TEACHING STUDENTS WHO ARE DEAF-BLIND: OBSERVED PRACTICES

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PREFACE

Several challenges for special educators and regular classroom teachers evolved during the 1980s. Implementation of the "Least Restrictive Environment" regulations brought deaf-blind and severely handicapped students into settings with teachers who have little experience working with these individuals.

Teachers are concerned about working effectively with students who are deaf-blind. Rehabilitation personnel are also being placed in the position of providing instructional services, including vocational training, to individuals with deaf-blindness. Teachers and rehabilitation counselors are very unsure about how to provide appropriate and effective services to these individuals in mainstreamed settings. This publication is intended for these professionals.

This publication is to serve as a guide for teachers and instructional personnel who are working for the first time with individuals who are deaf-blind. It may be used in conjunction with a companion volume entitled *Teaching Youth Who Are Deaf-Blind: Annotated Bibliography*. This document is not intended to solve all the problems a teacher may encounter or to provide a total picture; rather, it is to be used as a supplementary resource for teachers. Both this publication and the annotated bibliography contain resource information which may be of assistance to instructional personnel.

The information found in this publication is the result of a nondirected demonstration project funded by the U.S. Department of Education, Special Education Programs, Severely Handicapped Branch. The project was conducted over a three year period and allowed project staff to observe interactions between youth with deaf-blindness and their teachers in a variety of settings, working on a variety of tasks. These observations are reported in this publication with the hope that the information will be helpful to instructors and teachers who are willing to accept the challenge and the opportunity to touch and be touched by the lives of deaf-blind individuals.

Project staff want to acknowledge several individuals whose help and support were invaluable during the project. Dr. J. Martin Giesen and Dr. Shelly Marmion contributed expertise in methodological and instrumentation issues. Dr. Norma Tedder and Dr. Mike McCarthy served as subject matter experts, generously sharing ideas at professional and informal meetings. Dr. Susan Kelley gave valuable assistance in the editing and preparation of the final publication. Graduate students Byron Burton and David Isoh assumed responsibilities for data manipulation during the project. All of their contributions helped to produce this publication.

Project staff are especially grateful to all those persons who gave of their time and knowledge through completion of detailed questionnaires and through participation during observation periods. These included teachers in the national survey, administrators and instructional staff at the research sites, and parents. Special thanks are extended as well to the deaf-blind youth who participated in this project.

B. J. Maxson Project Director

EXECUTIVE SUMMARY

Improving the educational system's effectiveness and quality of education for deaf-blind youth is a major concern of the United States Department of Education. To examine the present capacity of educational programs to serve these young people, the Office of Special Education and Rehabilitative Services sponsored an "Observed Practices Study of Effective Teaching Technologies for Deaf-Blind Youth." This report presents the study's findings.

The goals of this research project were:

- 1. To investigate and identify current effective practices in teaching youth who are deaf-blind, and
- 2. To develop instructional guidelines based on those observed practices.

Three subprojects were completed toward this goal:

- 1. Identification, review, and analysis of existing literature on "learning styles" and effective learning methods used by deaf-blind youth. Results of this subproject are compiled in an annotated bibliography, a companion to this publication.
- 2. Preliminary identification of effective teaching technologies for enhancing vocational and independent living skills in deaf-blind youth through a national survey of teachers of deaf-blind youth. Results of this subproject are reported briefly in this publication and in greater detail in Maxson, Tedder, Lamb, Giesen, and Marmion (1989).
- 3. An ethnographic analysis of four successful supportive educational employment/work experience programs to identify effective learning styles and teaching technologies for deaf-blind youth in transition. Results of this subproject are reported in this publication.

Summary of Observed Practices

The following list summarizes observed teaching practices which appeared to impact the acquisition of knowledge and skills of youth with deaf-blindness. Included are items which encouraged, motivated, and inspired student interest in learning. These are not listed in any particular order and their emphasis varied with student and teacher.

Program and curriculum practices.

- 1. Facilities used a functional curriculum directed toward the individual student's vocational goals.
- 2. Activities were age appropriate.
- 3. All activities were meaningful to the student.
- 4. Students did not have to wait long periods of time without stimuli.

- 5. Students were taught to appropriately entertain themselves during free time.
- 6. There was an emphasis on teaching independent living skills.

