

University of Montana

ScholarWorks at University of Montana

Graduate Student Theses, Dissertations, &
Professional Papers

Graduate School

1979

A suggested public school program for elementary students with severe language disorders.

Patricia Jensen. Olmstead
The University of Montana

Follow this and additional works at: <https://scholarworks.umt.edu/etd>

Let us know how access to this document benefits you.

Recommended Citation

Olmstead, Patricia Jensen., "A suggested public school program for elementary students with severe language disorders." (1979). *Graduate Student Theses, Dissertations, & Professional Papers*. 7757.
<https://scholarworks.umt.edu/etd/7757>

This Thesis is brought to you for free and open access by the Graduate School at ScholarWorks at University of Montana. It has been accepted for inclusion in Graduate Student Theses, Dissertations, & Professional Papers by an authorized administrator of ScholarWorks at University of Montana. For more information, please contact scholarworks@mso.umt.edu.

A SUGGESTED PUBLIC SCHOOL PROGRAM FOR ELEMENTARY
STUDENTS WITH SEVERE LANGUAGE DISORDERS

By

Patricia Jensen Olmstead


B.A., University of Alaska, 1974

Presented in partial fulfillment of the requirements for the degree of
Masters of Communication Sciences and Disorders

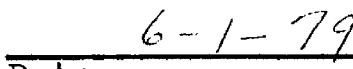
UNIVERSITY OF MONTANA

1979

Approved by:


- Chairman, Board of Examiners


Dean, Graduate School


Date

UMI Number: EP38558

All rights reserved

INFORMATION TO ALL USERS

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

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



UMI EP38558

Published by ProQuest LLC (2013). Copyright in the Dissertation held by the Author.

Microform Edition © ProQuest LLC.

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



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

PREFACE

The Amphitheater Public Schools' (APS) Severe Language Impaired (SLI) program was originally proposed to the APS Board of Education in May, 1976. The initial program proposal was rejected for funding reasons. It was proposed again during the Spring, 1977, and accepted. Students with severe language disorders were enrolled in the first classroom in January, 1978. There were seven full time students and one part time student ranging from kindergarten to fourth grade in the original classroom. The staff consisted of one certified teacher and one part time speech and language pathologist. In October, 1978, there were eleven students being served by one certified teacher and one full time speech and language pathologist. By November, 1978, the program had two classrooms (primary and intermediate), two certified teachers and one full time speech and language pathologist. Eighteen students were enrolled in the program.

My interest in this program occurred during an externship experience from the University of Montana, Missoula, Montana. During this externship, I was responsible for itinerant speech and language services at Donaldson Elementary School, Tucson, Arizona. This school also housed the SLI program. The reality of the problems faced by a language disordered child in a public school setting became more apparent after initial observations of

the APS-SLI program. My desire to know more about the language and academic needs of the children served in this program grew.

Published information about the language and academic problems faced by an elementary language disordered student is limited. Information for this paper was obtained from a variety of different sources, e.g., interviews with APS educators, review of available literature and on-site observations of similar programs in other school districts in Arizona and California.

My gratitude is extended to all members of the APS-SLI program staff, especially Ms. Ruth Jones, Ms. Leila Johnson, Ms. Carolyn Agar, Ms. Wendy Maddocks, Ms. Marcia Rislov and Ms. Janis Orr, for providing information and new insights.

For reading this paper and providing helpful suggestions and criticisms special thanks go to: Ms. Ruth Jones, M.S., C.C.C., and Dr. Charles Parker.

Special thanks also go to Ms. Donna McAuley for her time consuming and helpful services during research activities and while typing the final copy of this paper.

Deserving of my most sincere appreciation is my husband, Clif, for his encouragement and moral support.

Patricia J. Olmstead

TABLE OF CONTENTS

INTRODUCTION.....	1
GOALS AND OBJECTIVES.....	4
IDENTIFICATION AND PLACEMENT PROCESS.....	6
NUMBER, AGES AND CATEGORIES OF CHILDREN.....	8
STAFF RESPONSIBILITIES.....	11
Certified Teachers	
Speech and Language Pathologist	
Aide	
Support Service Personnel	
APPROACHES AND PHILOSOPHIES OF REMEDICATION.....	15
CURRICULUM REVIEW.....	20
Speech and Language	
Reading	
Math	
Writing	
Spelling	
Social Studies	
Science	
Learning Centers	
MAINSTREAMING PROCEDURES.....	31
MATERIALS AND AUDIOVISUAL EQUIPMENT.....	34
NEEDS FOR THE APS-SLI PROGRAM.....	36
CONCLUSION.....	44
FUTURE RESEARCH.....	44
APPENDIXES.....	46
BIBLIOGRAPHY.....	78
SOURCES CONSULTED.....	81

This paper is dedicated to the children enrolled in the Amphitheater Public Schools' Severe Language Impaired program, Tucson, Arizona during the 1978-79 school year.

INTRODUCTION

This paper describes a special education program within the Amphitheater Public Schools, Tucson, Arizona, that served elementary students with severe language disorders. The program consisted of a primary (kindergarten - 3rd grade) classroom and an intermediate (4th - 6th grade) classroom. The language disorders of these children were of such severity that enrollment in a special self contained class was considered necessary by the professionals working with them. The majority of the students in this program were previously served on an itinerant basis by speech and language services and resource learning disabilities services as much as five times per week. Even with this intensity of service, the student's speech and language needs, as well as their educational needs were not being completely met. The specialists felt that there was learning potential in these students but the student's academic progress was not meeting these expectations. These specialists perceived the student's language and academic needs and subsequently proposed the SLI program to the APS Board of Education.

The APS-SLI program was modeled to a great degree after the Los Angeles County School's program for children with severe language disorders. The APS-SLI program was also designed in some respects (e.g., long range goals and types of students served) to the Chula Vista School District Severe Language Handicapped Program, Chula Vista,

California.

Special education programs for severe language impaired students have existed in California public schools since 1960. Most of the early California programs operated under the rubric of "Childhood Aphasia" and were subsequently called "Aphasia" programs. (California State Department of Education, Special Report, 1976) The popularity of special public education programs for "aphasic" children also grew around the same time that Jon Eisenson published a book entitled Aphasia in Children (1972). This book evolved from observation and research of children at the Institute for Childhood Aphasia (ICA), School of Medicine, Stanford University. Eisenson (1972) described "aphasic" children as a "special population of perceptually impaired children who are seriously delayed in their onset and acquisition of language." He further attempted to distinguish "developmentally" from "congenitally" aphasic children. "Congenitally" aphasic children were characterized by Eisenson (1972) as follows:

- A. Late onset of language
- B. Retarded language development
- C. Deviant language from normal children

His thinking regarding "developmental aphasia" ("dyslogia") was discussed more specifically in Speech Correction in the Schools (Eisenson and Ogilvie, 1971). The following features of "developmental aphasia" were listed:

- A. Perceptual difficulties related to one or more sensory modalities,
- B. Slow development of laterality,
- C. Confused directional and spatial orientation,
- D. Inconsistency of response,
- E. Lability of general behaviors,
- F. Unevenness of ability, e.g., a child may show parallel disparities in learning to read and write.

Eisenson (1971) emphasized that these features were to be understood in terms of "impaired efficiency of neurological mechanisms."

Bloom and Lahey (1978) discussed Eisenson's clinical syndrome associated with childhood language disorders in their text, Language Development and Language Disorders. They reported that Eisenson insisted that there was a "rare syndrome of behaviors (i.e., "Childhood Aphasia") resulting from cerebral dysfunction and including more than language deficit." Some of the associated behaviors mentioned by Bloom and Lahey in this discussion were: perseveration, inconsistent response, hyperactivity, fatigue and distractibility. They concluded that the term "childhood aphasia" as used to represent a language deficit, did not evoke a clear understanding of the problem. They pointed out that the term didn't clearly state how it differed from the use of the term "language disorder" as an explanatory label or from the term "specific language disability" as used by some professionals. Language behavior of children labeled "aphasic" has more often been

described and explained in terms of processing of auditory stimuli rather than in terms of the production of language. Carroll (1964) also questioned the appropriateness of the term "childhood aphasia." Stark (1975) stated that "whether you use central language disorder, childhood aphasia, verbal dyspraxia or any other pretentious labels isn't as important as defining the symptoms."

The philosophy underlying APS special education programs was that a label, e.g., "Severe Language Impaired" (SLI) was appropriate if it enabled the child to receive the best possible education. Since there weren't any state or federal laws specifically mandating special education programs for the SLI child, the students in the APS-SLI program were classified "self-contained learning disabled" for funding reasons only. The initial cost to date of the APS-SLI program (e.g., for materials, capital out-lay and salaries) was approximately \$82,000.00.

GOALS AND OBJECTIVES

The major objective of the APS-SLI program was to provide each student with the language skills and concurrent academic skill development needed to return to a regular classroom setting. As the year progressed, this objective appeared unrealistic for some of the students. All the

professionals involved felt that certain children would always have language problems and therefore would need a continued placement in a self contained program. Other children would eventually be mainstreamed with support help, e.g., special reading programs and itinerate language services. It was more realistic to state that the APS-SLI program was striving to develop the language competency in each child which would enable him to function in the "least restrictive environment." (PL 94-142: Education for All Handicapped Children Act)

The long range goals for students in the SLI program (as proposed to the APS Board of Education in May 1977) were:

- A. Receptive and expressive language skills appropriate to the student's chronological age,
- B. Academic skills commensurate with chronological age and grade level.

In addition to these original long range goals, the classroom teachers also proposed that the students needed to develop independent work habits which would foster independent learning. Since a majority of the classroom activities were individualized, each student needed to develop the skills necessary to facilitate independent work habits; e.g., accepting the responsibility to participate in designated learning centers; taking turns when necessary; following verbal and/or written directions and developing problem solving strategies.

The immediate goals for each student's educational plan focused on one or more of the following areas:

- A. Language, communication skills, e.g., listening, speaking, reading, writing and spelling,
- B. Social-emotional growth, e.g., self concept and respect for others,
- C. Independent living skills, e.g., art, music and vocational education,
- D. Intellectual development, e.g., science, math, and social studies.

Other goals and objectives were included depending on the needs of each student. Individual Educational Programs (IEP'S) were written for each student enrolled in the SLI program.

IDENTIFICATION AND PLACEMENT PROCESS

Students in the SLI program were referred by a number of sources. Most of the students in the intermediate classroom had received speech and language services for a number of years. An analysis of how each student in this program was originally referred for speech and language services (i.e., itinerant services) revealed:

<u>SOURCE OF REFERRAL</u>	<u>NUMBER OF STUDENTS</u>
Annual Screening	7
Kindergarten Teacher	2
Psychologist	3
Counselor	1
Parent	3
Coordinator*	2

(*The school service coordinator's job was to refer students for diagnostic evaluations. Other school personnel, e.g., classroom teacher or psychologist, originally referred the child to the coordinator.)

