vowel sounds. He has successfully read all ten of the experience charts taken from the word list. He can read out of the first pre-primer in the series of the Graded Reader's Digest.

His teacher reported that he now seemed happier in school. He is making progress in reading. He shows distinct growth in beginning sounds and blends. He tries to read. He has lost some of his antagonism toward both peers and teacher. His teacher feels that the program definitely met his need for recognition and identification with the demonstration teacher. Both the demonstration teacher and the classroom teacher feel that with intermittent reinforcement, this child will establish patterns of success in his future school achievements.

COMPARISON MATCHING OF EXPERIMENTAL AND CONTROL GROUPS

Key  
 (E) = Experimental Group  
 (C) = Control Group

NAME	BIRTHDATE	I.Q.	C.A.	WORD LIST	PIAT (WORD RECOGNITION)	WORD LIST (SECOND)	MAGE
(E) R.I.	7-14-64	76	7-4	1	1.1	11	Kg. 5.6
(C) Pachecho, A.	10-6-65	75	6-5	0	1.3	0	
(E) H.L.	10-11-64	76	7-1	0	0.9	5	Kg. 5.4
(C) Careless, Tracy	9-21-63	76	8-1	0	1.1	8	
(E) F.I.	10-22-64	113	7-0	4	1.5	44	3.1
(C) Logan, Anthony	11-5-62	108	9-11	5	1.5	5	
(E) S.N.	7-20-62	83	9-3	20	1.3	128	2.9
(C) Jones, S.	1-4-61	81	10-10	18	1.4	21	
(E) L.L.	1-19-62	94	9-10	48	1.8	124	4.6
(C) Noyles, Larry	10-25-64	94	7-0	0	1.6	0	
(E) D.G.	8-14-63	84	8-3	20	1.8	148	2.1
(C) Rosario, Angel	8-20-62	77	9-2	20	1.3	17	
(E) B.L.	1-12-59	63	12-10	26	1.4	91	2.7
(C) Bowman, R.T.	9-27-60	62	11-1	10	1.0	1	
(E) A.M.	6-9-61	106	10-5	3	1.3	117	5.5
(C) Donaldson, D.	11-3-62	94	8-11	4	1.4	1	

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Special Word List

Word Recognition (PIAT)

Second Word List (Retest)

(E) Mean -- 15.25	Median -- 12	(E) Mean -- 1.45	Median -- 1.4	(E) Mean -- 83.5	Median -- 104
(C) Mean -- 7.12	Median -- 4.5	(C) Mean -- 1.45	Median -- 1.4	(C) Mean -- 6.63	Median -- 3

## V. WORD SELECTION AND STRUCTURED CLUE PATTERN

The first fifty-two words were those words that the planning group thought would be fully experienced by our children in this experiment. These words were known by most of the children with the exception of the written symbol. These fifty-two words are gut-level words in the child's emotional experiences, or are readily recalled through auditory clues or can be seen in store windows and cafe menus. Added to the word types mentioned above are the basic colors and the names of numbers from one to ten.

The second fifty words were taken from the most common nouns used in the English language. These nouns were picked for two reasons. First, that they were all common objects in which the Clue Pattern for Visual Retention could be fully utilized and second, they also were objects that the teacher could reproduce in drawings on work sheets.

The third group of words used were comparatives such as hot and hotter. Also included were superlatives. These words, once learned, served both as an aid toward associative grouping or classifications, ordering and serialization. This group of words also gave a new approach for repetition of the words learned in the other two groups.

### Neighborhood Experience Words

whistle	hamburger	yellow	bottle	yell	hot dog
black	drum	scream	mustard	white	ball
box	catsup	pink	board	cry	coffee



Neighborhood Experience Words (cont'd.)

track	one	street	milk	pencil	two	nine	orange
train	bell	truck	wine	store	ten	bus	eight
bread	beer	coke	book	paper	red	five	green
apple	soup	four	blue	three	six	horn	seven

Comparative and Superlative Words

tall - taller - tallest	old - older - oldest
big - bigger - biggest	young - younger - youngest
short - shorter - shortest	easy - easier - easiest
hot - hotter - hottest	small - smaller - smallest
cool - cooler - coolest	green - greener - greenest
dark - darker - darkest	wide - wider - widest
thick - thicker - thickest	fine - finer - finest
quick - quicker - quickest	fair - fairer - fairest

Most Common Nouns

birthday	face	hand	mother	rain	nest	ear
nose	school	tail	chair	table	money	bed
stick	puppy	bird	watch	ring	hair	el
airplane	girl	tree	door	eggs	feet	dog
rope	grass	hill	kitten	rabbit	cake	eye
flower	doll	dress	shoe	window	farm	cat
car	basket	baby	fish	water	fire	hat
father						

## CLUE PATTERN FOR IMAGE RETENTION

The students in this program suffer from the inability to retain both visual and auditory images. In order for these children to be able to recall word forms, we felt that a structured approach would be most beneficial. The whole idea of this form of remediation through prescription is dependent on a global retention pattern which is psychologically sound. This global approach should be such that it will involve all members of this program on their experience levels.

