DOCUMENT RESUME

ED 140 466

INSTITUTION

95

TM 004 736

AUTHOR TITLE

NOTE

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Built-In Assessment Instruments in an Instructional

Program Designed for Spanish-Speaking Children. Southwest Regional Laboratory for Educational

Fesearch and Development, Los Alamitos, Calif.

SPONS AGENCY PUB DATE

National Inst. of Education (DHEW), Washington, D.C.,

CONTRACT

NE-C-00-3-0064

15p.; Paper presented at the Annual Meeting of the

American Educational Pesearch Association (Washington, D.C., March 30-April 3, 1975)

EDRS PRICE DESCRIPTORS MF-\$0.76 HC-\$1.58 PLUS POSTAGE

Bilingual Students: Educational Objectives:

Elementary Education: Elementary School Students; *English (Second Language); Instructional Materials: *Instructional Programs: Language Skills: Program Evaluation: *Second Language Learning: *Spanish

Speaking; *Student Evaluation

ABSTRACT

Instructional materials and procedures to be used by Spanish-speaking children learning English call for assessment strategies not normally employed. Assessment scores aid in the selection of students, in student placement, in identifying children in need of remediation, and in assessing student performance at the end of the program. Assessment scores, along with attendance records, are useful in evaluating program effectiveness and in conducting followup studies which evaluate student progress beyond the program. Assessment strategies and procedures are described which have been incorporated into SWRL's English Language and Concepts Program for Spanish-Speaking Children (LCS), a program proven to be robust at a high level of effectiveness. (Author)

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BUILT-IN ASSESSMENT INSTRUMENTS IN AN INSTRUCTIONAL PROGRAM DESIGNED FOR SPANISH-SPEAKING CHILDREN

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Paper presented at the AERA (American Educational Research
Association) Annual Meeting, Washington, D.C., March 30-April 3, 1975.

Session no. 11.15



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ABSTRACT

During the 1969-1975 period, materials, procedures, and the accompanying assessment system of the SWRL English Language and Concepts Program for Spanish-Speaking Children (LCS) were exercised. The LCS assessment system is described in the context of the program goals, program description, scope of the tryout period, and summary of pupil assessment results. References are made to published documents presenting detailed statistical results.

BUILT-IN ASSESSMENT INSTRUMENTS IN AN INSTRUCTIONAL PROGRAM DESIGNED FOR SPANISH-SPEAKING CHILDREN

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Factors to be considered in designing an instructional program concerned with the acquisition of English by speakers of Spanish and a parallel discussion dealing with the acquisition of Spanish appear in publications by the speaker. Program goals, program procedures and materials provided by the English Language and Concepts Program for Spanish-Speaking Children (LCS) are described in this paper to present the framework in which the built-in assessment system operates.

LCS PROGRAM DESCRIPTION

Program Goals: Primary goals of the SWRL English Language and Concepts Program for Spanish-Speaking Children (LCS) are to teach Spanish-speaking children to communicate effectively in oral English language skills. An increasing amount of attention is given to the development of skills that prepare the children for future reading and writing in the subject matter areas of mathematics, science, and social studies. An important objective in the development of LCS has been to develop instructional and assessment procedures that will help integrate the program into extant bicultural, bilingual programs that will strengthen and extend the Hispanic cultural characteristics.

The work upon which this paper is based was performed pursuant to Contract NE-C-00-3-0064 with the National Institute of Education, Department of Health, Education, and Welfare.



Program Procedures: The Program consists of 225 daily lessons and accompanying follow-up materials. Organization of the Program into 15-lesson units allows for planning flexibility. At the end of each 15-lesson unit an assessment and review lesson are presented. Approximately 25 minutes of instruction are included in each teacher directed lesson. As many lessons are presented per day as is consistent with the pacing requirements of the class.

Classroom instruction centers on situations that encourage communication between teacher and learner and between learner and learner. Further practice is provided either by student tutors or adult aides on a one-to-one basis, or by the teacher on a small group basis, at the teacher's option. The follow-up activity takes an additional 25 minutes to present.

Language is used in a setting that gives the pupil many opportunities to use syntactic and vocabulary items that present problems. The sequence of lessons emphasizes the interrelationships of syntactic structures.

Each objective is presented in the context of previously-learned material.

Materials Provided:

1. A Placement Aid helps determine which pupils will profit from the Program. The results of this assessment, when used in conjunction with the teacher's knowledge about each pupil, indicate whether a given pupil should enter the LCS Program at the beginning (Unit 1), at a more advanced level (Unit 9), or if he should move directly into the school's basal reading program.



- 2. Individual Lesson Cards to be used by the teacher state the language skills being taught and the teaching procedures to be used. Each lesson also contains a list of needed materials.
- 3. Practice Exercises are the basic materials to be used in conducting the LCS follow-up practice. They are designed to facilitate easy use by a 5th or 6th grade student tutor or aide in working with individual students or small groups of children, and review the newly-learned language skills in the context of a cumulative review.
- 4. The Assessment Cards are used at the end of each 15-lesson unit to check the proficiency of each pupil to comprehend and produce the language structures included in the unit.