Communication practices.

- 7. There was a high emphasis on varied and simultaneous multiple communications.
- 8. All behavior was considered as potential communication.

Teacher/student interaction.

- 9. Students were encouraged to maintain internal locus of control as much as possible.
- 10. Initial instruction was conducted in a distraction-free environment.
- 11. When instruction was unsuccessful, the teacher presented the task again using other methods and strategies.
- 12. Students were made aware of environmental circumstances surrounding them as much as possible.
- 13. Most students worked with multiple teachers, but had one primary instructor. (Students' preferences for working with a particular teacher or staff member were recognized and facilitated when possible.)
- 14. Cognitive tasks were usually conducted one-to-one.
- 15. Students were encouraged to take decision making responsibilities.
- 16.A team approach to instruction was used when appropriate; team members collaborated formally and informally to reinforce each other's teaching objectives across different activities.
- 16. Students were expected to generalize appropriately to other activities.
- 17. Teachers accepted the responsibility for instructional success.
- 18. The more severe the visual loss, the lower the student/teacher ratio.
- 19. Different teaching methods were used for teaching different skill areas.
- 20. Instructional sessions tended to be short (10-20 minutes) and intense even if the class period was longer.
- 21. Instructional methods included repetition, use of a variety of stimuli, and experiential type learning strategies.
- 22. Students were allowed to attempt activities with limited success potential; they were allowed to fail.
- 23. Reinforcement schedules tended to be initially continuous and then intermittent. The goal was for the student to become self-reinforcing.
- 24. No compliance training was used.
- 25. Students' cognitive abilities were addressed and challenged across all functional levels.
- 26. Teachers prepared students for upcoming activities well in advance (i.e., daily schedules).
- 27. Students were encouraged to explore appropriately and problem solve.
- 28. Many instructional interactions allowed the student to problem solve before information was given.

- 29. Student preferences for teacher, location, materials, and environment were accommodated as much as possible.
- 30. Characteristics of the student/teacher bond and relationship, such as openness, trust, and intensity, were often the primary motivator for both student and teacher.
- 31. Teachers consistently emphasized the withdrawal of teacher involvement during progressive learning.
- 32. Students were consistently treated with dignity and respect.
- 33. Students were given daily responsibilities for the common good, emphasizing awareness of the needs of others.

Family involvement observations.

- 34. School personnel placed high priority on parental opinions and suggestions.
- 35. Students had frequent contact with their families.
- 36. There was frequent communication between families and instructional personnel.

Least restrictive environment observations.

- 37. Natural and appropriate settings were used for instruction.
- 38. Social interaction with nondisabled persons and peers was encouraged.
- 39. Whenever possible, students were integrated into activities with less disabled or nondisabled peers. This usually occurred in conjunction with a teacher or teacher's aide who normally worked with the individual with deaf-blindness.

Implications and Recommendations

This study enabled research staff to observe many exemplary program and instructional practices that have promising potential to improve the educational success of persons with deaf-blindness. Careful examination of these practices over time will be required to demonstrate whether, in fact, they translate into better vocational outcomes for deaf-blind youth.

While some educational programs for deaf-blind youth are certainly better than others, the educational system is not alone in its efforts to improve vocational and quality of life outcomes for persons who have this dual disability. The education system's level of success with this population is closely related to the relative success of the larger social and rehabilitation communities. Given the nature of deaf-blindness and its associated service needs, meaningful improvement in education outcomes has to be tied to a larger service and community environment with the capacity to provide opportunities for meaningful participation.

Opportunities for meaningful interactions with nondisabled peers are not necessarily enhanced in mainstreamed settings. For those who are deaf-blind, the least restrictive environment may be the one where they have the most opportunity to act freely and to enjoy friendships with those who can communicate with them. Mainstreamed programs will be effective and meaningful for the student only when

an individual in that environment takes a special interest in that student. There is still a major need for community education about the abilities of those who are deaf-blind. Transition into the community, therefore, will necessitate staff-intensive opportunities to help the community adjust to unique needs of the deaf-blind individual.