### Clue Retention Pattern

1. Visual Perception Clues
  - a. color of object
  - b. size and shape
  - c. design or pattern
  - d. relationship
  - e. written symbol
  - f. beginning sound
2. Auditory Clues
  - a. hearing the sound of the name
  - b. noting volume, pitch and rhythm
  - c. pleasant or unpleasant
  - d. instructive or entertaining
3. Tactile or Kenesthetic Clues
  - a. feeling shape and texture
  - b. softness or hardness

3. (continued)

- c. feeling density or weight
- d. holding and grasping

4. Smell clues

- a. strong or weak
- b. pleasant or unpleasant
- c. known or unknown

5. Taste Clues

- a. sweet or sour
- b. bitter or bland
- c. cool or warm
- d. spicy or salty
- e. tart

6. Clues of Association

- a. similarities or differences
- b. degree of similarities or differences
- c. relationships or parts to a whole
- d. relationship of involvement
  - (1) self-experienced
  - (2) involvement of significant figures
  - (3) traumatic and involved feelings

## VI. MOTOR FACILITATION PROGRAM

The Kephart Perceptual Motor Survey is not only a test but is also a source of remediation. The different exercises using the Walking Board test these children on balance and postural flexibility. The children walk backward, forward and sideways over the four-inch Walking Board. The student is also tested for his ability to jump, skip and hop which gives the instructor more information on both balance and postural flexibility. Body image and knowledge of the relationship of the parts of the body to each other is tested by identification of different parts of the body, imitation of movement, traveling over an obstacle course, using the Kraus Weber Test and playing "Angels in the Snow". The ability to effectively make a perceptual motor match is tested through several chalkboard exercises which include drawing a circle, a double circle, drawing lateral and horizontal lines and the use of rhythmic writing. Ocular control is tested by using a pen flashlight in a dark room. Form perception is tested through visual geometric forms which measure a form and position of forms on the page.

The Walking Board, the Balancing Board, the Obstacle Course are training devices which can motivate children to aspire. In this program the achievement of certain parts of the motor facilitation are the by-products and become simply the reward for recognizing a word form or letter form of the word list. Thus, these more basic perceptual experiences become entertaining and fun oriented with no negative undertones of value judgments. Rope jumping, as a form of entertainment, also improves regular

and alternate rhythm. Tossing different colored balls of different sizes aids both balance, gross and fine motor control and receipt skills. The Obstacle Course and the Stepping Stones also aid balance and gross motor control. In the group experiences these exercises, when they are completed, will give our students a wealth of success experiences to improve the self-image of each child.

If the Kephart Perceptual Motor Survey has indicated in the individual profile a serious deficit in perceptual motor activities, then the child is aided during the individual thirty-minute period in which he will not be subjected to ridicule by his peers.

#### Duration of the Program

The program ran for ten weeks from nine o'clock to eleven o'clock. The whole group has undergone exposure of vicarious experiences, the word list, experiences in the field of visual and auditory perception, reading readiness skills and games which illustrated both letter and word forms. The first hour of instruction was followed by a short ten-minute recess period, and the last hour and forty-five minutes modified the individual problems exposed by the diagnostic prescription. The first class started September 21 and ended November 7, 1971.

