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AUTHOR Meyen, Edward L.; And Others
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ABSTRACT

To assist teachers and administrators in the selection of materials, the Peabody Language Development Kits (PLDK), Levels 1 and 2, are reviewed and evaluated. The PLDK contain 180 daily lessons, teaching manual, and materials for an intensive language training program for mentally retarded and culturally deprived children. Level 1 can be used in primary educable retarded special classes, and Level 2 in intermediate age classes. Purpose, material, lessons, activities, advantages, and limitations of the PLDK are described, and related research reviewed. (KW)

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Peabody Language Development Kits
Level #1 and Level #2
by Lloyd M. Dunn and James O. Smith
Published by American Guidance Service, Inc.
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A COOPERATIVE PROGRAM INVOLVING THE IOWA STATE DEPARTMENT OF PUBLIC INSTRUCTION
AND THE UNIVERSITY OF IOWA

IN-SERVICE TRAINING MATERIALS FOR TEACHERS
OF THE EDUCABLE MENTALLY RETARDED

Session I

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Staff: Edward L. Meyen, Acting Director
Munro Shintani, Ph.D., Coordinator

Staff Assistants:

Phyllis Carter
Pat Adams
James Stehbens

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PEABODY LANGUAGE DEVELOPMENT KITS

Brief Description

The Peabody Language Development Kits (PLDK) were prepared to provide a comprehensive and intensive language training program for mentally retarded and culturally deprived children. One hundred and eighty daily lessons incorporating various activities and materials have been planned to be presented in a group instructional situation. The kits include a teaching manual and materials which consist of a series of picture cards, colored plastic chips, two hand puppets, and a tape recording of stories and music. These items are conveniently stored in a metal carrying case.

Level #1 of the PLDK can be used in primary educable special classes. Level #2 is applicable for intermediate age educable retarded students.

Introduction

Increasing interest has been shown during the past decade in the language development processes of mentally retarded children. Authorities agree that one of the major characteristics of the mentally retarded is their language limitation. Yet adequate communicative skills are of utmost importance if satisfactory social and occupational adjustments are to be made. Thus, increased emphasis is being placed upon approaches to aid the general language development of mentally handicapped students.

Kirk and Johnson state, "The language ability seems to be inadequate in most mentally handicapped children.... The development of language at this age may stand the child in good stead throughout his life, for it is his chief means of communication with others."¹

Johnson writes, "Verbal communication is the most commonly used and most important form of communication. It is necessary to communicate with others in all kinds of social and economic relationships. It is essential that the slow learners be taught to communicate as effectively as possible so as to learn to make good social and vocational adjustments as easily as possible. The early speech correction and speech improvement program will aid in this program but it must also be extended beyond the pre- and beginning reading stages."²

Freeman and Lukens, reporting on a speech and language program for educable mentally handicapped

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children, state, "The nature of the curriculum for oral communication must be such as to provide many opportunities for extremely frequent repetition of meaningful communication experiences. As in other areas, the daily practice of skills in concrete situations is essential to learning....

Most educators recognize the importance of social education for mentally retarded children. Since the acquisition of social competencies is a major goal in the education of mentally handicapped children, speech and language necessarily are important aspects of their total educational program. Through coordination of classroom and speech correction programs, increased social competence becomes a reality for these children."³

One attempt to provide a comprehensive and intensive language training program is the Peabody Language Development Kits.

PEABODY LANGUAGE DEVELOPMENT KIT (PLDK) LEVEL #1

Purpose of Kit

The program embodied in the Peabody Language Development Kit has a threefold purpose: 1) to stimulate overall oral language development, 2) to develop verbal intelligence through training, and therefore, 3) to improve school progress. The kit stresses a general language development approach rather than a remedial program to correct specific speech defects. A group situation is employed, allowing for a stimulating period in which all children are encouraged to participate. The Peabody Language Development Kit is intended to be a part of the total language arts program. It is not intended to replace regular activities in daily use in the classroom, rather to supplement them.

Level #1 of the Kit is designed for children who have a mental age of 4½ years to 6½ years. This would include educable mentally retarded children in primary special classes and culturally disadvantaged children in first grade. The materials could also be used with kindergarten children who are intellectually average or above, and slower pupils in a regular first grade class.

No specialized training in speech therapy or psychology is needed to teach the lessons. Thus,

the material is well suited for use by the special class teacher. The suggested activities may be modified if necessary to conform to the needs and backgrounds of the students within any given class.