For teachers who are newly confronted with this type of educational instruction, implications of this study are both encouraging and discouraging: With regard to teaching deaf-blind students, there is no one "right" way of doing anything. The most effective instructional strategies appear to be those that are individualized, functional, and occur in a natural context. Keys to learning are effective communication and the relationship between student and teacher. Positive one-to-one interactions are extremely difficult to accomplish when there is a high ratio of students to teachers.

This study's findings suggest a number of actions that OSERS and instructional personnel may want to consider in their efforts to improve the educational system's effectiveness and the quality of education for deaf-blind youth. The following recommendations propose ways in which OSERS and instructional personnel might facilitate this process at local, state, and national levels by (a) promoting the development of appropriate programs, (b) continuing to stimulate research in educational issues related to deaf-blindness, and (c) encouraging innovative professional development strategies for teachers who work with this population:

- 1. Encourage the development of opportunities for teachers new to the area of deaf-blindness to observe and/or interact with experienced teachers.
- 2. Encourage the development of inservice training opportunities to teach sign language to teachers involved with those who are deaf-blind.
- 3. Encourage the development and implementation of instruction in a natural and functional environment.
- 4. Evaluate existing instructional programs for the deaf-blind for utility in terms of standards of excellence observed in this study.
- 5. Stress the importance of development of language skills for students who are deaf-blind.
- 6. Promote additional research into the areas of cognition and memory of those who do not have verbal language skills.
- 7. Promote research into the team teaching versus individual teacher (Helen Keller-Annie Sullivan approach) models of teaching and the effectiveness of each.
- 8. Stimulate realistic community education concerning the skills, abilities, and talents of people who are deaf-blind and the contributions they can make to our society.

TEACHING STUDENTS WHO ARE DEAF-BLIND: OBSERVED PRACTICES

Part I: Study Findings

CHAPTER 1

STUDY PURPOSE AND METHODS

Since the mid-1960s, there has been a federal effort to encourage the development of educational programs designed to increase the effectiveness and quality of education for deaf-blind children and youth. This has occurred largely in response to the needs of those affected by the rubella epidemic. The efficacy of such programs and of the various approaches (e.g., cognitive, developmental, experiential, and functional) to teaching deaf-blind youth during the transition years has not yet been fully researched. As a result, special education teachers, rehabilitation personnel, and other instructional personnel are concerned about instructional methodologies that best meet the transition needs of deaf-blind youth.

Statement of the Problem

Administrators in the educational and rehabilitation fields are concerned about the extent to which the investment of financial and personnel resources will ultimately result in a time effective and predictively successful wage-earner outcome. Two of the barriers to appropriate community integration of deaf-blind persons are the dearth of qualified instructors and the lack of precise teaching methodologies available to teachers and other instructional personnel presently in place. Although much effort was expended in the 1970s, little has been done recently to identify, compile, review, or analyze the existing literature on the learning approaches of deaf-blind youth or to differentiate the ways in which members of this population approach learning. Whether a deaf-blind person's inability to acquire basic skills is a reflection of learning style specific to him/her or to the limitations of teaching methods, or perhaps a combination of both, is not known at the present time. This is further complicated by appropriateness of the task, level of difficulty of that task, and the interaction of these elements with learning style and teaching method.

The population of deaf-blind persons is very heterogeneous; the teaching method which works well for one person often does not work for another. Therefore, it is important to identify effective learning styles and teaching methods for each individual learner.

Purpose of the Research

The goals of this research project were:

- 1. To investigate and identify current effective practices in teaching youth who are deaf-blind, and
- 2. To develop instructional guidelines based on those observed practices.

Three subprojects were completed toward this goal:

1. Identification, review, and analysis of existing literature on learning styles and effective learning methods used by deaf-blind youth. Results of this

- subproject are compiled in an annotated bibliography entitled *Teaching Youth Who Are Deaf-Blind: Annotated Bibliography*, a companion to this publication.
- 2. Preliminary identification of effective teaching technologies for enhancing vocational and independent living skills in deaf-blind youth through a national survey of teachers of deaf-blind youth. Results of this subproject are reported briefly in this publication and in greater detail in Maxson, Tedder, Lamb, Giesen, and Marmion (1989).
- 3. An ethnographic analysis of four successful educational programs to identify effective learning styles and teaching technologies for deaf-blind youth in transition. Results of this subproject are reported in this publication.