#### Multi-sensory Approach

\* Retention is the key word here. In our discussion prior to planning this program, we felt that many of our children were not simply victims of serious perceptual barriers, but were victims of incomplete and unrelated

associations which restricted them in the field of abstract memory. Labeling them as mentally retarded or perceptually handicapped blocked, rather than aided, these children in learning to read. We want to raise our students' level of aspiration rather than lower it. We like the ideas that say to us ignorance is not stupidity, but rather the culmination of lack of exposure, insufficient exposure and no factors of motivation and relevance for this child. Through the use of film strips, records, recorders, films and a relevant beginning word list, we hope that we can, through the use of indirect learning, motivate this child not only to concentrate but to retain those symbols to which he will be exposed. Thus, the game and winning become the motivational factors and the things learned have relevancy perhaps for the first time. Our global approach in image retention used all the basic senses which the child is familiar with. Perhaps in the past the teacher introduced a word on the board perhaps once or twice and the child was supposed to retain the symbol in his vocabulary. We leave nothing to chance. When this child is shown a word, he sees the written symbol as he hears the word on the recorder. If it is an object he must enumerate all of the physical aspects of said object. He actually feels the surface, tells the color, feels the weight and actually experiences the word as he sees the written symbol. Sound, sight, touch and weight give him a depth of exposure previously unknown.



## VII. MULTI-EXPERIENCE APPROACH

### (Motivation Versus Remediation)

We wanted our children to feel that they could read and enjoy reading. Our first task was to insure these children against failure! In the past, for them the ratio of failure to success experiences was extremely top-heavy! Our group activities were reaching into the three different areas of perceptual skills, reading readiness skills and those of primary reading. How could we incorporate them all in both group activities and individual? Our format was structured but yet flexible. We first concentrated on learning to listen. This was done through introducing home, school and neighborhood sounds which had previously been put on tape. Through the concern of the teacher and his calmness under stress, we praised listening and ignored as much as possible those who were not. We learned to listen to the First Talking Alphabet. This group learned both the sound and sight of our special word list by hearing the sound of the word on the tape and seeing the word on the bulletin board. They played word recognition games and used exercises from Kephart's perceptual motor test for reward experiences. This did an important thing for each child's self image, especially the three lower children who needed much help and concentration in the perceptual area. These children were playing the same game as the others and were getting exercise in their deficit at the same time, but were unaware of this. Those who did not need the exercise simply played the word recognition game and went through the same or similar motor facilitation exercises.

Records, dances and songs illustrated rhythm and sequence to those children lacking these temporal skills. These records also allowed the children to differentiate between temporal figure-ground relationships, auditory discrimination and simply allowed those who did not need the training to enjoy the music.

The phonoviewer and the records that went with it taught the children to sing together and to view the story of the song. We concentrated on the records concerned with both counting and songs of actions. These records gave the child who was not verbal an opportunity to join in the singing and counting without feeling that he didn't know or that he would make a mistake.

We did five different tapes for this program. The first three tapes were sounds of the children's immediate experiences. The fourth tape was that of the word list presentation. After the third week, we ceased to use this tape as the large words printed on the bulletin board were sufficient. The fifth tape was done during the fifth week. This tape was done so the children could actually hear that they could read. We played these tapes in front of the principal and the parents who were present for the last day in which this group had a success party because they could read.

Film strips allowed us to illustrate to the children figure-ground relationships, form perception, form constancy, position in space and space relationships. Film strips also served a dual purpose. They served both as exposure to different groups and allowed the class, through

discussion, to explore likenesses and differences of different animals, both wild and domestic, different kinds of trees, flowers, different kinds of peoples and different occupations in the urban areas.

Fact was illustrated by those objects boldly illustrated on the board and fantasy was explored through the media of the story circle. Both the master teacher and the demonstration teacher read stories at different times of the week. Film strips and accompanying records by Walt Disney also stimulated our children. The realm of magic and instant success always fascinates children who find the reality world difficult to cope with. From these different stories, we were able to involve the child who could not talk in front of others. These absorbing stories interested the whole group and allowed us to explore our words of comparison using the stories as motivation for learning. Through the skill of the two experimental teachers, we could involve all the children in talking about the story, telling the main idea, looking for details and discussing relationships between people and events in each story.

The group work sheets were devised so that each child would have some level of success. Most of them were concerned with letter and word forms. Others were configuration forms. Others were concerned with geometric forms or figure-ground relationships. The key would be in coloring the pictorial triangle, circle or squares red, green, yellow, blue, black, white, orange and pink. For the children in the perceptual stage we would ask them to color the different figures. For those who could read the name of the colors, we would simply print the word in the

figure and they would color the other similar forms the same color. Other group work sheets were made in the form of clowns, cars, trains and wagons using the basic geometric forms. The final group work sheets were copied from the big experience charts on the wall. These two would allow both groups to participate. At the top of the work sheet were different letter forms, both upper and lower case letters, in blocks. For the lower group, the letters were put in the blocks in dotted lines. The blocks were blank for the more advanced students. Then, the simple sentences of the experience charts are repeated on the work sheet which allows for recognizing similar elements in a different context. Below that are drawings of the four or five key words on the chart. Below that is a number of blocks which represent the number of letters in each word. For the advanced these blocks are blank. They are filled in except for one or two letters for the others. These work sheets still keep the whole group involved in the same general activity and keep the self image of the child intact.