Children referred to the school service coordinator were seen by a diagnostic-education team to determine whether they qualified for the SLI program. A comprehensive diagnostic evaluation was completed which included:

- A. Medical-developmental history elicited by the school nurse,
- B. Hearing screening or complete audiological evaluation,
- C. Speech and language evaluation,
- D. Psychological evaluation including intellectual, perceptual and motor skills and behavioral assessment,
- E. Academic assessment,
- F. Vision screening.

After the appropriate evaluations were completed, a multi-disciplinary conference (MDC) was held. The staffing multi-disciplinary team included: School Principal, Director of Special Education, Psychologist, Audiologist, School Nurse, Parent, Regular Classroom Teacher, Speech and Language Pathologist and consulting Physician if necessary. The team who saw the student for original assessment continued to serve the child in the areas of ongoing instruction planning, curriculum development and ongoing evaluation. Temporary itinerant services for a minimum of one semester were provided for each student before placement in the SLI program. These services were provided by speech and language personnel, learning disabilities specialists and the regular classroom teacher. After one semester of itinerant services, a second MDC was

held. Long range goals and an appropriate transportation schedule* were decided at this MDC. Observation, e.g., for three weeks, and further evaluation by SLI program staff, occurred after the second MDC.

Before a student entered the APS-SLI program, a Review of Placement Conference was held. The following people attended this conference: Speech and Language Pathologist, Learning Disabilities Specialists, Regular Classroom Teacher, Psychologist, SLI program staff and the child's Parents. The final decision regarding program placement and written parental permission were completed at this conference.

NUMBER, AGES, AND CATEGORIES OF CHILDREN

Eighteen students were enrolled in the SLI program. The intermediate classroom served eleven students and the primary classroom served seven students. Some of the children in the intermediate classroom were served part of the day by the primary teacher. In the original program proposal, the maximum number of students per class was designated as eight students. The age range in the

(*Most of the students in the SLI program were bused to school because they lived in different geographical locations within the District.)

primary classroom was five to seven years old and in the intermediate classroom eight to eleven years old.

According to the original program proposal, one, several or all of the following statements applied as categories of children to be served in the APS-SLI program:

- A. Unable to understand the meaning of symbols (verbal, written, gestures)
- B. Little or no speech
- C. Cannot organize words into appropriate phrases and sentences.
- D. Difficulty forming the motor movements (tongue, lips, palate) required to correctly form the speech sounds.
- E. Inability to use language to organize, integrate or direct perceptual, social or motor activities.
- F. Not due to deafness, autism or general retardation.

Four students in the APS-SLI program came from bilingual (Spanish-English) homes. Their language difficulties were identified in both languages during bilingual evaluations. According to original diagnostic reports, all of the APS-SLI students had "receptive" and/or "expressive" language disorders. One student had "fluency" problems in addition to his language difficulties. Eight students also had articulation problems. Additional diagnostic labels included in three APS-SLI student evaluation reports were: "dysarthria," "ataxic cerebral palsy" and "learning disabled." One student was previously enrolled in a Severe Language Handicapped

(aphasic) class within the Chula Vista School District, Chula Vista, California.

A review of original diagnostic reports also revealed that five students currently in the APS-SLI program, had previous test scores, e.g., from the Stanford-Binet Intelligence Scale, reported as falling within the Educable Mentally Handicapped (EMH) and Trainably Mentally Handicapped (TMH) range, while they were enrolled in other school districts. These students were re-assessed when they entered APS and were subsequently identified as language disordered children rather than mentally handicapped children. They exhibited, as did all of the other APS-SLI students, language disabilities (e.g., in the comprehension, retention and/or expression of language) concurrently with inadequate academic skills development. Their language skills appeared inconsistent with their learning rate (as identified by previous specialists working with them) and with other attributes of functioning as measured by instruments which didn't require oral expression, e.g., Leiter International Performance Scale. Instruments which provided performance and verbal profiles, e.g., the Weschler Intelligence Scale for Children - Revised (WISC-R) were also occasionally used. One indicator of possible language problems was a gap between WISC-R verbal and performance scaled scores (e.g., greater than 15 points). A majority of the APS-SLI students demonstrated

verbal-performance score discrepancies greater than 15 points on the WISC-R. These discrepancies were considered relative to other evaluation results when making final decisions regarding language disabilities.

STAFF RESPONSIBILITIES

Personnel in the APS-SLI program included one full time speech and language pathologist, two certified teachers and one aide. Support service personnel included: Supervisor (Coordinator - Speech and Language Services), School Principal, Psychologist, School Nurse, Music Teacher, Librarian, P.E. teacher and other classroom teachers for mainstreaming of students.

Certified Teachers: Primary and Intermediate Classrooms

In the original APS-SLI program proposal (May, 1977) the teacher's time percentages were designated as follows:

- 60% Direct instruction, remediation and supervision of students
- 20% Planning, preparation of materials, coordinating with school staff
- 15% Working with parents
- 5% Clerical work, records, staff meetings

The certified teacher's responsibilities included working with the speech and language pathologist in developing individual academic programs for each child; developing a language based curriculum in reading, writing and mathematics and in maintaining a detailed record keeping

system. Duties as specified by the original program proposals were:

1. Serve as member of diagnostic team evaluating children who are candidates for the program.
2. Direct instruction, remediation and supervision of the students.
3. Plan and prepare material for individual and group activities.
4. Maintain, evaluate and record pupil progress.
5. Work with parents.
6. Coordinate with school staff for mainstreaming activities.
7. Present program to various groups within the District, i.e., P.T.A., school board and special education teachers.
8. Develop long range goals for classrooms regarding the number of children to be served, needs and materials to be used.

The certified teachers in the APS-SLI program had professional training in reading, learning disabilities and deaf education. They both possessed valid Arizona certificates in elementary education.

SPEECH AND LANGUAGE PATHOLOGIST

The responsibilities of the speech and language pathologist included working with both the primary and intermediate classroom teachers in developing individual speech and language programs for each child; developing a language based curriculum in reading, writing and mathematics and maintaining a detailed record system for each child. The specific duties as indicated by the original program proposal were the same as the certified

teacher's duties. The speech and language pathologist in the APS-SLI program possessed a Master's Degree in Speech Pathology, Certificate of Clinical Competence (C.C.C.) from the American Speech and Hearing Association and a valid Arizona certificate as a speech and language specialist.

The APS-SLI program speech and language pathologist had day-long responsibility for the children in the SLI rooms just as the certified teachers did. Included in her responsibilities were lunchroom and playground duties, attending faculty meetings and arranging for a substitute if needed.

AIDE

The aide's responsibilities included preparing materials (e.g., dittoes), completing clerical duties (e.g., attendance, record keeping and grading papers), assisting with playground and lunchroom duties and working with individual or small groups of children using lesson formats developed by the certified teachers. For instance, the SLI program aide taught handwriting and spelling in the intermediate classroom. The aide also helped to monitor individual work at the learning centers. The APS-SLI aide was hired through the federal government CETA (Comprehensive Employment Training Act) program.

Support Service Personnel

Supervisor: The supervisor for the APS-SLI program was unofficially the APS Coordinator of Speech and Language Services. Her responsibilities included monitoring program curriculum, language remediation services and procedural aspects of mainstreaming. This individual also had final decision making duties regarding the placement of a student into the SLI program.

Principal: The principal was responsible for the physical facilities which housed the SLI program. He acted as a liason between the SLI personnel and regular school faculty. He also coordinated with the superviosr in making mainstreaming decisions. Next year, he will be responsible for evaluating classroom teacher performance in the SLI program.

Psychologist: The psychologist was responsible for completing a psychological evaluation including intellectual, perceptual and motor skills and behavioral assessment of each student in the program. This individual also advised the SLI program staff regarding behavioral management programs and specific educational needs of each student. As soon as more students are mainstreamed, the psychologist will be supervising the entire mainstreaming process. Next year, the psychologist will also be actively

involved in parent groups.

School Nurse: The school nurse's major responsibility was to dispense necessary medications. Ritalin was administered to two students (e.g., for hyperactivity) and phenobarbital was administered to one student (e.g. for epilepsy). The nurse also obtained developmental histories from the student's parents. Next year the school nurse's responsibilities may include more emphasis on the student's needs, e.g., regarding diets and necessary medical referrals.

Learning Disabilities Specialists: During the original MDC conference, LD specialists from the student's sending schools were consulted regarding possible SLI program placement. The LD specialists at the school where the SLI program was housed, become involved with SLI program staff when a student was eligible for itinerant speech and language services complemented by support center academic remediation, i.e., when a student was ready for a least restrictive environment vs. a contained classroom placement.

APPROACHES AND PHILOSOPHIES OF REMEDIATION

The APS-SLI program staff appeared to be diagnostically teaching the children in this program. Bangs (1968) refers to this type of teaching as discovering

how each child learns and how he makes use of what he's learned. Remedial academic activities were planned for each student using a task analysis approach. Skills to be learned were analyzed to ascertain the specific abilities necessary to perform them. The component abilities were then arranged in order and students mastered these skills in an appropriate sequence. Teaching strategies were usually based on the student's processing style. Myklebust (1971) proposed a "language based approach" that suggested that children should be taught new material through their intact modalities. The classroom teachers appeared to be following this proposition. Children who learned well visually were presented unfamiliar material in a visual format. Children who learned well auditorially were allowed to learn unfamiliar tasks by listening. Most of the students in this program were visual learners and therefore teaching was tied closely to the use of visual clues since the visual avenue was stronger than the auditory avenue as an input channel for learning.

One classroom teacher appeared to be attempting to decrease or circumvent students' deficits. Specific exercises were devised to remediate deficit areas, e.g., auditory discrimination training. Myklebust also advocated this type of remediation. (Newcomer and Hammill, 1976)

Specific perceptual motor remediation approaches were

not observed in this program, e.g., training visual perception skills as a prerequisite for reading. Kephart and Frostig advocated this type of training but Bryan (1975) indicated that there is little evidence that perceptual motor training is critical to the development of traditional academic skills.

The APS-SLI program staff tailored particular approaches to particular children to facilitate learning. For instance, Fernald techniques were employed for some children. Grace Fernald (1943) suggested a multisensory approach to teaching reading, writing and arithmetic. Ms. Fernald advocated that learning would be facilitated and maximized if relevant information was presented through multiple sensory modalities, e.g., using visual, auditory and kinesthetic cues. Beth Slingerland (1975) also advocated a multisensory approach to teaching language arts. Ms. Slingerland's approach was not being used in the APS-SLI program but it was being used in some language programs; e.g., Chula Vista School District Severe Language Handicapped Program, Chula Vista, California.

An area of special emphasis observed in the APS-SLI program was the encouragement of independent thinking and work habit skills. Self help techniques were encouraged to set patterns for carry over into regular classroom

situations. For instance, each student had the responsibility to complete designated daily learning center activities and an independent work folder.

The APS-SLI program staff were aware of the general language skills of each student (e.g., his ability to comprehend verbal directions and to express himself). Individual and small group instructional sessions (e.g., for math and reading) and learning center activities, were designed to reinforce receptive and expressive (written and verbal) skill development. For instance, teachers used simple then progressively more difficult directions and explanations. Children were encouraged to verbalize their response whenever appropriate. If a child didn't understand what was said to him during an instructional session, the teacher did one of the following:

- A. Selected different vocabulary,
- B. Shortened the phrase or sentence,
- C. Made a statement; showed or demonstrated the task and then repeated the statement in a shortened form.

