Bilingual education, as an approach to the problem of preparing the American Indian child for entry into American public schools, has not proven satisfactory due to a lack of properly certified teachers and a tendency to thrust too much upon the child too fast. In response to this problem, a tutorial system has been devised in which bilingual, upper-grade-elementary Indian children are used as tutors for kindergarten and first-grade Indian children. Procedures to establish this system are: Phase I--to identify the critical vocabulary to meet students' needs; Phase II--to devise diagnostic tests based on the critical vocabulary to indicate individual student requirements; Phase III--to develop training materials, audio-visual materials, and home study materials for the students' tutors and to select and train adult tutor supervisors; Phase IV--to select and train bilingual student tutors and to conduct student diagnostic testing; Phase V--to assign bilingual tutors to individual students and implement instruction; and Phase VI--to conduct a post-assessment of the structured tutoring learning process, to revise the specific tutoring model for use with Navajo children, and to revise the general tutoring model to optimize it for use in second language instruction. (Author/RW)
THE USE OF BILINGUAL STUDENT TUTORS IN TEACHING ENGLISH AS A SECOND LANGUAGE

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Problem

Perhaps the most disadvantaged minority of any of the western cultures is the American Indian. Most of the problems of any disadvantaged group are magnified in the Indians, as evidenced by the abnormally high dropout rates in elementary and secondary schools as well as in high institutions of learning. Among the more serious disadvantages of many Indian children is a lack of proficiency in English upon entry to our public schools. Reared in the relative isolation of a reservation or farm where their native language is used almost exclusively during their preschool years, they then enter a "mixed" public school seriously deficient in basic English comprehension.

In an environment with other children who don't have the problem, there is an increasing need for a solution to the problem of non-English speakers, specifically American Indian children, to perform satisfactorily in our schools. From Alaska to the southern tip of Florida many of the American Indian children attending Bureau of Indian Affairs Schools or public schools are non-English speaking. William H. Kelly states in his 1967 paper "Current Research on American Indian Education, A Critical Review of Selected Ongoing Studies" that most Indian students either do not speak

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before entering school or are seriously deficient in their knowledge of English. This deficiency in English becomes a major disadvantage to his classroom performance since all subjects require a fairly sound command of English. Consequently, they soon fall behind in scholastic achievement which proves to be crippling to them throughout life. Traditional approaches to this specific problem have involved bilingual teachers and bilingual curricula. After years of experience, it is apparent that this approach is not completely satisfactory for a variety of reasons.

Research has substantiated that in most instances children who are deficient in language do not learn effectively in a classroom situation. It has been found that children who are deficient in language "tune out" even in small group settings. Only when the teaching was conducted on the basis of short (fifteen minute), one-to-one sessions between the teacher and child did the children benefit from instruction. Furthermore, it was found that unless the learning activity was highly structured, the children did not benefit from the instruction provided on a one-to-one basis. (Blank & Solomon, 1969)

Research conducted over the last six years by the author has demonstrated that only by means of highly structured individualized help, can the unique learning characteristics of disadvantaged primary grade children be met. Dr. Harrison has identified ten characteristics frequently evidenced by educationally disadvantaged children which interfere with their ability to learn in a group situation. These characteristics identified in a series of projects involving disadvantaged children included tendencies to:
1. Respond impulsively without reading the question or problem.

2. Learn to elicit answers from teachers by means of subtle cues, results in them not learning the desired concept or task.

3. Evidence limited task perseverance.

4. Proceed with insufficient confidence because of repeated failure.

5. Require significantly more clarification and explanation regarding the directions and procedures.

6. Fail to request help or clarification from the teacher when needed.

7. Require that instruction be presented systematically in small increments.

8. Require more appropriate practice with a new task than other children.

9. Suffer from failure induced by low levels of motivation in academic areas.

10. A tendency to mumble when they respond orally because of the fear of being incorrect.

It is humanly impossible for a teacher in a traditional classroom setting to devise methods of instruction that will compensate for the unique learning characteristics evidenced by many disadvantaged children.

The following are some of the limitations faced by teachers.

1. Because of time restraints the learning needs of low-achieving students are not identified precisely enough.

2. It is not possible to insure each child is reading every problem carefully before they respond.

3. In a regular classroom setting it is extremely difficult to provide individual students additional clarification and explanation regarding procedures.