 Review Cards provide additional practice if required.
- 5. Each 15-lesson unit includes a Dialog Practice Exercise to be administered either before or after the assessment. The Dialog Practice Exercise includes content from previous LCS units and provides structured dialog contexts designed to strengthen conversational use of English sentences. A Dialog Practice Review provides further structured practice for those Pupils who need it.
- 6. An End-of-Program Assessment is provided to evaluate the achievement level of each child in the English language and concept skills presented in the Program.



- 7. Self-contained Teacher and Tutor-Aid Training Materials accompany the <u>LCS</u> Program. A guide, to be used by the teacher in training either tutors or aides, provides procedures to be used for correction of student errors.
- Concept Cards, Concept Posters, and other visuals are used to present language concepts.

ASSESSMENTS IN THE LCS PROGRAM

Design Considerations of the LCS Assessment System: At the initial stages of designing the built-in assessments, certain general procedures were recognized as being indispensable. The children were to demonstrate by their performance the comprehension of concepts, the ability to answer different types of questions with acceptable phrases, and the ability to produce complete sentence responses. Each assessment to be used in an individually administered context by the teacher was to take 5-10 minutes to administer and score. Real objects, posters, flashcards and the use of a puppet were to be used in establishing communication contexts to elicit desired responses.

During the tryouts various format procedures were refined. A section was added to the Placement Aid and End-of-Program Assessment in which situational contexts made it necessary for children to produce simple and complex sentences. For those students selected entry points and procedures were established. The 15-lesson unit assessment and 40 item End-of-Program Assessment were developed to accompany the LCS



Program. The End-of-Program Assessment is more difficult and contains more items than the Placement Aid administered prior to instruction.

<u>Skill Areas Assessed</u>: The built-in assessment instruments contain items which assess various performance skill areas.

 Concept identification - a simple recognition of an English concept by the pupil, e.g.,

Point to the two shapes that are equal in size.

Concept statement - a more complex behavior requiring the
pupil not only to recognize but also to produce the appropriate
words or phrases to communicate an understanding of concepts,
e.g.,

Do you see more horses or more dogs?

Minimal answer: more dogs

3. Language production - the production of sentences involving simple and complex transformations, e.g.,

Response is embedded in the request:

- A. CONTEXT: Ellie, a puppet, has a pencil.
- B. REQUEST: Ellie thinks the pencil is short. Tell Ellie IT IS LONG.
- C. RESPONSE: [IT IS IT'S LONG THE PENCIL IS]
- D. REINFORCEMENT: Thank you.



Response calls for permutation and morphological processes:

- A. CONTEXT: Ellie is waving her hand.
- B. REQUEST: ASK ELLIE WHAT SHE IS DOING.
- C. RESPONSE: WHAT ARE YOU DOING?
- D. REINFORCEMENT: Ellie answers I'M WAVING MY HAND.

Following each 15 lessons, the unit assessment consisting of 10 items is individually administered to each child. The more complex items within each unit were sampled to assess, as economically as possible, unit proficiency. Additional reviews for each of the 10 items are provided for children not demonstrating adequate proficiency. The review activities fulfill the following design requirements:

- 1. Reteach the criterion item.
- 2. Provide practice in carrying out the skill in the context of previously taught related items, e.g., criterion item: above, related items: below / in / on / by.

Unit Assessment Cards are provided which include directions for conducting the assessment, a list of materials needed, the 10 assessment questions, and a grid for recording individual pupil responses. An accompanying concept card is used in conjunction with the assessment questions and review activities.

ASSESSMENT DATA SOURCES

<u>Tryouts</u>: During the five tryouts of <u>LCS</u>, the instructional, training, and assessment systems of the <u>LCS</u> program have been developed and tested. In the two early tryouts, the program components were in the developmental



stage. In the last three tryouts the components covering all 15 units were available for year-long tryouts. Schools were selected to represent various demographic situations: schools in a large Spanish-speaking community, schools in the inner city, schools in pocket areas surrounded by English speaking communities, and country schools serving migrant families. The major tryouts have taken place in the Southwest and Florida.

During the last tryouts the program was not closely monitored by the Laboratory. Users received and presented the LCS instructional program and the accompanying assessments with minimal Laboratory assistance so as to simulate performance as it would be outside of tryout circumstances. More than 10,000 children, ranging from kindergarten to grade 8, have been involved in the tryouts. Ages of the children ranged from 4 to 13 years of age. The largest portion of entering pupils have been in kindergarten and first grade, five and six years of age. Teacher comments, observation reports, and assessment scores have been used as data sources in modifying the Program. The following improvements associated with the assessments were incorporated during the tryout periods.

1969-1970 Tryout: A tutorial training program was developed to meet the specific needs of the Program. Tutor training included how to treat correct and incorrect student responses.

1970-1971 Tryout: Unit assessments followed by remediation were incorporated into the Program. Students, regardless of Unit score, who



answer any of the questions incorrectly receive additional instruction
and review based on those items.