The APS-SLI program staff appeared interested in each child. They gave positive individualized attention to each student in an attempt to find out what had been learned, what needed to be learned and what was the best method of instruction. All program personnel interacted with the children in a flexible way in order to gain insight into the latter's level of functioning.

Traditional assumptions of instruction, e.g., (1.) students of a given age level should learn the same material, (2.) children should only learn through verbal explanation by the teacher or through written exposition in workbooks, (3.) children will learn little if allowed to select what is to be learned, (Ginsburg & Oppen, 1969) were NOT observed in the APS-SLI program. Students of a given age level were not all learning the same material. Since there were children of different age levels in both classrooms, constructive imitation was also facilitated. For instance, some children were observed to try new skills that were displayed by other children at the various learning centers.

The following Piagetian tenets of learning (Ault, 1977, Ginsburg & Oppen, 1969) were observed in the APS-SLI program.

1. Children were not expected to learn complex responses until they mastered more simple components.
2. Instructional apparatus was employed that could be used by the children without assistance by the staff, e.g., language master.
3. New materials were made available at each learning center as soon as a child was ready for them.
4. Children were allowed to move around the classroom while completing learning centers.
5. Children were given some control over their own learning. If a student needed more time to complete a lesson he was allowed more time to deal with the material.

- Each child practiced a skill as long as he needed to.
6. Experiences were provided that had some relevance to what the child already knew but at the same time were sufficiently novel to present new learning incentives e.g., making alphabet letters out of clay.

CURRICULUM REVIEW

The learning needs of the students in the APS-SLI program were different from the average school population in that language remediation was necessary and additional time for mastery of academic skills in small increments was essential. While primary attention was given to each child's language development, instruction in other areas, e.g., math, reading, writing, spelling, social studies and science was also occurring.

The APS-SLI program staff created a learning environment in which each child set his own pace for learning. Each staff member was aware of a child's level of functioning. They examined all curriculum material to see if it was suited to a child's abilities, e.g., through task analysis procedures. When a lesson wasn't being learned well, it was analyzed in terms of the demands it made on the student's thought processes. The following sections review the curriculum used in the APS-SLI program.

Speech and Language

Students were seen for individual and/or small group language remediation on a daily basis. Language remedial activities were designed to enhance the development of phonological, morphologic, semantic and syntactical skills. Structured activities were planned to increase:

1. Vocabulary development
2. Comprehension of oral directions
3. Comprehension and use of Wh questions
4. Categorization skills
5. Use of noncontent words (e.g., prepositions and articles)
6. Verb Usage (e.g., auxillary verbs, verb tense and time relationships as they are reflected in verb tense.
7. Sequencing skills (e.g., first on the simplest level of ordering words in simple sentences and ultimately moving to a higher level of telling an event or story in a correct and logical sequence.)

Six students received articulation services in conjunction with language remediation. Two students misarticulated the /s/ sound and four students had multiple misarticulations.

Language lessons mainly involved eliciting responses from students utilizing Developmental Learning Materials, Newby Visual-Language sheets (e.g., for prepositions and verbs) and 100 magazine action pictures. The language component of Systems FORE (L.A. Unified School District) was used to obtain pre and post data regarding language remediation received in the SLI program. Additional baseline data was obtained prior to a student's entry into the

program. This data included language samples analyzed by Developmental Sentence Scoring (DSS) or Developmental Sentence Analysis (DSA) and scores from the following standardized tests: Peabody Picture Vocabulary Test, (PPVT), Carrow Elicited Language Inventory (CELI), Token Test and the Test of Auditory Comprehension of Language (TACL).

It appeared that many of the SLI students needed more concrete experiences to discover for themselves the new syntactical structures and vocabulary that had been taught during specific language sessions. According to Ginsburg and Oppen (1960) teachers can get a child to SAY certain things but these verbalizations often indicate little in the way of real understanding. Piaget's theory of learning implies that learning occurs through a child's activity. (Ginsburg & Oppen, 1969). A major challenge faced by the speech and language pathologist was planning activities that facilitated spontaneous expression by students in all kinds of situations. During the Spring, more language experience activities were planned, e.g., a field trip to a bakery. Additional unstructured language activities (individual and group) were being planned for next year.

Reading

All students in the APS-SLI program had reading problems. The over-all range of Woodcock Reading Mastery Tests scores for students in this program was 1.0 to 2.6. Two students in the primary classroom were at pre-readiness levels prior to entry into the program. Students were generally functioning at a first to second grade reading level.

Research has shown that a child with an inadequate language foundation will have difficulties with the reading process. (Flynn & Byrne, 1970, DeBoer, 1970 and Stark, 1975) DeBoer (1970) stressed that language is an element essential to any growth in reading. Smith (1971 & 1973) stated that reading is a language activity, e.g., rules for reading will include rules that the beginning reader has already acquired in his mastery of the spoken form of language. This is a psycholinguistic approach to understanding reading, i.e., the reader (a language user) re-constructs, as best he can, a message which has been encoded by a writer as a graphic display.

The classroom teachers used a variety of approaches to teach reading to the SLI students. Synthetic, analytic and language experience approaches were observed. Individualized reading programs had been created for many of the students. Reading texts and programs noted in the

primary classroom were:

1. Dolch sight word lists (used in context) (E.W. Dolch, The Psychology & Teaching of Reading)
2. SRA alphabet books and readiness books (Science Research Associates, Chicago, Illinois)
3. Allyn and Bacon Pre-Primers, Sheldon Basic Reading Series (Allyn and Bacon Inc., Boston, Mass.)

Texts and programs noted in the intermediate classroom were:

1. Rebus Readers (Peabody Rebus Reading Program, American Guidance Service, Inc. Minn.)
2. Scott Foresman Reading Systems (Scott Foresman & Co., Glenview, Illinois)
3. Sullivan Program (Webster Division: McGraw-Hill Book Co., New York, N.Y.)
4. Dolch sight words, (E.L. Dolch, The Psychology and Teaching of Reading, Boston, 1931)
5. Views on Vowels (Allyn and Bacon, Inc., Boston, Mass.)
6. Specific Skill Series: Getting the Facts (Barnell Loft, LTD., Baldwin, New York)
7. Beginning Phonics (Coronett Cassettes)

Math

According to Lerner (1976), arithmetic is an academic area that requires nonverbal thinking and language. She indicated that math has been called a universal language because it "enables human beings to think about, record and communicate ideas concerning the elements and the relationships of quantity." (IBID) Children's early concepts of quantity are evidenced in early language in such phrases as "all gone," "more," and "that's all." For many of the

children in the APS-SLI program, early concepts of quantity and spatial relationships had to be directly taught. Two students in the primary classroom were at pre-readiness levels prior to entry into the program. The over-all range of Key Math Diagnostic Test scores for students in this program was 0.9 to 2.6.

In this program, the arithmetic curriculum followed a modern mathematics program. The goal of this program was to help each child develop an understanding of the basic structure of the number system rather than the rote performance and rote learning of isolated skills and facts. Collier and Lerch (1969) stressed that an important objective in math instruction was to help the child understand the why as well as the what and how of mathematics. The SLI program teachers used the Developmental Mathematics Processes series (Rand McNally & Co., Chicago, Illinois) to develop the comprehension, formulation and practical application of mathematic concepts and skills.

Of equal importance in the development of mathematical skills are the computational operations of arithmetic. (Lerner, 1976, Collier & Lerch, 1969, Fernald, 1943). For efficient learning in arithmetic the computational skills of adding, subtracting, multiplying and dividing must become automatic. Two students in the APS-SLI program were being directly taught computational skills in

order to prepare them for projected mainstreaming into regular math classes.

Writing

The written form of language is the most complex form of communication. According to Lerner (1976), proficiency in using written language (e.g., handwriting, spelling and written expression) requires the following skills:

- A. Previous experiences in listening, speaking and reading ("auditory language skills"),
- B. Ability to keep one idea in mind,
- C. Ability to formulate the idea in words and appropriate syntactic patterns,
- D. Ability to plan the correct graphic form of each letter and word,
- E. Ability to correctly manipulate the writing instrument to produce the letter shapes,
- F. Ability to integrate complex eye-hand relationships,
- G. Sufficient visual and motor memory.

Children in the APS-SLI program had difficulty with at least one or all of the above skills. Most of the instructional time was spent in the areas of listening, speaking and reading ("auditory language skills"). Handwriting experiences (e.g., manuscript writing in the primary classroom and cursive writing in the intermediate classroom) were mostly occurring at the writing learning centers. For some primary classroom students individualized activities were planned to enhance fine motor skill development, e.g., peg boards and puzzle activities. In the

intermediate classroom, students were learning cursive handwriting as suggested by the Dubnoff Program(Teaching Resources, N.Y. Times, Boston, Mass.). Children with extra needs in cursive writing were using teacher-prepared materials. Use of a typewriter was being considered for a few SLI intermediate students who had severe problems in handwriting (dysgraphia). Intermediate students were also given experiences in written expression, e.g., writing book reports.

Spelling

Spelling a word is more difficult than merely reading a word. Recognizing a word in print is a decoding task and in a reading situation there are many clues to aid the reader in word recognition, including context, phonics, structural analysis and configuration. Reproducing a word is an encoding task where the opportunity to draw upon peripheral clues is greatly reduced. (Lerner, 1976) APS-SLI program students had difficulty decoding words during reading and while attempting to encode words for spelling. The intermediate classroom students who were learning to spell, were given individual spelling contracts such as the following:

"I must do seven or more."

1. Write each misspelled word three times.
2. Unscramble the words.
3. Alphabetize the spelling words.
4. Choose 5 words. Use each word in a sentence.
5. Do the crossword puzzle.
6. Write the hidden sentence.
7. Fill in the missing letter.
8. Do the word hunt.
9. Fill in the blanks.
10. Do the cross out page.

Teacher prepared word lists were used which included vocabulary from reading lessons (e.g., Dolch sight words) or practical needs, e.g., spelling names and addresses.

Social Studies

Social studies activities were planned by the speech and language pathologist to incorporate the language skills being taught using social studies content material. Social Studies units (e.g., "Foods" and "Safety") were designed to generate language growth during small group (3-5 students) sessions. A vocabulary list of new words for each unit was created. Students categorized words when appropriate, e.g., "Types of Foods." Spontaneous group discussions were held regarding each unit. Follow-up social studies activities were planned for the intermediate classroom learning center. These activities consisted of listening to cassette tapes and answering questions pertinent to the unit being taught.