4. It is humanly impossible for a teacher to monitor the behavior of students individually during a learning activity.
5. In a regular classroom setting it is extremely difficult for a teacher to provide individual students additional appropriate practice on a new task.

6. A teacher of necessity gears her instruction to the majority.

7. There is a limit on how much specific feedback a teacher can provide individual students.

8. There is a limit on how much reinforcement and encouragement a teacher can give individual students.

Consequently, in many instances, the unique instructional needs of children who are deficient in language are not being met.

The problem is further compounded by the fact that parents of these children are frequently less likely or able, for a variety of interfering conditions, to provide their children individualized help at home as consistently as advantaged parents.

As early as 1967 Dr. Rolando A. Amader of the Southeastern Educational Laboratory pleaded for some mechanism by which, within a bilingual instructional setting, instruction could be legitimately individualized. However, even if there were enough certified bilingual teachers to instruct children on a one-to-one basis the problem would not be completely solved. First, such an approach is financially impossible, and secondly, traditional approaches for teaching a second language have not proven very effective.

It is desirable therefore to develop a new approach to this second language problem which will meet the following criteria: (1) Be sensitive to the unique learning characteristics of children who are deficient in language. (2) Be more efficient, and (3) Be financially feasible.
A New Approach

It is apparent that the key to improving the situation with Indian children who are deficient in language is effective individualized instruction. Cost and bilingual teacher availability preclude drastic reductions in classroom size and a dramatic increase in the numbers of teachers assigned to work with Indian children. It is proposed to explore a completely new approach to the problem. In several replicated experiments it has been demonstrated that if nonprofessional tutors (e.g., students, parents) are trained in the use of structured or prescribed techniques and procedures, they are very effective in helping a younger disadvantaged child achieve specified objectives. Using such research as a base of departure, it is proposed that the feasibility of using Indian students who are bilingual as tutors for Indian children who are deficient in English be investigated.

Tutoring is not a new concept. However, the involved procedures, controls, and disciplines that have been developed in structured tutoring models over the last six years are unique. Structured tutoring was initially used in teaching basic concepts to children of Mexican-American descent in local California school districts. Its success there led to wider use for teaching basic reading and mathematic skills to primary age children who were experiencing difficulties in these areas. The structured tutoring concept as it has evolved, basically utilizes in a highly structured role upper-grade elementary students who have mastered the subject material to be taught the younger children. Adult supervisors for the tutors are provided very specific
competencies by means of an applied training workshop. These adults need not be professional educators. Adults with no more than a high school education have functioned very well in such a role. Following are the basic elements of the structured tutoring model.

1. Pre-established instructional objectives.
2. A pre-determined sequence for introducing the specified objectives.
3. A valid means of assessing mastery of the pre-established instructional objectives.
4. Instructional materials appropriate for the instructional objectives.
5. Validated tutoring techniques and procedures commensurate with the instructional objectives.
6. Management procedures capable of making instructional prescriptions for individual students based on pretest performance.
7. Management procedures capable of systematically checking individual student mastery of instructional prescriptions.
8. Management procedures capable of maintaining a record of when instructional prescriptions are made, the date the student achieves mastery of each instructional prescription and the date subsequent reviews of objectives are to be made.
9. Management procedures capable of insuring that objectives previously mastered are systematically reviewed.

The procedures and techniques involved in structured tutoring represent to some extent principles of learning which have been identified primarily with programmed instruction. In a sense, structured tutoring is an extension of programmed instruction, in which the tutorial procedures are carefully prescribed and conform to basic tenets of programmed instruction. It is the first form of individualized instruction capable of truly monitoring oral response. It is also the first form of individualized instruction capable of
monitoring the student's behavior while he attempts to solve a problem.

Structured tutoring provides a degree of flexibility with instruction that cannot be duplicated with computers. Tutoring techniques and procedures are identified which allow for maximum sensitivity to the individual learning characteristics of the child being tutored so as to maximize learning gains.

Structured tutoring is a teaching technique rather than a set of materials so that the subject matter taught can be determined entirely by the curricular requirements of the school system in which it is used. Preliminary research indicates that this type of tutoring has great potential for individualizing instruction at the primary grade level, and could very possibly provide the answer to the ever-pressing problem of effectively adapting instruction at the primary grade level to individual differences.

The teaching techniques associated with Total Physical Response (TPR) provided the vehicle for the adaptation of the structured tutoring model for teaching a second language.