Methodology

This study is a qualitative evaluation, one which relied upon naturalistic inquiry in naturally occurring educational programs for deaf-blind youth. The research design required that project staff have direct personal contact and experience with the programs under study. Multiple approaches, including triangulation, for data analysis contributed to the methodological rigor of this project.

Sample selection. Four diverse sites known for excellence in the area of instruction of youth with deaf-blindness were selected for direct observation. These included one urban residential program with community work experience and mainstreamed educational opportunities; one rural residential program with different levels of on-campus work experience designed to simulate community based employment (community placements were not available); an adult service rehabilitation facility; and a fully integrated, nonacademic, community based educational program in an urban setting.

At each site, three students representing three levels of intellectual functioning were selected for participation in the study. Each student was between the ages of 15 and 25 years and diagnosed as deaf-blind according to the Special Education Services definition:

"Having both visual and auditory loss such that the combination causes such severe communication, learning, and development problems that they cannot be appropriately educated in programs solely for hearing impaired or visually impaired students."

The student sample included seven females and five males. Three had no usable residual hearing or vision. These students were equally distributed into three functional levels: (a) The highest level students were all pursuing standard high school diplomas; (b) the middle group had some communication skills and were able to function fairly independently in some situations; (c) lower level students had very little, if any, communicative language and were classified among lower levels of intellectual functioning.

Project staff trained in observation techniques specific to this study stayed at each site for two full weeks and lived within close proximity to the students, eating meals with them and sharing their nonstructured time as well as their daily educational routine. Students demonstrated a wide range of abilities, interests, and potential in terms of intellectual, visual, and auditory functioning. On the whole, the students were very friendly and accommodating to the observers and readily accepted them into their living, working, and learning environments. Each student was systematically observed in the classroom for two full days in conjunction with other various activities on other days. The schedule remained relatively intact at all facilities. Weekends were used to interact with students at regular leisure time activities such as field trips, attendance at sporting events, crafts and games, shopping, and organized activities.

Teachers and professional staff who had instructional responsibilities or interactions with the students also participated in this study. They included 53 teachers and additional support personnel such as psychologists, administrators, and residential care workers.

Instrumentation. Standardized assessments were used and new instruments developed to assist in organizing and recording the observations and to focus the attention of the research team on specific areas of concern. Existing standardized instrumentation used to acquire information about teachers at the study sites included the Myers-Briggs Type Inventory (Briggs-Myers & McCaulley, 1985) and the New Revised Canfield Instructional Styles Inventory (Canfield & Canfield, 1988). Other data collection instruments developed by the project staff included the following: (a) Student Data and Case Review Form, (b) Student Observation Sheets (which were completed for each instructional task observed), (c) Group Observation Sheets, (d) Analysis of Student Learning Form, (e) the Revised National Teacher Survey (developed in the first subproject as a preliminary tool), (f) Curriculum Information, (g) Program Information, (h) Facilities Information, (i) the Student Interview Form, (i) the Teacher Interview Form, and (k) three separate learning tasks which teachers were asked to introduce to students. These learning tasks allowed All instruments developed by project staff were for measures of comparison. reviewed by a panel of experts for content validity, presentation style, ease of use, and overall utility.

Data collection. Data collected for this study were measured both quantitatively and qualitatively. Emphasis was placed on gathering detailed descriptions of situations, events, people, interactions, and observed behaviors. Minimal effort was directed toward making empirical data fit predetermined or standardized categories.

Information gathered at the sites was augmented by narrative information which was written out by each observer. These narratives included teacher characteristics, student learning characteristics, dialogues, and descriptions of activities and interactions. Revisions of the more structured instrumentation were made on two separate occasions in order to streamline some of the narrative data collection process.

Data analysis. Data collected on 750 variables for 12 students and 53 teachers and other staff were coded for descriptive analysis as outlined in *The Statistical Package for Social Sciences* (Nie, Hull, Jenkins, Steinbrenner, & Bent, 1975). Information directly related to instructional issues was developed using a content analysis approach via group brainstorming and is included in the Teaching Methods section of this publication. Two outside experts, both with many years experience working with deaf-blind youth, met with the observers to help identify themes, analyze overall impressions, develop conceptual meanings, and provide direction and objectivity to the content analysis.