The individual thirty-minute period twice a week for each child gave the demonstration teacher ample opportunity to give individual guidance and instruction. Work sheets were used; also different motor perceptual exercises. The opportunity to let the child express himself and grow both in verbalization and vocabulary depth was there. Cards showing part-to-whole relationships, puzzles of animals, sandpaper alphabet cards, the use of the screen board which allows the child to feel the lines of each letter were used. For the child who has trouble concentrating and following directions, time was allotted to present directions slowly and step

by step. For the child who had mastered his letters and knows some words, the Lyons and Carnahan Phonic Kit was used showing beginning sounds, blends, diagraphs, hard and soft "c" and syllables. Small experience charts, more complex and longer than the others used in the group activities, are provided. These sheets combined the comparative and superlative words with both the experience words and the most common nouns.

Perhaps the unique thing about this program was that it explored the three different areas of concentration without categorizing the children in the group. It allowed for group participation and at the same time explored systematically the individual deficits existing. It utilized the common interests of the child at the functional level of each child. It ceased to be standard oriented and became child directed. Through the different sensory modalities and the wealth of vicarious and actual experiences, it reinforced previous memory experiences which existed below the threshold of recognition and recall or added new and stimulating experiences to the memory bank of these children. The structured exposure to the basic sensory experiences, the milieu of acceptance of each child and his answers and the game oriented activities without value judgments gave them the feeling that learning was fun.

## VIII. MATERIALS USED TO MEET THE NEEDS OF THIS PROGRAM

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The various materials necessary for the Motor Facilitation Program were the Walking Board, the Balancing Board, individual jump ropes, different sized red and green balls, Stepping Stones made from sandpaper and the Obstacle Course which is made from chairs and a long stick.

The prescriptive tests used were the Binet, the W.I.S.C., Wepman's Auditory Perception, Frostig's Visual Perception Test, Informal Reading Inventory (Graded Reader's Digest), Peabody Language Achievement Test, Kephart's Perceptual Motor Survey and 150 Word List.

The audio-visual aids used in this program were the film strip projector, tape recorder, record player, film projector and opaque projector.

Film strips used were:

- a. Different animal groups, trees, trucks, cars, flowers, etc.
- b. Visual Perceptual Film strips
- c. Walt Disney

Records used were:

- a. Talking Alphabet
- b. Sounds of the City, neighborhood and school
- c. Different animal sounds
- d. Rhythms in Motor Skills
- e. Records of singing
- f. Vicarious experiences, Walt Disney



Perceptual learning aids:

- a. Basic shapes, push out plastic forms of geometric figures
- b. Colored Inch Cube Designs
- c. Expressive Language Picture Cards I and II
- d. Visual Discrimination Cards (color)
- e. Association Picture Cards.
- f. Alphabet Cards made from sandpaper
- g. Spatial Relations Picture Cards
- h. Sequential Picture Cards
- i. Animal Puzzles
- j. Dot-to-dot Paper
- k. Word Classification Cards
- l. Study Scope - classification, comparisons for similarities and differences
- m. Phonics -- We use game kit.
- n. Words and Action (large set of pictures to stimulate discussion)

Pictures for discussion:

- a. Farm animals
- b. Zoo animals
- c. Wild animals
- d. Flowers
- e. Fruits
- f. Insects
- g. Trees
- h. Different kinds of people

Tactile and Kinesthetic aids:

- a. Alphabet sandpaper letters
- b. Screen writing boards
- c. Letter templates
- d. Geometric templates

Work Sheets:

- a. Figure-ground relationship
- b. Parts to the whole
- c. Similarities and differences
- d. Form constancy
- e. Laterality and directionality
- f. Body image
- g. Letter form
- h. Word form
- i. Word configuration
- j. Word tracing and simple spelling

Experience Charts:

- a. Using experience words, comparatives and common nouns to make simple sentences.
- b. Make simple sentences into short paragraphs.

## IX. METHODS AND TECHNIQUES

The rationale for this program is solving the case of the missing or disguised experiences. Reading attempts have failed in the past because our teachers were not experienced in the field of both reading readiness and perceptual skills. We hoped to devise a program that would not only be successful in this experiment, but would serve as a model so that the special service teachers could pick up the necessary skills to teach and reach these non-readers and near non-readers.