Science

More science activities were occurring in the APS-SLI program during the Spring, e.g., studying all aspects of yearly seasons. The primary classroom teacher was using the following texts to aid in planning science activities:

1. Creative Science Experiences for the Young Child (Fork & Mackenzie, Incentive Publications, Inc. Nashville, Tenn., 1973)
2. Beginning Readers Cookbook (Carlton, OrePress, Inc. Sunnyvale, Calif., 1976)
Simple cooking operations were offered, e.g., making "Goblin Goo" (Chocolate Pudding)
3. PROBE: Suggested Activities to Motivate the Teaching of Primary Science (Youngpeter & Davan, Educational Service, Inc., Mich.)
Units include: simple machines, weather, plants, animals and learning basic scientific skills such as "What do you think happened?"

The APS-SLI staff were planning to incorporate more science experiences into the curriculum for next year.

Learning Centers

Learning centers were established to encourage independent work and to follow-up academic and language instruction. These centers were purposeful and not merely busy work stations. Spontaneous practice of an unrelated or even competing skill did not occur in these centers. The use of learning centers allowed the staff time to

provide individualized instruction for each student.

Each child wore a card around his neck. This card designated which learning centers should be completed each day. A sample card may be found in Appendix E. Some of the activities which were occurring in the primary classroom learning centers were as follows:

<u>Play Center:</u>	Playing house
<u>Writing Center:</u>	Writing letters, names, addresses, phone numbers, and <u>Dolch</u> words
<u>Language Center:</u>	Tutorgram programs, e.g., alphabet, matching and sequencing exercises. Language master activities, e.g., colors, sounds, vocabulary and sentence building.
<u>Listening Center:</u>	DLM tapes and enrichment cassette-filmstrips, e.g., <u>Little Red Riding Hood</u> .
<u>Small Motor Center:</u>	Making alphabet letters out of clay, completing puzzles and peg board designs.
<u>Work Center:</u>	Independent worksheets to follow up previous academic instruction.

Similar types of activities were occurring in the intermediate classroom learning centers. The activities were altered to the student's level of functioning. For instance, the Language Center contained social studies follow-up work and the Listening Center included auditory listening tasks and literature enrichment activities.

MAINSTREAMING PROCEDURES

There were no specific procedures regarding mainstreaming of students in the APS-SLI program into regular education programs. Mainstreaming was occurring in the SLI program as follows:

<u>Nonacademic Areas</u>	<u>No. of Students</u>
PE	11
Music	11
Art	11
<u>Academic Areas</u> (part-time)	
Reading	1
Social Studies	4
Science	4

One student attended Kindergarten for the afternoon and one student attended first grade during enrichment activities in the afternoon.

Since there weren't specific mainstreaming procedures, misunderstandings occurred between regular education teachers and special education staff members. The supervisor and psychologist for the APS-SLI program proposed the following special education mainstreaming procedures for the 1979-80 school year to avoid future misunderstandings.

Phase of Program: 1. Mainstream in non-academic areas.

<u>Activities</u>	<u>Responsibilities</u>
1.1 Collect data as to student's present level of non-academic functioning (on-going process)	Special Education (SE) teacher Speech & Language (SL) pathologist Psychologist
1.2 Contact principal to discuss student's needs	SE Teacher
1.3 Meet with principal, regular classroom (RC) and SE teachers	SE Teacher
1.4 Meet with parents to present recommendations	Staff
1.5 Mainstream students in non-academic areas (Art, Music, P.E.)	Staff
1.6 Observation of student in regular education setting (4-6 weeks)	SE teacher and/or other staff
1.7 Meet with principal, RC teacher, SE teacher and parents to assess student's progress and plan further mainstreaming.	Staff

Phase of Program: 2. Mainstream in academic areas (part-time)

<u>Activities</u>	<u>Responsibilities</u>
2.1 Provide data as to student's current level of skill development in his strongest area	SE teacher
2.2 Develop instructional plan for the academic area in which the child will be mainstreamed (IEP)	SE teacher, RC teacher, SL pathologist, Psychologist

<u>Activities</u>	<u>Responsibilities</u>
2.3 Select appropriate instructional materials	SE teacher & RC teacher
2.4 Observation of student in regular education setting (4-6 weeks)	SE teacher or other staff
2.5 Meet with parents, principal SE teacher, RC teacher and other appropriate staff members in order to assess student progress, and plan further mainstreaming if appropriate.	Staff

Phase of Program: 3. Full Day Mainstreaming

<u>Activities</u>	<u>Responsibilities</u>
3.1 Request evaluation by appropriate support services personnel (L.D. specialists, SL pathologist)	SE teacher, Psychologist or SL pathologist
3.2 Meet with principal, SE teacher, RC teacher, and other specialists involved in the evaluation to share information and formulate recommendations.	Psychologist or SL pathologist
3.3. Meet with above staff members and parents to share evaluation results; make recommendations and plan program.	Staff
3.4 Develop instructional plan reading and math (IEP)	SE teacher, RC teacher, Psychologist & SL pathologist
3.5 Select appropriate instructional materials	SE teacher and RC teacher
3.6 Schedule appropriate support services	Staff

<u>Activities</u>	<u>Responsibilities</u>
3.7 Monitor student progress (equivalent of one semester)	Staff
3.8 Meet with principal, parents, SE teacher, RC teacher and other appropriate staff in order to assess and formulate recommendations for dismissal from the self contained program.	SE teacher and/or other staff

Additional suggestions made for next year's mainstreaming procedures included:

- A. Providing release time for planning and observation to all teachers involved in the mainstreaming process.
- B. Designating co-operating teachers at each grade level who would be receiving teachers for mainstreamed students. These teachers' class loads would be adjusted according to the projected number of students to be mainstreamed. Preferably the Co-operating teacher would be selected on a voluntary basis. Inservice training would be provided by the Special Education Department.
- C. Hiring a full day substitute who will release the special education teacher and the regular education teacher to team teach in each others classrooms.

MATERIALS AND AUDIOVISUAL EQUIPMENT

A majority of the materials used in the APS-SLI program were teacher prepared because they were adapted to meet the individual needs of each student. For instance, Developmental Learning Materials were too difficult for some students, so the teacher completed a task analysis of the materials and created her own

listening tapes to teach some of the necessary skills, e.g., the ability to identify rows and columns. Teacher prepared materials at the learning centers were designed to follow up academic learning. For instance, if a child had difficulty during the reading session with rhyming words, the teacher created a special set of rhyming word cards to be used during a concentration game at the reading center. Commercially available materials that were used in the APS-SLI program included:

1. Developmental Learning Materials
7440 Natchez Ave.
Nile, Illinois 60648
2. Teaching Resources Materials
100 Boylston St.
Boston, Massachusetts 02116
3. Milton Bradley Materials
Milton Bradley Co.
Springfield, Mass. 01101
4. Ideal Materials
Ideal School Supply Co.
Oak Lawn, Illinois 60453

Audiovisual equipment used in the APS-SLI program included:

1. Cassette recorders, language masters and reel-to-reel recorders
2. Video-tape equipment and opaque projectors
3. Singer AutoVance II filmstrip and recorder
4. E.R.C.A. Tutorgrams (Iron Ridge, Wisconsin)

NEEDS FOR THE APS-SLI PROGRAM

(1.) The classroom personnel needed to develop a weekly schedule that was more flexible. A flexible schedule would incorporate field trips, assemblies and more unstructured group language experience activities, e.g., creative dramatics and puppetry. More spontaneous speaking should have been occurring in this program to encourage enhanced communication skills and mental growth. Stimulating group speaking activities could have occurred in all types of environments, e.g., during sharing sessions held each morning. These types of activities can occur in relationship to an academic curriculum, not in exclusion of the latter.

(2.) APS-SLI students needed more opportunities for working together cooperatively in small and large groups at tasks that promote oral communication. More interchange of student ideas is desirable. Social experience, or interaction with other persons, promotes intellectual as well as language growth. Group meetings would be helpful in promoting independent thinking and problem solving. Braunstein and Beiderman (1974) suggested class meetings to discuss problems and find solutions. In this way, rules are set by the class and not by the teacher. They indicated that a lot of

guidance was initially needed, but by the end of the year the students managed their own meetings.

According to Wood (1976), children enjoy talking about communication situations and they can profit from the analysis of such events. She advocated the use of a "communication analysis approach" adaptable to the needs and concerns of the children in the class. Sessions strive to build a child's repertoire of communication strategies with which they can deal with critical communication situations in their own special worlds and in public schools. Wood (1976) suggested the following methods of analysis instruction:

- (1.) Children should analyze "live" communication situations or those presented on film or T.V. or from a picture coupled with dialogue. The final objective is to define the following communication parameters: who?, what?, when?, where?, why?
- (2.) The children then analyze the communication events in terms of how different channels of communication (e.g., words, voice, body, space) convey effective meaning. These are "How Can You Tell?" activities.
- (3.) Using cassette recorders, children then conduct interviews with their friends. These are "Do You Have a Few Words to Say?" activities. These activities offer instruction in audio-visual aids, interviewing and communication analysis.

Wood (1976) also suggested a "participation approach" to encourage the development of oral communication skills.

Real communication situations are role played by the students. Follow up discussions focus on verbal and nonverbal strategies employed by the students. These situations can portray how to make new friends, how to bargain with a sibling, or how to follow teacher's directions.

(3.) Whether a child was engaged in an individual or group speaking situation, all classroom personnel should have enlarged upon any verbalizations. Modeling and expanding techniques have been shown to be effective in managing language disorders. (Courtright, 1976). There are many possible techniques to encourage spontaneous oral language development. Some of the techniques which could be employed throughout the day during all activities, by all classroom personnel, include nine possible child initiated and teacher initiated techniques suggested by Muma (1978):

<u>Child Initiated</u>	<u>Teacher Initiated</u>
1. <u>Correction Model</u> Ch.: Doggy runned T.: No not doggy runned. The doggy ran.	6. <u>Completion Model</u> Ch.: Doggy T.: Doggy ran home.
2. <u>Expansion Model</u> Ch.: Doggy Bark T.: The doggy is barking.	7. <u>Replacement Model</u> Ch.: The doggy is barking. T.: My doggy is barking.

- | <u>Child Initiated</u> | <u>Teacher Initiated</u> |
|--|--|
| 3. <u>Simple Expatiation Model</u>
Ch.: Doggy Bark
T.: The doggy's hurt.
Puppies whine sometimes.
Sometimes they bark. | 8. <u>Combination Model</u>
Ch.: The dog is barking.
The dog is old.
The dog is in the street.
T.: The old dog that is barking is in the street. |
| 4. <u>Complex Expatiation Model</u>
Ch.: Doggy bark
T.: The black dog is named Scotty. | 9. <u>Revision Model</u>
Ch.: The dog is black.
His name is Spotty.
The dog eats popcorn.
T.: Spotty, the black dog, likes popcorn. |
| 5. <u>Alternative Model</u>
Ch.: Doggy bark
T.: Yes. Why do doggies bark? | |

(4.) A review of the APS-SLI program curriculum revealed the following needs:

(A.) The language experience approach to reading should have been used more often in the APS-SLI program. All of the skills utilized in this approach are intended to develop a progressive concept of language. For instance:

1. What a child thinks about he can say.
2. What he says can be written.
3. What has been written can be read.
4. He can read what he has written, and what others have written for him to read.