Kit Materials

The Peabody Language Development Kit, Level #1, is a collection of materials which are contained in a compact 12" by 8" by 9½" metal carrying case. Included are:

1. a Manual which contains the 180 daily lesson plans, "General Information and Directions," information on research and development of the kit, and lists of materials.
2. a set of 430 full-color 7" by 9" stimulus cards arranged in 13 different categories, lithographed on triple-laminated stock to prevent see-through, and specially coated for long life. These cards are used to build vocabulary and stimulate associative thinking.
3. six large "Story" and four large "I Wonder" pictures, printed on 14½" by 28" plastic paper in full color to stimulate imagination and continuity in story telling.
4. a set of 350 plastic color chips, 35 of each of ten different colors, which interlock to allow chaining; used to teach the colors, sequencing, motor skills, memory, as well as to reinforce learning.
5. two soft hand puppets, "Peabo" (Peabody) and "Telsie" (Tell and See), used by the instructor and children alike to motivate and draw out the total group and especially the withdrawn and distractible.
6. a tape recording containing six favorite fairy tales as told by a male speech model, and songs and music for introducing and concluding "Language Time."

Not included, but necessary for the presentations of the lessons, is a tape recorder that plays 3 3/4 ips, plus a clear tape in addition to the prerecorded tape included in the kit. (Manual, p. vii.)

Presentation of Material

1. It is suggested that the daily lessons be 30 minutes in length if the class includes 15 children or less.
2. The activities do not require reading or writing skills and no seat work is involved. It is intended that "Language Time" be an interlude from conventional school work, the emphasis being on understanding speech, talking and thinking through activities that are enjoyable and highly motivating.
3. The Daily Lesson plans indicate all materials that will be needed to present each lesson. For example, if any 7" by 9" stimulus cards are to be used, the category is listed (such as Animal Cards) as well as the name and number of each specific card.
4. Detailed instructions for guiding the activities are given in each Daily Lesson plan. Suggestions for modifying or expanding the lessons are included. One lesson is reproduced from the manual as an example:

DAILY LESSON NO. 1

Materials needed: Animal Cards: cat (2), dog (3), bee (6), cow (10), donkey (11), duck (12), pig (19), rooster (20), sheep (21), snake (39) / Puppet, Peabo/
Tape recorder and tape: Introductory and Concluding Songs to Language Time.

1. LISTENING TO ACTIVITY TIME. Instructor may open lesson by playing the taped Introductory Song to Language Time, which is sung to piano accompaniment. Repeat this opening song, encouraging children to join in. Then play the Language Time Song (piano only) and ask the children to sing the words to this.
2. BRAINSTORMING TIME.* Have children name as many animals as possible from memory in three to four minutes. Use free responses from the total group. Call on

slower children first. Keep score on the board with tallies, or make list of responses for future use. (Do not use Animal Cards as clues)

*If the children are mature enough, the instructor may create a spirited, competitive game by dividing the room into two or three teams. Call on each team in turn for responses. Rotate as long as hands are up in all groups; otherwise call on the first team with a hand up. Keep score with tallies on the board.

3. VOCABULARY BUILDING TIME. Present the ten animal cards in turn, asking for different volunteers to identify each animal by name. Instructor repeats each response to set a good speech model. Have group repeat each response in unison after instructor. Place cards in order along the chalk ledge. If additional practice seems indicated, go through the cards a second time, asking the group to name in unison the animals. Go through the cards a third time (randomly selected) calling on individual children (other than volunteers) to identify the pictures. Give all children an opportunity to respond. Conclude by counting and recounting the ten cards in unison.

4. FOLLOWING DIRECTIONS TIME. Have Peabo, the puppet, say, "We are going to play a 'Do-What-the-Leader-Says' game. Let's see how many good listeners we have."

Puppet gives only oral directions such as, "Close your eyes, open your eyes, stand up, sit down, stand on one foot, hold up one hand, hold up two hands, put your

hands down, stand up again, hold your nose, touch your head, sit down again." To make activity easier, give both oral instructions and demonstrate. To make it more complex, give two commands such as, "Hold your nose and rub your tummy." (Some children may not know the parts of their body; therefore, these will need to be taught before beginning this activity.)