This program will be structured in presentation so that the subjects gain skills in the three fields of perceptual motor skills, reading readiness and primary reading.

### Program Organization

#### A. Monday, Wednesday and Friday

1. Presentation of Reading List using tape and visual list on the board
2. Motor Facilitation Exercises
3. Film strips showing categories and classification
4. Basic rhythms using records, rope jumping
5. Talking Alphabet and work sheets

#### B. Tuesday and Thursday

1. Reading word list and phonic games
2. Using singing records for counting and action
3. Vicarious experiences using Phonoviewer film strip and records of Walt Disney

B. (continued)

4. Tracing letter, geometric designs and word forms
5. Use of experience charts to show short sentences
6. Use of study scopes to show likenesses and differences  
in classification

C. Individual Prescription

1. Area

- a. Perceptual motor deficits
  - b. Visual motor deficits
  - c. Auditory deficits
  - d. Visual discrimination
  - e. Auditory discrimination
  - f. Visual and auditory memory
  - g. Letter forms
  - h. Word forms on the list
  - i. Beginning sounds
  - j. Word configuration
  - k. Verbalization
  - l. Categories and classifications
  - m. Time orientation and sequence
2. Each folder will hold what material was prescribed to meet  
the needs of each child.

Program organization changed from the first week to the last week.

The final three were dominated by the Word List and various word recognition

games. Work sheets utilizing words and short sentences which had been presented on the experience charts prepared the children for word retention.

If image retention was the primary concern in this program, then the second most important concern was that of motivating the child to want to learn. Each child, when tested prior to the program, was told that he was going to read, that this program was his program and that what we found in this program would help other children to read as well. Each child was also assured that he was an important part of this program and that we could not do without him! The next step was to get and hold his attention. We realized that this child had experienced failure in basal readers so our program did not contain regular readers as the other classes did. Our words were put on the board or large sheets of paper or on duplicopy work sheets. This served a dual purpose. We could put down only the factors which we regarded relevant, but it also removed the defenses of the child who can't read and says "I had this book before, this is baby stuff!"

Records, different tapes, stories and film strips allowed these children to enter into discussion freely in an area in which they felt secure. The different modality exposure gave these children enrichment and reinforcement in vicarious experiences.

The program, though structured, was still flexible enough so that a change in activities occurred whenever class unrest deemed this necessary.

Games using word forms, letter forms and phonic sounds removed fact learning from the realm of value judgments and gave factual learning relevance and, as it became necessary, continuing and enjoying the different games.

Activities on a group level allowed the self-image of each child to develop. No child lost face or was ridiculed during games or multi-sensory activities. When each child was taught in the area of his most serious deficits, it became a personal experience between teacher and child. Each child's work for the day was checked and mistakes shown. Our child needs to see both mistakes and accomplishments now!

Behavior Modification showed that when the difficult child gets enough success and attention he too can improve. It was very difficult to run the first few classes due to the noise. Again we followed a structured approach to discipline. When a disturbance started, the activity stopped! Nothing was said. If the child stopped, then the activity started again. This was never quite as effective as we would have wished, but this type of behavior was expected. Many times we had to stop, but neither the teacher or the master teacher responded in an emotional way and most of the negative behavior was controlled. If a child continued, he was removed from the class and talked to until he would tire of this and ask to return to the activity. It is important to realize that most of our problems with problem children occur because of our inadequate step-by-step approach to problem solving rather than their behavior. If

the child realizes what is expected, he is much more apt to respond favorably than if he is unaware of what to do. Also, a relevant activity is a much better way of controlling behavior than negative punishment.



#### X. TEST - RETEST COMPARISONS

The control group was tested twice just as the experimental group was. During the prescriptive two weeks, the control group was tested with the Peabody Individual Achievement Test and the Special Word List. The control group was matched or paired with pupils in the experimental group with similar I.Q. scores and with almost identical Word Recognition scores using the Peabody Individual Achievement Test. The median score for the control group on the Word Recognition Subtest was 1.4 which was the identical score for the experimental group. The mean score for both groups was 1.45. This gave both groups a close relationship in word recognition skills.

The control group during the first testing had a mean of 7.12 and a median score of 4.5 in the Special Word List. After the Special Word List retest, the mean dropped to 6.78 and the median dropped to 3. The experimental group in the first test had a mean score of 15.25 and a median score of 12. After the retesting, the experimental group had a mean score of 83.25 and a median score of 104. It is prudent to note, however, that five of the group had heavy scores of 118, 128, 124, 91 and 117 while the other three had scores of 11, 8 and 44. The top heavy numbers made this skewed distribution.