The approach can be adapted to the language level of any student in the APS-SLI program. Through language experiences the child can deal with his own language in reading and writing before he deals with other authors. The child furnishes words he wants to read and he first sees his speech put into written words instead of encountering printed words that must be put back into speech. This approach can encourage simultaneous development of language and reading skills.

(B.) There were students in the APS-SLI program whose handwriting skills were characterized by spatial judgement problems and reversal errors. More activities for teaching handwriting were needed for these children. A few of the activities suggested by Lerner (1976) for helping children learn to write include:

1. Chalkboard Activities: Circles, lines, geometric shapes, letters and numbers made with large free movements.
2. Writing movement practice: fingerpainting and writing in a clay pan or and tray.
3. Dot-to-Dot picture drawing.

The Slingerland (1971) approach to teaching manuscript letter forms is also suggested to minimize directional confusion. (If manuscript writing must be taught prior to cursive writing.) Each letter is formed with one single stroke wherever possible and not with the usual circle and line such as most children learn. Specific techniques for

teaching letter-size relationship, spacing and alignment are also offered in the Slingerland approach. Structural guidance for manuscript and cursive writing instruction is given. Mrs. Slingerland has adapted this multisensory approach for classroom use to include group instruction which provides at the same time, individualized practice at tracing, copying and writing from memory.

(C.) The children in the APS-SLI program need more spelling words selected from their own speaking vocabulary and from the vocabulary being taught during reading and language lessons. According to Fernald, (1943) "children who learn to spell by learning new words as they write what they want to say, will not need to be supplied with spelling books or formal word lists of any sort." Fernald (1943) also stated that "to get a maximum of attention to a word it must not only be one in the child's vocabulary but it must also be one used to express an idea that is of interest to him at the time when he's writing it."

(D.) The social studies curriculum for the APS-SLI program was moving in the right direction but it needed to be expanded for next year. According to Michaelis (1972), the social studies program as developed through the technique of the UNIT is not only a means of informing children about their culture and other world cultures but it is also a way of affording children working experiences

with related skills experiences. For instance, a variety of social studies units could be planned to provide experiences in other areas of the curriculum:

- A. Language Arts
 - 1. Group discussions
 - 2. Keeping vocabulary lists of new words for each unit
 - 3. Creating a drama about unit material
- B. Mathematics
 - 1. Measuring quantities in food preparation
 - 2. Planning a budget for purchase of needed foods.
- C. Geography
 - 1. Use maps to locate significant places
 - 2. Study climatic conditions
- D. Art
 - 1. Making murals after enough information on the subject and setting is collected.
 - 2. Collage on particular subject
- E. Science Activities
 - 1. Development of Transportation
 - 2. Materials used in building and clothing construction.
 - 3. Home needs: Light (from candles to electricity), Heat (invention of matches), cooking utensils (e.g., what kind of stoves were used?)
 - 4. Telling time: methods and devices
 - 5. Ecology
 - 6. Climate
 - 7. Plants and animals
- F. Physical Education
 - Learning sports, folk dances and games from other countries.
- G. Music Activities
 - 1. Listening to records of era studied
 - 2. Playing recorder, rhythm instrument, bells, tonettes, ukelele.

More integration of curriculum material and related skills experiences should have been occurring whenever possible in this program, e.g., all aspects of language

skill development could have been emphasized during science activities. These students needed repetition of content material in a variety of ways rather than different content material taught for each skill to be learned.

Additional suggestions for program improvement made by various members of the program staff included:

- (A) Defining staff responsibilities more clearly. This would also involve a specifically designated individual to be the supervisor of the program.
- (B) Conducting an in-service program to familiarize the public and other school personnel with the goals of the program and the types of students served.
- (C) Establishing well defined procedures regarding mainstreaming and placement procedures.
- (D) Encouraging parental involvement.
- (E) Establishing realistic figures (e.g., rather than an arbitrary 50% mainstreaming quota) based on accurate data obtained from currently enrolled students.
- (F) Hiring separate aides for the primary and intermediate classrooms to be employed for the entire school year.
- (G) Allowing more planning time for the classroom teachers and the speech pathologists.
- (H) Maintaining the originally proposed class size (8 students) so that more individualized instruction can be given to each student.

CONCLUSION

The advantages of the APS-SLI program far outweighed any suggestions for improvement. Children who otherwise would have been misplaced and experienced failure and frustration with a curriculum not commensurate with their abilities and potential, were learning in an environment suited to their needs. Evidence to suggest that the students were learning in this program included:

- A. More mainstreaming was occurring during the 1978-79 school year for SLI students,
- B. A majority of the formal and informal test measures suggested improvement of the student's academic and language skills,
- C. Parental input regarding the program was favorable during the 1978-79 school year.

The students were succeeding because the work was geared toward their language and academic needs. They knew they could handle the work and were motivated to do so.

FUTURE RESEARCH

After observing various SLI programs in Arizona and California it was obvious that all professionals working in these programs had similar questions:

1. What specific admissions criteria are essential for a student to be eligible for a severe language impaired special education program? For instance, how does a language problem differ from a learning disability?

2. What are the most important dismissal criteria for students in the SLI program?
3. What is a "Severe language handicapped student?"
4. What steps should be taken in identifying the severe language impaired student?
5. How should the language skills of the SLI student (English-speaking or bilingual) be assessed? (e.g., standardized tests, informal assessments, etc.)
6. What should be the major objective in classroom management for SLI students? (e.g., language therapy services vs. academic skill development)
7. Who should teach these children? (e.g., speech and language pathologist?, learning disabilities specialist?)
8. What are some meaningful ways parents may become involved in SLI programs?

The completion of this study revealed the need for specific research in the following areas:

1. Expected correction rates for children diagnosed as language impaired in the areas of language and academics,
2. Long term management of children with language disorders,
3. Appropriate academic remedial techniques, e.g., reading approaches, for language disordered children,
4. Differences between EMH, LD and SLI children.

APPENDIX A

Special education forms used for students placed in the APS-SLI program.

AMPHITHEATER PUBLIC SCHOOLS
125 E. Prince Road
Tucson, AZ. 85705

Date _____

Dear _____,

An evaluation of your child has been requested to aid in planning a program of instruction. It is the responsibility of the school district to provide an appropriate education for your child. Upon completion of the your child's evaluation, which may include school psychologist, speech pathologist, audiologist, and learning disability specialist, a conference will be scheduled in order to discuss your child's needs and plan a suitable program. The conference will be scheduled at a time convenient for you, and you will receive a notice confirming the time, date, and place of the conference. All of your child's records will be available for your inspection at any time.

* * * * *

PERMISSION FOR EVALUATION

NAME OF STUDENT _____ BIRTHDATE _____
SCHOOL _____ GRADE _____

- ☐ I give my permission for an evaluation.
- ☐ I do not give my permission for an evaluation.

Your child's medical/developmental history may be an important part of this evaluation. With your approval, the school nurse will come to your home and obtain this information from you.

- ☐ I approve a home visit.
- ☐ I do not approve a home visit.
- ☐ I would like the school nurse to contact me to make other arrangements

(Signature of Parent or Guardian) (Date)

* * * * *

I have referred the above named student to the appropriate specialist(s) for evaluation.

(Signature of School Administrator) (Date)

STATEMENT OF PARENTAL RIGHTS AND PROCEDURES
CONCERNING PLACEMENT

The following rights and procedures are available to you in planning for future education programming for your child.

1. You may sign the enclosed parent consent form and thereby permit your child to be placed in the appropriate special program for Exceptional Children, as recommended by the Placement Committee in the attached report(s).
2. You may choose to withhold your consent to the special education placement and said placement will not be made.
3. You have the right to review all placement records.
4. If you feel that you do not have enough educational information prior to signing the parent consent form, you may choose not to sign the enclosed form. You may request an additional conference that would include other appropriate school personnel in addition to the Placement Committee to obtain clarification. The Chairperson of the Committee should be asked to arrange this conference.
5. You may desire an independent medical, psychological, and educational evaluation of your child by an agency other than that provided by this school system. You may be assisted in acquiring this independent evaluation by contacting:

Arizona Department of Education
Division of Special Education
1535 West Jefferson
Phoenix, Arizona 85007
(602) 271-3183
6. If you do not agree with the recommendation of the Placement Committee, you may refuse to sign the consent form. In this circumstance, if you notify the chairperson of the Team Placement Committee in writing, a review will be instituted by the Superintendent according to established school district policies.
7. If an impasse has been reached between you and the local school district, you may continue to refuse to sign the consent form. You may request a hearing before an independent Hearing Officer. At such a hearing you may be represented by counsel; may offer independent evaluation of a medical, psychological, or educational nature; may examine all school records pertaining to your child; and may cross-examine school officials. If such a hearing is desired, please make your request in writing to: Dr. Thomas E. Neel, Superintendent, Amphitheater Public Schools.
8. If you approve the placement, it will not be changed without your consent. You have the right to withdraw your consent to the special education placement.
9. If you consent to enrolling your child in special education, the placement will be reviewed as necessary, and at least once a year. You may require a comprehensive review once a semester by contacting the school principal. You will receive a written report of each review.
10. All of the information gathered concerning your child will be treated CONFIDENTIALLY, and no records will be released without your expressed written consent.

I have had my rights as a parent explained to me and my questions answered regarding said rights.

ITHEATER PUBLIC SCHOOLS
Student Services

of Student _____ Birthdate _____ School _____
ent's Address _____ Phone _____ Grade _____

Following persons have been consulted regarding placement of the above named student.
Our consensus that the student should be placed in a special education program
igned for _____
(Type of Program)

Signature of Principal _____ Date _____

Signature of Special Education Administrator _____ Date _____

Signature of Counselor or Classroom Teacher _____ Date _____

Signature of Professional Advisor _____ Date _____

Signature of Special Education Teacher _____ Date _____

Signature of Parent or Guardian _____ Date _____

The nature and content of the program has been explained to me. I also understand that;
1) all special education placements are on a temporary basis, 2) I may inspect my child's
confidential file at anytime, 3) I can obtain an independent evaluation and present the
results to the district, 4) there will be an annual review by the staff and I have the
right to request a special review once a semester from the placement administrator,
5) my child's program will not be changed without my permission, 6) all special education
placements are subject to due process procedures, and 7) all records on my child are con-
fidential and will not be released without my written consent.

I approve placement of my child in the Special Education Program described to me.

Signature of Parent or Guardian _____ Date _____

I do not approve placement of my child in a Special Education Program. I reserve the right
to reconsider this decision and request such placement at a later date.