5. LISTENING-ACTIVITY TIME. Instructor may close the lesson by playing the taped Concluding Song to Language Time, which is sung to piano accompaniment. Repeat this closing song, encouraging children to join in. Then play the Concluding Song (piano only) and ask the children to sing the words. (Manual, pp. 1-2)
5. The philosophy of the Peabody Language Development Kit is that the materials and activities should be highly motivating and rewarding for all children. Thus, the atmosphere in which learning takes place should be relaxed and enjoyable. The engaging puppets, attractive stimulus cards, the use of the tape recorder, etc., will also serve to keep the attention of the children on the changing activities at all times.
6. An important aspect of the program is that each child's performance should be rewarded with liberal praise. Many times the praise should be accompanied by handing out a color chip, stimulus card, or some other concrete reward. In this manner appropriate behavior is reinforced and rewarded.
7. Lessons have been planned to provide repetition. After a child has successfully performed an act, it is extremely important that he have an opportunity to repeat it successfully a number of times. Thus, practice, drill and review play an important role in the program.

Types of Activities

A total of twenty-three different types of activities are included in the lessons. These are listed in the manual as follows:

Activity Time	Looking Time
Brainstorming Time	Memory Time
Classification Time	Pantomime Time
Conversation Time	Patterning Time
Critical Thinking Time	Relationship Time
Describing Time	Rhyming Time
Dramatization Time	Speech Development Time
Following Directions Time	Speed-up Time
Guessing Time	Story Time
Identification Time	Touching Time
Imagination Time	Vocabulary Building Time
Listening Time	

These activities will:

1. stimulate coherence and continuity in story telling.
2. aid in building memory.
3. stimulate imagination.
4. encourage spontaneous conversation.
5. improve listening skills.
6. increase vocabulary.
7. develop ability to follow directions.
8. give opportunities to describe a variety of things.
9. emphasize rhyming.
10. provide opportunities to touch objects, then tell how they feel.
11. allow dramatization and pantomime.
12. encourage critical thinking.
13. give opportunities for classifying objects.
14. provide for guessing games and listen to clues.

15. aid in speech development.
16. assist in perceiving relationships.
17. provide for observation and looking.
18. allow for activity time and doing things.
19. stress identification of things and objects.
20. improve creativity through brainstorming sessions, e.g., naming as many animals as possible from memory in a given time, thinking up unusual uses for objects, etc.
21. stress problem solving.

Each lesson contains an average of three activities, but the range is from two to five activities each. The emphasis is placed on sequencing the difficulty of the exercises for a particular activity from the beginning to the end of the year rather than within any daily lesson. An attempt is made to coordinate a day's activities, however.

Development of Kit

An original investigation of the effectiveness of a group language development program was carried out in 1962 by James O. Smith, co-editor of this level, as his doctoral study at Peabody College at Nashville, Tennessee. He developed 33 daily lessons which were later revised by Carolyn M. Smith as a specialist in education project at Peabody. A number of the brainstorming items were presented by Sue Rouse as her doctoral study at Peabody. The great bulk of the work of providing materials to expand the number of lessons was carried out by a group of general and special educators at Peabody College during the 1964 summer session. In the late summer, the co-authors developed the experimental edition of the PLDK which consisted of 200 daily lessons. This was field tested extensively in 1964-1965 in California, Illinois, Kansas, South Carolina, Tennessee, and Washington. These teachers evaluated each daily lesson, providing numerous suggestions for its improvement. The co-authors then thoroughly refined the lessons again during the 1965 summer session.

PEABODY LANGUAGE DEVELOPMENT KIT LEVEL #2

Level #2 of the PLDK was published in 1966. This Kit is designed for pupils who are intellectually 6 to 8 years of age. Thus, it would be applicable for educable mentally retarded pupils in intermediate special classes as well as second grade children from economically deprived areas of urban and rural communities. The materials could also be used with first grade children who are intellectually above average and also some trainable retarded adolescents.

The purpose of the program and the materials which comprise the Kit are similar to Level #1. One addition which has been included in the Level #2 Kit is the Teletalk, a two-way inter-communication device powered by batteries.

There are 180 daily lessons as in the first level Kit. However, fewer activities are planned for each individual lesson as more time is spent on each activity.

The co-authors report in this publication that research tends to show the lessons do appear to be effective in stimulating oral language development. They state, however, that the evidence is less clear on the usefulness of the lessons in training intellect, and in enhancing school achievement.

Two other levels of the PLDK are currently in preparation. Levels P and 3, levels below and above the present levels are now in experimental usage throughout schools and training centers in the United States. The publishers expect Level #3 to be available in September, 1967, and Level P to be available immediately thereafter.