1971-1972 Tryout: This tryout is described in detail in Molina, 1973 and 1974. Test results and teacher comments indicated that during initial instruction, LCS performance was highly related to the child's entering facility. Progressively, however, LCS's effectiveness reduced the correlation and student performance became more independent of entering language facility; i.e., irrespective of entering English language proficiency, children performed well in the Program as evidenced by unit and end-of-program assessment scores.

1972-1973 Tryout:

- 1. The Placement Aid required full sentence responses.
- 2. Two placement points in the Program were established.
- 3. The End-of-Program Assessment was divided into three sections each requiring a different type of response.
- 4. Reports of program performance were given to users upon completion of instruction. These reports provided users with a basis for appraising program use during the year past and planning for its use during the next school year.

1973-1974 Tryout: The tryout was conducted to determine the effectiveness of the LCS instructional and assessment systems under operating conditions involving no direct assistance from SWRL. Feedback from this tryout served as the basis for the final revisions in preparation for commercial distribution of LCS in the fall, 1974.



THE QUALITY ASSURANCE SYSTEM

LCS Quality Assurance System: During the 1972-73, 1973-74 tryouts the

LCS Quality Assurance (QA) System was developed and put into operation.

The System provides the information needed by school personnel to monitor the implementation and progress of the Program.

SUMMARY OF TRYOUT RESULTS

Following is a brief summary of results that relate directly to student performance using the built-in assessment instruments.

Placement Aid and End-of-Program Assessment: Students who were selected by the teachers for participation in LCS were those who could most benefit from English language instruction before entering the basal reading program. To illustrate, in the 1971-72 tryout children who were not selected for instruction attained a mean score of 34.42 on a 40 item Placement Aid, 14.28 points higher than the mean score of those selected for LCS participation. The End-of-Program Assessment score data indicate that pupils beginning instruction in Unit I or Unit IX have demonstrated considerable skill attainment in the outcome areas assessed. In the 1973-74 Tryout, of the children who began in Unit IX, 93% of them scored 87% or higher in Concept Identification, 81% scored 87% or higher in Concept Statement, and 81% scored 80% or higher in Language Production.

<u>Unit Assessments</u>: In the tryouts children have performed at high levels across all units. The highest possible score on each unit was

10. In the tryouts, 10 was the modal value for each unit and the preponderance of pupils scored either 9 or 10.

Pacing: Undoubtedly the long duration of time to complete Unit I reflected logistic problems and other installation factors at work. The time to complete a unit decreased as instruction proceeded. In the 1973-74 tryout, for the children beginning in Unit 1, the first unit took 13 weeks, the second and third units took 4 weeks, the for unit took 3 weeks, the fifth unit took 2 weeks, and the remaining units took around a week to complete. Declining durations, plus high unit performance suggest an accumulating effect of the Program. Follow-up of Children: A follow-up in 1973 of children who participated in the 1971-72 tryout shows that \underline{LCS} not only accomplishes the program specific oral language and concept outcomes but bears strongly on subsequent pupil success with regular classroom instruction. Children were tested and rated by their teachers in the following curriculum areas: reading comprehension, oral reading, oral language development, writing skills, math, science, and social studies. The high levels of performance in a follow-up test indicate that, after a lapse of one year, an LCS graduate tended to retain or improve upon the language proficiency acquired in the $\underline{\text{LCS}}$ instruction. The ratings indicated a generally high level of performance, suggesting that the school success experienced in LCS is generalizing to other areas of instruction. Teacher ratings of pupil performance demonstrated that only 3 percent of all the children who had participated in the tryout were unable to cope with regular



instruction.

In both the LCS instruction and in regular classroom instructional situations, absenteeism proved to be a significant factor in student performance. Both 1972 and 1973 absence rates tended to be regularly associated with decressed performance ratings by the teacher in 1973.

Follow-up rest _____e described in detail in Molina, 1975.

In sum, <u>LCS</u> as used in tryouts accomplished the prespecified instructional objectives at a high level at proficiency. Each assessment relates directly to student performance in the <u>LCS</u> Program. The Placement Aid helps the teacher select and place students. Unit Assessments determine in which areas a child needs additional instrution. The End-of-Program Assessment indicates the degree to which a child has mastered the program objectives. The Program has proved manageable by teachers and robust under a wide range of school and classroom conditions.

References

- Molina, Huberto. 1971(a). Factors to be considered in designing an instructional program in English for Spanish speakers. FRIC ED 052-652.
- Molina, Huberto. 1971(b). The learner, the teacher, the grammar, and the method in designing an instructional program. Hispania, 54, 3, 439-444.
- Molina, Huberto. 1973. The SWRL English Language and Concepts Program for Spanish-Speaking Children: 1971-1972 Tryout. Technical Report 46. SWRL Educational Research and Development, Los Alamitos, CA. An expanded version of this study appears in Molina, Huberto 1974. System, 2, 2, 57-69.
- Molina, Huberto. 1975. Evaluating the effectiveness of a program used in school situations characterized by high pupil absenteeism and attrition. System, 3, 1, 48-54.
- SWRL Educational Research and Development. 1974. English Language and Concept Skills for Spanish-Speaking Children, New York, American Book Company.