Signature of Parent or Guardian _____ Date _____

* * * * *

Signature of School Administrator _____ Date _____

Signature Stamps Accepted

AMPHITHEATER PUBLIC SCHOOLS
125 East Prince Road
Tucson, Arizona 85705

MULTI-DISCIPLINARY CONFERENCE REPORT

School Year _____

Name of Student _____ Birthdate _____ School _____

Student Address _____ Phone _____ Grade _____

Primary Language: Student _____ Parents _____

Staffing Team:

School Principal _____ Speech Pathologist _____

Director of Spec. Ed. _____ Counselor _____

Psychologist _____ Nurse _____

Audiologist _____ Parent _____

Special Education Teacher _____ Teacher _____

Others _____

SUMMARY OF CONFERENCE

RECOMMENDATIONS

Recorded by: _____

Date: _____

AMPHITHEATER PUBLIC SCHOOLS
125 East Prince Road
Tucson, Arizona 85705

INDIVIDUAL EDUCATIONAL PLAN

Student's Name _____ Birthdate _____ Sex _____

School _____ Grade _____ Primary Language _____

Special Education
Placement Program _____

Present Level of
Performance _____

Long-range Goals (See attached sheet) _____

Services to be Provided:

	Amount of Time	Beginning Date	Review Date	Proj. End- ing Date

Amount of Time in Regular Classroom _____

IEP Committee Members:(Signatures)

Date _____
Date _____
Date _____
Date _____

Contact Person _____

I approve the Individual Educational Plans written above.

(Parent or Guardian) Date _____

GOALS

School Year _____

Student's Name _____

Birthdate _____

Long-range Goals are:

Prioritize goals that are appropriate.

- ___ 1. The student will complete reading readiness skills that are appropriate for his level.
- ___ 2. The student will complete decoding skills that are appropriate for his level.
- ___ 3. The student will complete the reading comprehension skills that are appropriate for his level.

- ___ 4. The student will complete the math readiness skills that are appropriate for his level.
- ___ 5. The student will complete the math computation skills that are appropriate for his level.
- ___ 6. The student will complete the problem solving math skills that are appropriate for his level.

- ___ 7. The student will complete remediation of information processing skill deficits.

- ___ 8. The student will complete the remediation for the development of gross motor skills.
- ___ 9. The student will complete the remediation for the development of fine motor skills.

- ___ 10. The student will complete the spelling skills that are appropriate for his level.
- ___ 11. The student will complete the writing skills that are appropriate for his level.

- ___ 12. Appropriate behavior will be shaped through the use of a behavior management program.
- ___ 13. The student's self-image will be improved through the use of positive teaching and/or behavior management techniques.

- ___ 14. The student's language skills will be developed to a level appropriate for his age.
- ___ 15. Other goals as needed:

Student's Name _____

School Year _____

Birthdate _____

Page _____

Term ives	Name of Person Responsible	Methods/Materials	Expected Start Date	Expected Date of Achievement	Date Started	Date Comm

APPENDIX B

Daily accountability forms used by APS-SLI classroom staff.

SPEECH AND LANGUAGE

Name _____

Area _____

Objectives:

1. _____

Materials: _____
Date: _____ (#correct/#of total trials)

Data: pre treatment _____

weekly checks

post treatment _____

2. _____

Materials: _____
Date: _____ (#correct/#of total trials)

Data: pre treatment _____

weekly checks

post treatment _____

Skill Graph

Subject: _____ Skill: _____

Skill: _____

[illegible]

1) _____ 4) _____

2) _____ 5) _____

3) _____ 6) _____

P.R.E.B. Skills Diagnosis
(Pupil Record Education Behavior Skills Diagnosis.
Teacher Resources Corporation, Boston, Mass.)

Name _____

C- met goal

Date _____

P- progress; needs work

Teacher _____

D- difficulty

Skill	Pretest	Postwork					Comments
I. <u>Visual Motor Perception</u>							
a. geometric forms							
b. color							
c. form							
d. puzzles							
e. color and cut							
f. peg designs							
g. incomplete pictures							
h. block designs							
i. self concept							
j. writing							
k. following directions							
l. motor coordination							
II. <u>Auditory Perception</u>							
a. listening							
b. consonant sounds							
c. rhymes							

Skill	Pretest			Postwork			Comments
III. <u>Language Devel.</u>							
a. matching letters							
b. oral language							
c. sequence							
d. comprehension							
e. recall							
f. word recognition							
g. definitions							
IV. <u>Math Concepts</u>							
a. matching numbers							
b. counting							
c. number concepts							
d. problem solving							
e. computation							

APPENDIX C

Sample progress reports.

NAME: _____
PARENTS: _____
GRADE LEVEL: _____

DATE: _____
D.O.B.: _____ C.A.: _____
TEACHER: _____

PROGRESS REPORT

I. LANGUAGE:

A. RECEPTIVE

PROGRESS:

DIFFICULTIES:

B. EXPRESSIVE

PROGRESS:

DIFFICULTIES:

II. NUMBERS/MATH:

LEVEL:

PROGRESS:

DIFFICULTIES:

III. VISUAL SYMBOLS/READING:

LEVEL:

PROGRESS:

DIFFICULTIES:

IV. VISUAL MOTOR:

PROGRESS:

DIFFICULTIES:

V. MOTOR DEVELOPMENT:

PROGRESS:

DIFFICULTIES:

VI. SOCIAL DEVELOPMENT:

PROGRESS:

DIFFICULTIES:

VII. ADDITIONAL INFORMATION:

(Source: Chula Vista
School District, Chula
Vista, California)

AMPHITHEATER PUBLIC SCHOOLS
Tucson, Arizona

PILOT REPORT SYSTEM

Student _____ School _____

Teacher _____ School Year 19__ - 19__

Grading System Levels K & 1: Grading System Levels 2 & 3: Grading System Levels 4, 5

Satisfactory
Needs Improvement
Not Applicable

E = Excellent
S = Satisfactory
N = Needs Improvement
/ = Not Applicable

E = Excellent
G = Good
S = Satisfactory
N = Needs Improvement
U = Unsatisfactory
/ = Not Applicable

Placement for Next Year: _____

	QUARTERS				
	1	2	3	4	
READING					<u>Reading Level</u> <u>Placement</u>
WRITING					
MATHEMATICS					
SOCIAL STUDIES					Above Grade At Grade Below Grade
SPELLING					
SCIENCE					
HEALTH					
ART					
PHYSICAL EDUCATION					<u>Mathematics Level</u> <u>Placement</u>
MUSIC					
General					
Band					Above Grade At Grade Below Grade
Orchestra					
WORK STUDY SKILLS					
Follows Oral Directions					Below Grade
Follows Written Directions					
Uses & Organizes Time & Materials					
Exhibits Initiative					
Contributes to Class Discussions					
Takes Care of Materials					
PERSONAL GROWTH					
Assumes Responsibility of Own Actions					
Assumes Responsibility in Work					
Considers Rights of Others					
Respects Property of Others					
Is Willing to Approach New Situations					
Maintains a Positive Self-Concept					
ATTENDANCE					
Days Absent					
Days Tardy					

ENTRIES (Please date each entry):

APPENDIX D

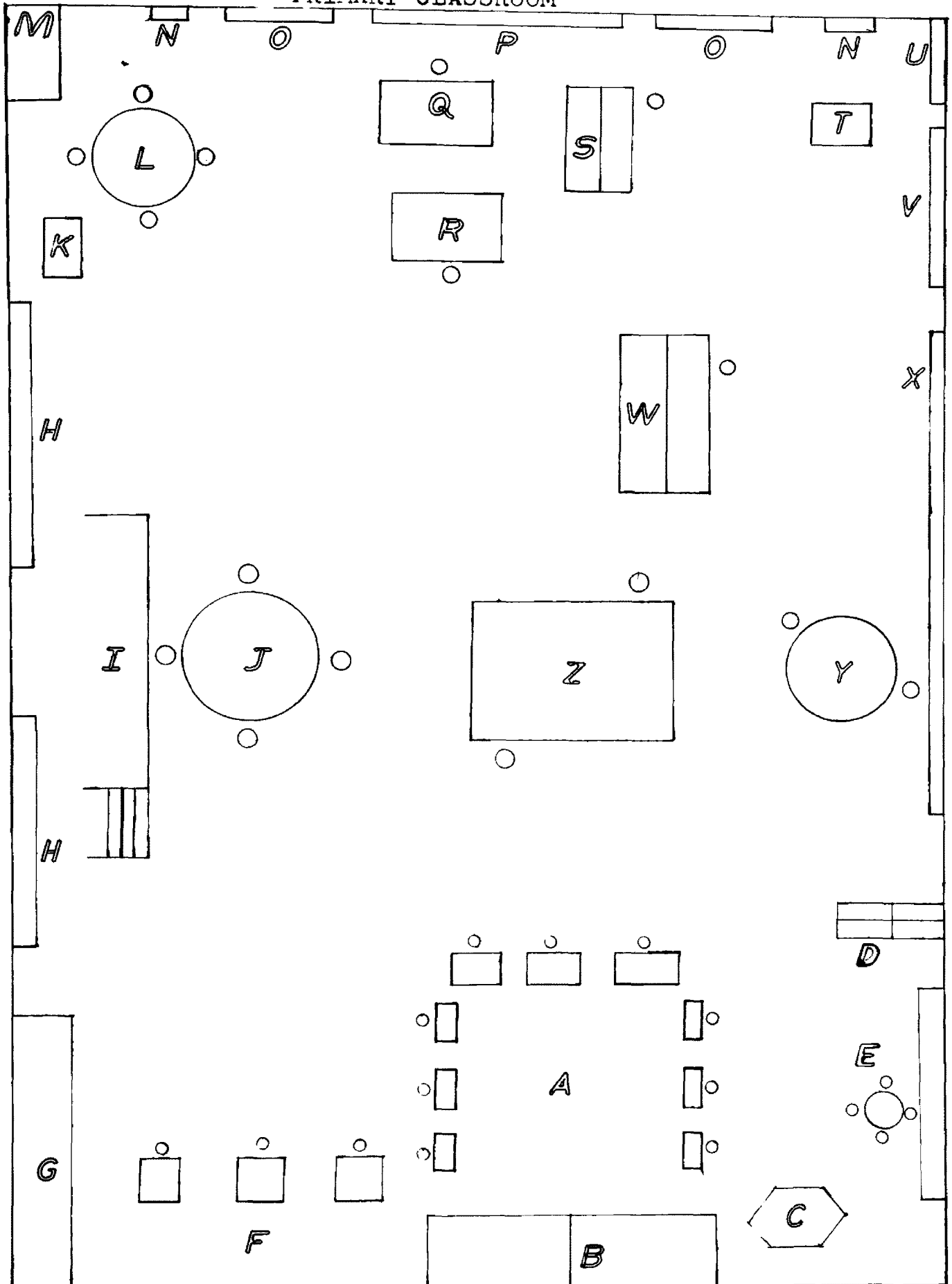
Classroom arrangements in the APS-SLI program.