Modification of Materials and Activities

Teachers using the Peabody Language Development Kit may follow or depart from the suggested activities according to their own inclinations and the abilities of their group. Less time may be spent on those activities that are not as popular with the children. Minor adjustments may be needed to present the activities at a more appropriate difficulty level. If a tape recorder is unavailable, the text of the fairy tales and words and music to the Language Time songs may be found in appendix of the manual.

The materials and activities may be supplemented in a number of ways. For example:

1. The children may learn songs about airplanes, animals, home activities, community helpers, etc., as these things are presented through the use of the stimulus cards.
2. Movies dealing with various aspects of transportation or community helpers may be shown after activities involving the use of People or Transportation categories of stimulus cards.
3. The children may draw pictures of an imaginary trip taken to the farm, the grocery store, etc.
4. A number of opportunities may arise for further dramatization experiences, e.g., eating food, going to a restaurant, playing with toys, etc.
5. Appropriate poems and stories may be found to supplement the activities.
6. Additional number and color games may be devised.
7. Original stories and letters could be written.
8. The children could make sock puppets for their own use.
9. Assembly programs may serve as a culminating activity.

Advantages of Program

1. No specialized training is necessary to teach the language development program.
2. The program has a high interest appeal for children. The activities are fun and highly motivating.
3. The program reinforces concepts taught in the social studies and science areas as well as stressing reading and arithmetic skills.
4. The materials in the kit are well organized and would be easy and convenient to use. For example, the stimulus cards are stored in the center compartment in the metal carrying case. A colored identifying letter and number is printed on the top right-hand corner of each card, corresponding to the dividers. The metal case is compact and would be convenient to store.

5. The manual is detailed and complete, yet is well organized to facilitate ease in usage.
6. The items in the kit are very colorful and attractive. They are constructed of quality materials and should withstand well the wear and tear of everyday classroom use.
7. The prepared kit includes most of the materials needed to teach the lessons. Additional items that are needed are common things that may be easily procured.
8. The program is designed to provide an opportunity for each child in the classroom to gain some measure of success. Thus, even those children who experience difficulty with the more academic subjects in school can feel a sense of positive accomplishment in the language development program.
9. The activities can be modified to suit the abilities and needs of various groups.

Limitations of Program

1. The cost of the materials may be a limiting factor in some situations. The price of the Level #1 kit is \$52.00. The Level #2 kit is priced at \$65.00.
2. The lessons require 30 to 45 minutes of instructional time daily. In a schedule that may already be crowded it could prove difficult to find the time to conduct the program.
3. The research to date on the PLDK fails to prove conclusively that the program does indeed accomplish its stated purpose of stimulating oral language development, developing verbal intelligence through training, and therefore improving school progress.

RESEARCH

Increasing interest has been shown during the last five years in conducting experimental research on group language development programs for mentally retarded children and also investigating the possibility of increasing intellectual ability through training. The Peabody Language Development Kit, however, is the

first attempt to develop a program that has the dual purpose of stimulating both global language functioning and verbal intelligence through a group instruction program.

Research Dealing with the Concept of Group Language Development Programs

J. O. Smith, in his initial study on the effectiveness of a language development program (1962), found that an experimental group of educable mentally retarded children who received a three month instructional program made significantly greater gains in overall language age as measured by the ITPA than did the control group who had no special language stimulation.⁴

Blue, in a replication of Smith's work as applied to trainable mentally retarded children, also found significant gains were made by the experimental group receiving a structured language development program.⁵

A follow-up study on the children involved in Smith's research was conducted after a period of approximately one year. Mueller and Smith found that, upon re-examination, the differences in language age between the experimental and control groups were no longer significant. This finding suggested the need for a longer period of treatment (the lessons had extended over a three month period) so as to enhance the chances of initial gains becoming permanent advantages.⁶

Blessing, in a study done in 1964, found that through a four month group language program he was able to increase significantly the talking (vocal encoding) score of 20 experimental subjects as contrasted with 20 comparable control subjects. In a two-year follow-up, Weld found the experimental group was no longer superior, thus bringing into question again the long term effects of a short term group language program. However, these studies did indicate that language functioning could be increased, at least temporarily, as a result of a group language development program.⁷

Research Dealing with the Peabody Language Development Kit

In reporting on research done with the Peabody Language Development Kit, the co-authors of the Kit point out that the research referred to in the manual was done with the experimental edition of the PLDK and not the published materials.