The strategy of the total physical response is to have the students listen to a command in a foreign language and immediately obey with a physical action. For example, two students will sit on either side of the instructor. In Japanese, the instructor may say "tate" and immediately, along with the instructor, the students stand up. Then he may say "aruke" and everyone walks forward. Other commands may be "tobe" (jump), "maware" (turn), "kagame" (squat), and "hashire" (run). The training begins with brief one-word utterances, but within thirty minutes, the morphological and syntactical complexity of the commands has been increased.
This approach has some similarity to how children seem to learn their first language. For example, young children in America acquire a high level of listening fluency for English before they make English utterances. This listening fluency can be demonstrated by observing the complexity of commands which the young child can obey before he learns to speak; and even as speaking develops, listening comprehension is always further advanced.

The use of total physical response (TPR) in teaching a foreign language has been studied in numerous experiments and substantial evidence supporting its effectiveness has been accumulated. (Asher, 1966, 1972).

Studies by Asher have shown the superiority of TPR over more traditional foreign language teaching procedures. Audio-lingual approaches typically stress the importance of teaching both listening and speaking together. Asher reasons that the stress of trying to master the pronunciation should retard the student's ability to focus on listening and understanding. An experiment comparing the two approaches did indeed confirm this conclusion: The group not required to mimic the foreign utterance demonstrated greater listening comprehension than the group both listening and speaking (Asher, 1969).

The question might be raised, even if TPR results in greater listening comprehension, does it aid one to speak or read or write better? Yes, it does. There is evidence that listening ability facilitates the other three skills of speaking, reading, and writing, especially speaking (Asher, 1964a, 1964b). In the eight-week German experiment, despite the absence of any systematic training in reading, the TPR group performed just as well on reading tests as the control group, whose training emphasized reading and writing (Asher, 1972).
Another question: Does TPR work just with simple straightforward commands that the student can memorize? No, the method actually shows its strongest advantage when the commands are long and involved and when new commands are constructed which have never been heard by the student during training, but only during the test (Asher, 1965). The superiority of TPR for such commands is indeed phenomenal.

This study was designed to evaluate the proficiency with which 7th and 9th grade tutors could use the total physical response technique within the structured tutoring model as a potential solution to the problems of native American Indian students in language skills.

Procedures

The acquisition of tutors and subjects took place through the local Headstart program and junior high in Blanding, Utah where 50% of the students enrolled in the public schools are Indian.

Headstart children were selected because of their deficiency with the most basic English commands. Their average age was four years.

Subjects were selected by means of a diagnostic pretest. Fifteen children were designated as deficient in English by their teacher. Ten were randomly selected from those who were tested.

The student tutors were selected by the English teachers in the junior high school. Training in specific testing and tutoring procedures required approximately four hours in which the tutors demonstrated mastery of the techniques through role playing some of the commands.
The command inventory (pretest) consisted of 67 items from the following categories:

1. Objects like ball, crayon, etc.

2. Fixed commands with objects like "touch the floor," and without objects like "stand up."

3. Physical responses with numbers, letters, and colors. ("touch the 3," etc.)

4. Multiple commands such as "stand up, turn around and raise your hand" were taught in small groups with mastery of each group required before progress to the next group was allowed.

Results

The scores of the students who were tutored is summarized on Table 1.

Insert Table 1 about here

Based on the entire inventory they averaged 40.0 on the pretest and 57.4 on the posttest, a mean gain of 17.4 items. Using a simple two-tailed t-test, the pre-post differences are significant at the .001 level.

This average difference in percentages is 59.3% versus 85.4%. With a preinstructional goal of having eighty percent of the subjects reach eighty percent of the criteria, all but two of the subjects scored higher than 85%. The other two were below the eighty percent criterion level.

The learning gains realized take on even more significance when considered in light of the total amount of time each child was tutored.

The average number of tutoring sessions was eight and the average total
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**Table 1**
time each tutor worked with the individual child was 2 hours 20 minutes in 15 minute sessions over a three week period.

This limited demonstration, although significantly successful, requires extension into additional curriculum areas and older populations with more complex language requirements. The authors are confident, nonetheless, that the combination of structured tutoring and total physical response will emerge as a practical solution to the heretofore unsolved problems of second language acquisition among public school children who are deficient in English-speaking and comprehension skills.
REFERENCES