Primary Classroom

Key

- A. Individual Desks
- B. Blackboards
- C. Work Center
- D. Book Shelves
- E. Play Center
- F. Listening Center
- G. Books & Materials
- H. Bulletin Boards
- I. Teacher's Desk
- J. Teaching Station
- K. Supply Table
- L. Teaching Station
- M. Closet
- N. Windows
- O. Doors
- P. Bulletin Board
- Q. Language Center
- R. Tutorgram
- S. Writing Center
- T. Science Supply Center
- U. Sink
- V. Closet
- W. Follow-up Reading Center
- X. Bulletin Board
- Y. Table
- Z. Fine Motor Center

PRIMARY CLASSROOM

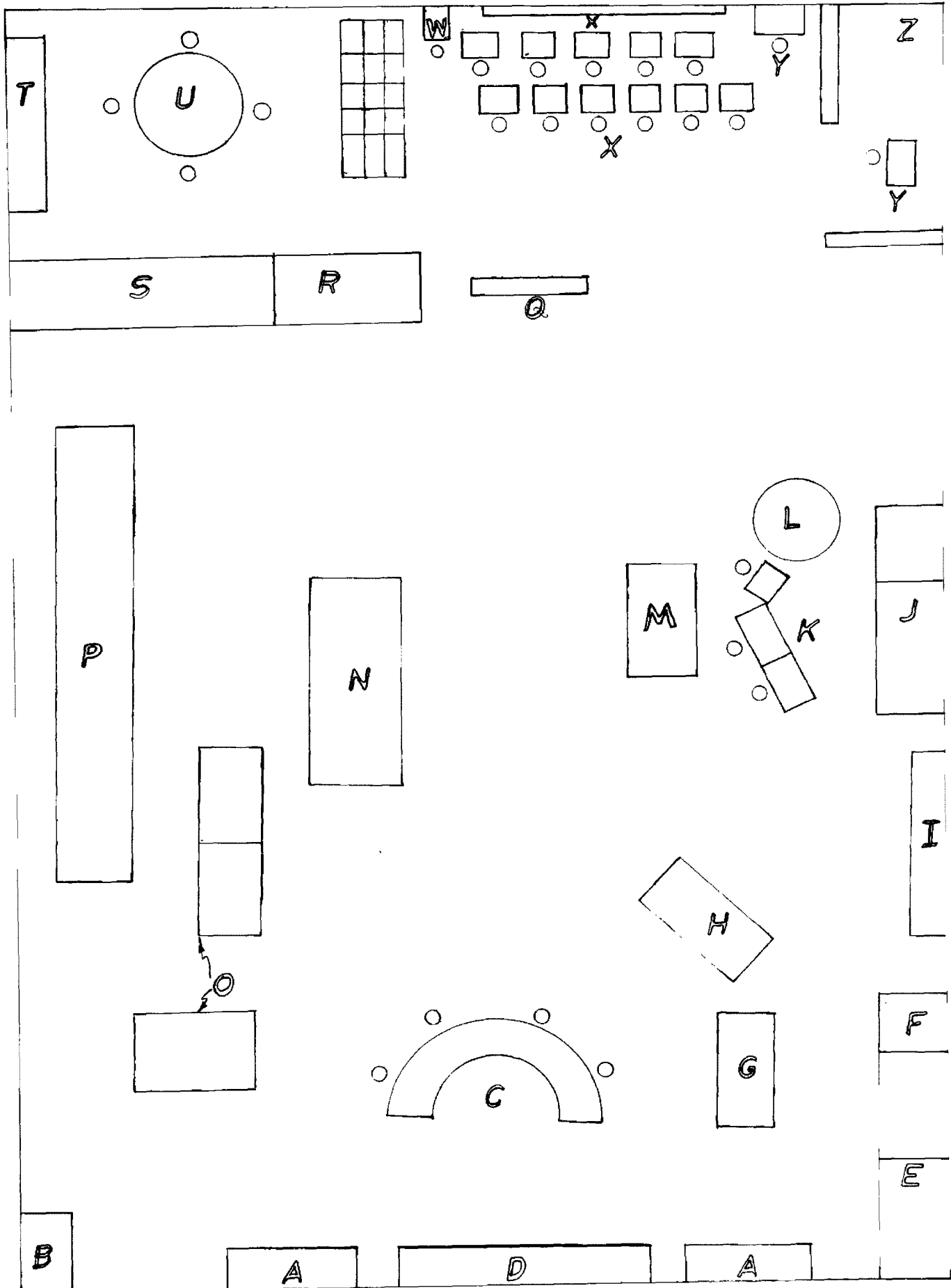


Intermediate Classroom

Key

- A. Exits
- B. Sink
- C. Math Teaching Station
- D. Math Bulletin Board
- E. Closet
- F. File Cabinet
- G. Teacher's Desk
- H. Portable Closet
- I. Book Shelves
- J. Reading Bulletin Board
- K. Reading Teaching Station
- L. Overhead Projector
- M. Learning Station
- N. Math Center
- O. Learning Center
- P. Bulletin Board
- Q. Independent Work
- R. Enrichment Center
- S. Storage
- T. Blackboard
- U. Writing and Spelling Center
- V. Individual Folders
- W. Social Studies and Follow-up Language Center
- X. Individual Desks and Blackboards
- Y. Reading Centers
- Z. Reading Corners

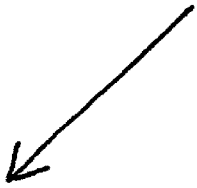
INTERMEDIATE CLASSROOM


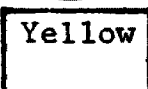



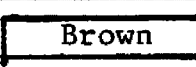


APPENDIX E

Sample learning center card used in the primary classroom.

(Identical labels are placed on tables
in the appropriate learning centers.)



	Monday	Tuesday	Wednesday	Thursday	Friday	
Green 	—	✓	✗			Language Center
Yellow 						Small Motor Center
Blue 						Listening Center
Red 						Reading Center
Orange 						Work Center
Brown 						Writing Center

Key: — "don't do the center"
 ✓ "do the center"
 ✗ "center completed and checked by teacher"

APPENDIX F

Sample summary of California Administrative Codes which
mandate programs for "severe language handicapped minors"
in California.

CALIFORNIA STATE DEPARTMENT OF EDUCATION
Office of Special Education
721 Capitol Mall
Sacramento, California 95814
and
One Bunker Hill, 601 W. Fifth Street, Suite 1014
Los Angeles, California 90017

KEY POINTS REGARDING PROGRAMS FOR SEVERE
LANGUAGE HANDICAPPED MINORS IN CALIFORNIA
(Aphasic)

MANDATORY PROGRAM

Programs for the aphasic and other severe oral language handicapped minors are mandatory for pupils between six and 21 years of age as set forth in Education Code Sections 894, 6801-6812. Programs are permissive beginning at three years of age and with prior approval of the Superintendent of Public Instruction permissive at 18 months of age. (Education Code Sections 6806 and 6812.5). Programming for the severely language handicapped including aphasic within the provisions of the Master Plan for Special Education are mandated in Education Code Sections 7000-7041, 17303.7 and 26405; and Title 5, California Administrative Code Sections 3300-3390.

HISTORY

Special Education programs for aphasic pupils in the public schools have existed since 1960. The earliest programs were established in Berkeley and Garden Grove. Parents played a significant role in initiation of programs in meeting the special needs of their children with severe language disorders.

PHILOSOPHY

The program for the aphasic and/or severe oral language handicapped is dedicated to providing special education services to the child having severe difficulty with the language process. Because of the complex nature of the linguistic behavior of a child with a severe language disorder, it is important to:

- 1.0 Describe the child's linguistic difficulties as distinctly and concisely as possible;
- 2.0 Observe non-linguistic behaviors that affect language performance; and
- 3.0 Consider these observations as part of and influence on the total developmental and learning patterns of a child.

In order to properly program in the schools for the aphasic and/or severe oral language handicapped, it is necessary to understand the child's language performance in both comprehension and production (reception and expression). Therefore performance in terms of phonology (sounds), syntax, and morphology (grammar), and semantics (concepts) are all essential ingredients in developing a comprehensive program for these pupils. A language disorder is defined as the abnormal acquisition, comprehension, or use of spoken or written language.

DEFINITION OF THE APHASIC AND/OR SEVERE ORAL LANGUAGE HANDICAPPED

Section 3600 (g) of Title 5 of the California Administrative Code reads:

"The aphasic and/or other severe oral language handicapped. A minor is aphasic and/or other severe oral language handicapped when all of the following statements apply to him or her:

- (1) The minor has a severe disability in the comprehension and/or expression of oral language. A minor may be considered to have a severe oral language disorder when:
 - (a) The minor shows normal intellectual potential as measured by instruments that do not require oral expression.
 - (b) The minor's score on the auditory verbal scale of one or more standard tests or sub-tests of language assessment falls two standard deviations below the mean for the minor's mental age as indicated in (a), except that any minor above the two standard deviations but below one standard deviation may be designated as an aphasic and/or other severe oral language handicapped if agreed upon with the unanimous decision of the admission committee.
 - (c) The minor is nonverbal or when a spontaneous language sample of at least 50-100 utterances can be obtained the sample shows development judged clearly inadequate for the minor's age in at least two of the following areas of language development: syntactic, semantic, morphologic, phonologic.
- (2) The disability is of such severity as to require enrollment in a special day class, intensive remedial instruction, an integrated program of instruction, or instruction under Education Code Sections 6670-6874.6.
- (3) Aphasia and/or other severe oral language handicap is evidenced by written statements certifying that the minor has a severe speech and/or oral language disorder, not due to deafness, mental retardation, or autism. This determination of aphasia and/or other severe oral language handicap shall be made in written statements by personnel in each of the following

specific professional capacities:

- (a) A teacher credentialed in the area of the speech and hearing handicapped, or a credentialed speech and hearing specialist, or a speech pathologist who holds certification in speech pathology in the American Speech and Hearing Association shall determine that the child has an aphasic and/or other severe oral language disorder and that the condition is not primarily due to deafness.
- (b) A credentialed or licensed psychologist or licensed educational psychologist shall determine the child's intellectual and emotional capabilities and shall determine that the condition is not due to mental retardation or autism.
- (4) A licensed physician who has training and/or experience with children who have neurological disorders shall determine if neurological dysfunction or other physical disorders exist and how these disorders may be associated with aphasia and/or other severe oral language handicaps.

STANDARDS FOR EVALUATION, PLACEMENT, AND REVIEW

Section 3760 of Title 5 of the California Administrative Code reads:

"(a) Admission of minors to programs for the aphasic and/or other severe oral language handicapped shall be made only on the basis of an individual evaluation and upon individual recommendation of an admission committee which shall include an administrator in charge of special education programs in the school district or county or administrator designated by the school district or county superintendent of schools, a credentialed teacher of the aphasic and/or severe oral language handicapped, a speech, hearing and language specialist who has examined the minor under consideration for eligibility and placement, and a school psychologist or other pupil personnel worker authorized to serve as a school psychologist who has examined the minor under consideration for eligibility and placement. The admission committee shall use such health reports as are needed to properly evaluate the minor. The admission committee shall have the services or presence of other pupil personnel workers, educational specialists, school nurses, social workers, physicians or classroom teachers as the committee may require and request.

The recommendation shall include a statement, that in the professional judgment of the members of the admission committee the minor is recommended for placement in a program for aphasic and/or severe oral language handicapped minors to ameliorate a marked language disability. Any member of the admission committee dissenting from the final committee recommendation shall attach to the final recommendation a statement of reasons for such objection.