From such a small control and experimental group, it would be needless to state that this has been proven to be a very successful program! But, the large gains in word image retention do indicate a need for further expansion and experimentation. A plan for the future will

be to incorporate the control group as an experimental group. Again, if the program had stopped at the end of the ten-week period, then we would have failed. This experimental group must be intermittently stimulated once a week until the end of February. Then, the Word List must be presented and the rate of retention of the whole group noted.

## XI. CONCLUSION, SUMMARY AND RECOMMENDATIONS

Those concerned with this experiment felt that it was successful. The children did make valuable gains in many different areas. The two major objectives of this study were realized. The experimental group did achieve a much higher level of retention of word images than did the control group which received no specific training. The experimental children did become motivated to aspire and seek success in symbolic school experiences. Interviews with the different teachers of the experimental group reinforced our belief in changed attitudes of experimental pupils toward self, peers and adults in authority roles. Each pupil felt more sure of himself and was willing to take a chance! He can now stand competition and the vicissitudes of normal classroom social interaction. The feeling of hostility has lessened. (I didn't say gone!) The pupils' behavior has undergone change. They are not perfect, but they can line up and go down the stairs in a line. They do sit in their seats (sometimes). The flexible program and the interest that it created in the children did much to alleviate behavior problems. Behavior Modification was, for once in my experience, completely intrinsic because the major objective was the reward which was learning to read.

The complete group has changed some of their negative behavior from the way they were when they first came into the program. The two who did not play together are now doing so! The shy one is increasingly verbal and the aggressive ones have changed from physical aggression to that of

verbal. The male image impressed the boys in the class, but has been equally effective in its effect on the girls.

#### Extension of the Program

The concentration of time and the saturation of services done during the experimental ten weeks must be spread out over an eighteen-week period. This new group will meet for two mornings a week for two hours. The word list of experience words, comparatives and Dolch common nouns will undergo modification. Some words which did not seem relevant will be discarded and new ones such as regular verbs will be added. We taught verbs, but indirectly on the experience charts. This time we will teach those verbs directly from the word list. We will discard some material that did not interest or motivate our children. The materials will be largely of paper so that the kit can be taken around to different classes by the special service teacher. This idea of a portable kit was the suggestion of my director. These kits will allow the E.R.A. Program to service almost ten times as many children and make each special service teacher an experimental demonstration teacher. The materials that we will use will consist of:

- A. Basic plastic or paper geometric shapes (circles, squares, rectangles)
- B. Work sheets or cards of:
  - 1. Visual discrimination
  - 2. Spatial relationships
  - 3. Sequential

- B. (cont'd.)
  - 4. Animal puzzles
  - 5. Dot-to-dot paper ( position in space)
  - 6. Association pictures
  - 7. Perceptual constancy
- C. Study scopes
  - 1. Categories (comparisons), similarities and differences
  - 2. Primary reading skills
- D. Pictures for discussion
- E. Tactile and kinesthetic aids
  - 1. Screen writing board
  - 2. Geometric templates and letter forms
- F. Additional aids
  - 1. Phonic and spelling games
  - 2. Vowel and consonant lotto
  - 3. Scrabble
  - 4. Spelling baseball
  - 5. Phrase, word and sentence sheets
- G. Original and Graded Reader's Digest stories
- H. Reading diagnostic tools
  - 1. Oral reading inventory
  - 2. Set of alphabet cards
  - 3. Set of work sheets dealing with perceptual skills
  - 4. Group and individual reading tests

The most significant features in any reading program are the impact of the teacher on the class and the rapport established. The way the demonstration teacher established control was effective because it was done without anger or value judgments. Behavior modification was easier because he had to change only acts, not adverse feelings of anger and fear! The class looked forward to coming because they knew they were special to their teacher. I feel that the teacher, however, was reinforced by a structured program. This program incorporated motivation with exposure and success experiences in three different areas of learning in the fields of perception, reading readiness and primary word attack skills. The strengths of each pupil became instruments for success experiences in the group games and activities and his deficits were remediated individually with no loss of self-esteem. This was a flexible yet structured program with each child getting his psychological and academic needs met! So, to those concerned, this was a child-centered program.

The "Formula for Success" was:

Motivation + Structure + Rapport + Ego protection = Aspiration!

## XII. RECOMMENDED READING

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