Dunn and Mueller have initiated a three year study, with tentative data available after the first year (1965). Involved are 734 first grade disadvantaged children divided into 10 experimental groups and 150 control subjects. Optimistic conclusions are reported about the effectiveness of the experimental version of the PLDK in stimulating both language facility and verbal intelligence, as well as enhancing school progress. However, insufficient evidence is given to substantiate these findings, necessitating further investigation of this study.⁸

Ensminger also field tested the experimental version of the PLDK. The experimental subjects were 6 to 10 years of age, had I.Q. scores of 70 to 90, and were taught a daily lesson for the first seven months of the school year. Language change was measured with the ITPA and intelligence change with the Stanford-Binet. Language age gains for the total experimental group was 8 months as compared with 5 months for the controls, but this difference was not statistically significant. When the groups were divided into those with mental ages below 77 months (6.5) and those above 77 months, the lower mental age experimental children made significantly greater gains than their control counterparts, whereas the higher mental age experimental subjects did not. The co-authors interpret this to mean that Level #1 of the PLDK works for the children for whom it was designed, namely those who have mental ages of 4½ to 6½ years, but may not be effective for those who have advanced beyond this point.⁹

Robert C. Gibson, in a doctoral study at the University of Iowa completed in 1966, ¹⁰ attempted to evaluate the effectiveness of a supplemental language development program with educable mentally retarded children. Twenty-six children between the ages of 6½ and 9½ years in the Pine School Unit of the University Hospital School made up the population sample for this study. From November 1, 1965 to May 1, 1966, the first forty-five lessons of the Peabody Language Development Kit Level #1 were presented to the experimental group as a supplement to their regular language instruction program.

The results of this study found that there was an increase in the language ability of the experimental group but this growth was not general enough so as to be statistically significant. An identifiable increase in verbal intelligence in favor of the experimental group was found, but again, this failed to be statistically significant. The data showed some indications of growth in school progress in favor of the experimental students but this also was not

statistically significant.

Gibson felt that the highly stimulating program of the Pine School may have affected the results of the study by possibly reducing the difference between the experimental and control groups.

Thus, Gibson's study concluded that,"(1) there was nonsignificant gain in oral language; (2) there was no increase in verbal ability; and (3) there was no increase in academic school progress. A fourth conclusion appears valid; it being that the magnitude of gain in language age by both groups was greater than one would have anticipated for mentally retarded children."¹¹

In Summary

Research dealing with the effectiveness of group language development programs for mentally retarded children tends to show that overall language functioning can be improved through the use of organized training sessions.

Research reported using the experimental version of the Peabody Language Development Kit Level # 1 showed that the PLDK appeared to be effective in "stimulating both language and intellectual facility and thus school achievement when taught to a total class by the regular teacher. This is true especially if the training program is extended over the school year and if the lessons are taught to those for whom they were designed, namely those with mental ages $4\frac{1}{2}$ to $6\frac{1}{2}$ years."¹² However, insufficient evidence is given to substantiate these finds conclusively.

Gibson's study failed to support the contentions of the PLDK authors concerning the threefold purpose of the program. Gibson does state, however, that "The consistent direction of growth by the experimental group gives some degree of validity to the co-author's contentions that the PLDK which they have developed does stimulate verbal intelligence, oral language and increase overall school progress. However, with the subjects, treatment, evaluation techniques and measurements used in this study the gains made are statistically significant in isolated areas only."¹³

ILLINOIS TEST OF PSYCHOLINGUISTIC ABILITIES (ITPA)

With the growth of interest in the language development processes of mentally retarded children has come the need for instruments to measure these psycholinguistic processes. One test which has been developed is the Illinois Test of Psycholinguistic Abilities (ITPA). This test was developed by Kirk and McCarthy at the University of Illinois and the experimental version was published in 1961 by the University of Illinois Press. Work on a revised edition is under way with a publication target date of late 1968 or early 1969.

The ITPA is an individual test for children between the ages of 2½ and 9 years. It must be administered and scored by a trained psychologist. The test is diagnostic in nature, assessing the child in such a way that an educational or remedial program can be initiated.

The test consists of nine sub-tests: (1) auditory decoding, (2) visual decoding, (3) auditory-vocal-association, (4) visual-motor association, (5) vocal encoding, (6) motor encoding, (7) auditory-vocal automatic, (8) auditory-vocal sequencing, and (9) visual-motor sequencing. The test yields a profile of these nine language skills as well as a total language age.

The ITPA assesses the child's particular areas of ability or disability. It should be noted that the Peabody Language Kit does not attempt to correct these specific defects or weaknesses. Rather, it presents a more general approach to overall language development programming.

FOOTNOTES

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13. Gibson, p. 44.