(b) The admission committee and the minor's teacher shall annually:

- (1) Review the appropriateness of the placement of minors in special educational programs under the provisions of this chapter.
- (2) Submit recommendations as to the return of such minor to the regular school program, continuance in the program for the aphasic and/or other severe oral language handicapped, transfer to other special education programs, or referral to other agencies.

(c) A special class teacher for the severe language handicapped and/or aphasic pupil shall hold a special education teaching credential or a services credential in language, speech, and hearing which shall include a special class authorization.

(Section 3760 of Section 2 of Article 14, Chapter 4 of Division 3 of Title 5 of the California Administrative Code.)

SERVICES PROVIDED IN AN APHASIC AND/OR SEVERE ORAL LANGUAGE HANDICAPPED PROGRAM

1.0 Special day classes (Education Code Section 6802.1)

- (a) self-contained (E.C. Section 6802.1 (a))
- (b) integrated (E.C. Section 6802.1 (c))

2.0 Intensive remedial instruction (E.C. Section 6802.1 (d))

3.0 Individual instruction (E.C. Section 6802.1 (e))

CLASS SIZE

Maximum class sizes for the aphasic and/or severe oral language handicapped are 6 for ages 3-8; and 8 for ages 9-20. (Education Code Section 6802.2).

FUNDING SOURCES

Current funding support of State apportionments for the aphasic programs is based on ADA and special education allowances. (E.C. Section 18102 and 18102.9).

TEACHER QUALIFICATIONS

A valid credential authorizing service as a language, speech, and hearing specialist is required. (E.C. Sections 6820, 13135, and 13139; California Administrative Code, Title V, Sections 3340, 3760(c), 6570-6575 and 6596-6598).

PHYSICAL FACILITIES

Many school districts are eligible for State School Building Aid to build and equip classrooms. Current area allowance for the aphasic program is: 1,235 sq. ft. (k-8); 1,335 sq. ft. (7-9); and 1,360 sq. ft. (9-12). (Title 2, Section 1810-1, Office of Local Assistance).

TRANSPORTATION

Provisions are made for transportation allowance under E. C. Sections 6807, 6808 and 18060.

STATE DEPARTMENT OF EDUCATION - Program Consultants

Office of Special Education, Special Education Programs

Frederick E. Garbee, Ph.D., Southern California
Consultant in Education of the Language,
Speech, and Hearing Handicapped
One Bunker Hill, 601 W. Fifth St., Suite 1014
Los Angeles, CA 90017
(213) 620-2990

Gordon L. Duck, Northern California
Consultant in Education of the Language,
Speech, and Hearing Handicapped
721 Capitol Mall
Sacramento, California 95814
(916) 445-3561

June, 1976

APPENDIX G

Interviews used to obtain information regarding the
APS-SLI program.

Interview used with: Classroom teachers
Speech Pathologist

1. What are the goals and objectives of this program?
2. Describe the students served in this program:
3. What are your responsibilities as a staff member?
4. Describe the mainstreaming procedures within this program:
5. Describe the curriculum: Speech and Language
 Reading
 Math
 Writing
 Social Studies
 Science
 Remedial Programs
6. Describe the Learning Centers:
7. What equipment, materials and special techniques are used in this program?
8. What are the individualized student evaluation procedures?
9. What are your suggestions for improvement of this program?

Interview used with: Building Principal
Learning Disabilities Specialist

1. What are your responsibilities in this program?
2. Describe the students in this program:
3. Describe the goals of this program:
4. Describe the mainstreaming procedures within this program:
5. What are your suggestions for improving this program?

Interview used with: Psychologist
Coordinator of Speech and Language
Services
Supervisor of Psychological Services

1. What are your responsibilities in this program?
2. What are the long range goals of this program?
3. How are the students identified?
4. Describe the required diagnostic evaluations and procedures:
5. Describe the Review of Placement conference:
6. Describe the children served in this program:
7. Describe the staff responsibilities of:
 - Supervisor
 - Principal
 - Psychologist
 - Learning Disabilities
 - Specialists
 - Certified Teachers
 - Speech Pathologist
 - School Nurse
 - Aide
8. Describe the mainstreaming procedures within this program:
9. How was baseline data collected?
10. What are your suggestions for improving this program?

BIBLIOGRAPHY

- Amphitheater Public Schools. Unpublished Student Records, Diagnostic Reports, Proposals and Procedures. Severe Language Impaired Program, Tucson, Arizona. (1977, 1978 and 1979).
- Ault, Ruth L., Children's Cognitive Development. New York: Oxford University Press. 172-182 (1977).
- Bangs, T.E., Language and Learning Disorders of the Pre-Academic Child. New York: Appleton - Century - Crofts. (1968).
- Barbe, Walter B., Educators Guide to Personalized Reading Instruction. New Jersey: Prentice - Hall, Inc. 131 - 207 (1961).
- Bennett, Clayton L., "Communication Disorders in the Public Schools." Handbook of Speech Pathology and Audiology. (ed.) Lee E. Travis. New York: Appleton - Century - Crofts. 963-994 (1971).
- Bloom, L., and Lahey, M., Language Development and Language Disorders. New York: John Wiley & Sons. Ch.X, XI, XIII, XVIII, XIX (1978).
- Braunstein, S. and Biederman, Sherry., "From Speech Pathologist to Language Classroom Teacher: What Does It Take?" Language, Speech, Hearing Services in Schools, V, 245 - 252 (1974).
- Bryan, Tanis and James., Understanding Learning Disabilities. New York: Alfred Pub. Co., Inc., Ch. 8, 10, 11 (1975).
- Burrows, E., and Neyland, D., "Reading Skills, Auditory Comprehension of Language, and Academic Comprehension." J. Speech Hearing Dis., 43, 467-472 (1978).
- California State Department of Education & La Mesa - Spring Valley School District. Assessment, Education and Management of the Child With A Severe Language Disorder. Sacramento, California. June (1976).
- Carroll, John B., Language and Thought. New Jersey: Prentice - Hall Inc., Ch. 1, 3, 5 (1964).
- Collier, Calhoun C., and Lerch, H., Teaching Mathematics in the Modern Elementary School. London: Macmillan Co. Ch. 1 (1969).

- Courtright and Courtright. "Imitative Modeling as a Theoretical Base for Instructing Language Disordered Children." J. Speech Hearing Res., 19, 655-663 (1976).
- DeBoer, J., and Dallman, M., The Teaching of Reading. New York: Holt, Rinehart and Winston, Inc., Ch. 3, 16 (1970).
- Eisenson, Jon., Aphasia in Children. New York: Harper and Row, Pub. (1972).
- Eisenson, Jon., and Ogilvie, M., Speech Correction in the Schools. New York: Macmillan Pub. Co., Inc., Ch. 8 & 402-406 (1971).
- Fernald, Grace M., Remedial Techniques in Basic School Subjects. New York: McGraw - Hill Book Co., Inc. (1943).
- Flynn, P., and Byrne, M., "Relationship between reading and selected auditory abilities of third grade children." J. Speech Hearing Dis., 13, 731-740 (1970).
- Garrard, Kay R., "The Changing Role of Speech and Hearing Professionals in Public Education." ASHA, 21, 91-98 (1979).
- Ginsburg, Herbert and Oppen, Sylvia., Piaget's Theory of Intellectual Development: An Introduction. New Jersey: Prentice - Hall, Inc. 218-232 (1969).
- Knight, Nancy F. "Structuring Remediation in a Self Contained Classroom." Language, Speech, Hearing Services in Schools. V, 198-203 (1974).
- Johnson, D.J., and Myklebust, H.R., Learning Disabilities. New York: Grune and Stratton. (1967).
- Lerner, Janet W., Children With Learning Disabilities. Atlantic: Houghton Mifflin Co. 203-276 (1976).
- _____. "Components of the Program Offered by the Office of the Los Angeles County Superintendent of Schools, Division of Special Education for Children and Youth with Severe Language Disorders." Los Angeles, California.
- Mann, L., Goodman, L., Wiederholt, J., Teaching the Learning Disabled Adolescent. Boston: Houghton Mifflin Co. (1978).

- Michaelis, John U., Social Studies for Children in a Democracy: Recent Trends and Developments. New Jersey: Prentice - Hall Inc. (1972).
- Moran, M.R., and Byrne, Margaret C., "Mastery of Verb Tense Markers by Normal and Learning - Disabled Children." J. Speech Hearing Res., 20, 529-542 (1977).
- Muma, John R., Language Handbook: Concepts, Assessments, Intervention. New Jersey: Prentice - Hall, Inc. (1978).
- Myklebust, Helmer R., "Childhood Aphasia: An Evolving Concept." Handbook of Speech Pathology and Audiology. (ed.) Lee E. Travis. New York: Appleton - Century - Crofts. 1203-1217 (1971).
- Newcomer, P.L., and Hammill, Donald D., Psycholinguistics in the Schools. Ohio: Charles E. Merrill Pub. Co., Ch. 5 (1975).
- Ogilvie, M., Speech in the Elementary School. New York: McGraw - Hill Book Co., Inc., 1-9 (1954).
- Slingerland, Beth H., A Multi - Sensory Approach to Language Arts for Specific Language Disability Children: A Guide for Primary Teachers. Mass.: Educators Pub. Service, Inc. (1975).
- Smith, Frank., Understanding Reading. New York: Holt, Rinehart and Winston, Inc. (1971).
- Smith, Frank, Psycholinguistics and Reading. New York: Holt, Rinehart and Winston, Inc. (1973).
- Stark, J. "Reading failure: A Language based problem." ASHA, 17, 832-834 (1975).
- Wood, Barbara S., Children and Communication. New Jersey: Prentice - Hall, Inc., Ch. 14 & 15 (1976).

SOURCES CONSULTED

Agar, Carolyn. Amphitheater Public Schools, Tucson, Arizona. Interview. 28 February 1979.

Amphitheater Public Schools. Severe Language Impaired Program, Tucson, Arizona. Observation. October, February, March 1979.

Chula Vista School District. Severe Language Handicapped Classes, Chula Vista, California. Observation. 19 January 1979.

DeGregori, George, Dr. Amphitheater Public Schools, Tucson, Arizona. Interview. 3 March 1979.

Green, Cheryl. Amphitheater Public Schools, Tucson, Arizona. Interview. 3 March 1979.

Jones, Ruth. Amphitheater Public Schools, Tucson, Arizona. Interview. 16 February 1979.

Johnson, Leila. Amphitheater Public Schools, Tucson, Arizona. Interview. 21 February 1979.

Maddocks, Wendy. Amphitheater Public Schools, Tucson, Arizona. Interview. 8 March 1979.

Orr, Janis. Amphitheater Public Schools, Tucson, Arizona. Interview. 21 February 1979.

Rislov, Marcia. Amphitheater Public Schools, Tucson, Arizona. Interview. 15 February 1979.

Tempe Elementary #3. Communications Development Program, Tempe, Arizona. Observation. 20 February 1979.

Tucson Unified School District. Severe Oral Language Classes, Tucson, Arizona. Observation. 8 February 1979.