Organization of the Report

Chapter 2 of this report summarizes study findings related to characteristics of the sample of teachers (N=53) who participated in this study. Chapter 3 operationally defines six teaching methods in relationship to five specific cognitive skills that were emphasized in this study, then discusses findings concerning the mix of strategies matched to skills. Chapter 4 presents detailed descriptive information about observed practices. Chapter 5 summarizes findings related to least restrictive environment considerations. Chapter 6 includes conclusions and recommendations.

Part II of the report includes descriptions of specific instructional activities observed during the study. Assessment instruments used with students, as well as other useful resources, are listed in the Appendix.

CHAPTER 2

TEACHER CHARACTERISTICS

It has often been said that it takes a special type of person to effectively teach deaf-blind persons (VanDijk, 1964). The research staff explored this idea using two popular standardized instruments: the Myers-Briggs Type Indicator (Briggs-Myers & McCaulley, 1985) and the Canfield Instructional Styles Inventory (Canfield & Canfield, 1988).

The Myers-Briggs Type Indicator (MBTI) is a self-report personality inventory which describes and profiles individuals' natural preferences for focusing attention, acquiring information, making decisions, and dealing with people and things in the outer world. Preferences are measured on four scales: (a) Extroversion-Introversion, (b) Sensation-Intuition, (c) Thinking-Feeling, and (d) Judgment-Perception. Preferences vary by task, situation, timing, and interpersonal factors; nevertheless, individuals tend to prefer one mode of perception and behaving over another much as they prefer using one hand over another.

Results indicated that teachers participating in this study were virtually equally divided on three continua: on the extroversion-introversion continuum (how they related to the outer world of people and things), on the sensing-intuition dimension (how they make decisions, i.e., using known facts or examining possibilities and relationships), and on planful versus spontaneous activities. On the fourth continuum, thinking-feeling, the majority of teachers expressed clear preferences for basing judgments on feelings rather than logic.

Instructional staff also completed the Canfield Instructional Styles Inventory (CISI), a self-report instrument which was designed to be used by instructors in educational settings. The purpose of the CISI is to assist teachers in their efforts to adjust instructional approaches to suit the needs of their students. The CISI gives a comprehensive profile of the techniques individual instructors use when presenting materials to students and assesses relative preferences for 21 different aspects of the teaching-learning experience, including: (a) Conditions of Instruction (8 scales encompassing peer organization, goal setting, competition, instructor, detail, independence, and authority; (b) Areas of Interest (4 scales including numeric, qualitative, inanimate, and people; (c) Modes of Instruction (4 scales related to lecturing, reading, iconic and direct experience; and (d) Influence Scale (4 components and 1 summary scale).

The newest edition of the CISI was administered after site visits were completed. The number of respondents was less (n=29) than the full sample (N=53) because several staff were not available. The majority of teachers responding described preferences for neutral instructional styles on this instrument. They preferred to shift and tailor their instructional styles to suit the needs of a given set of students or a particular aspect of the curriculum.

Results of both the MBTI and the CISI indicate that teachers in this study are characterized by flexibility and diversity. They do not appear to fall into any particular educator typology or personality category.

CHAPTER 3

TEACHING METHODS

To organize data about instructional methods, the research staff first conducted a national survey of 124 teachers of deaf-blind youth and asked them what strategies they would use in teaching five specific cognitive tasks: remembering (abstract and concrete), perception, concept development, and problem solving. These task areas or skills to be mastered by students were based on the cognitive areas which were being explored for the study and were operationally defined as follows:

- 1. Remembering concrete information: Learning tasks in this area include remembering concrete or tangible information. Instruction observed in this area included assembly tasks, laundry skills, sewing, and cooking from a recipe.
- 2. Remembering abstract information: Learning tasks in this area were those which did not have a tangible representation. Observed instruction included remembering a sequence of events, daily schedules, and academic subjects such as historical data, facts, and names.
- 3.Learning concepts: Learning tasks in this area included vocabulary development, processing and interpreting new concepts, and generalizing a concept to different applications and in different environments, for example, "work" as a concept and as an activity. Observed activities included work adjustment activities, filing, sorting, communication, and language arts.
- 4. Problem solving: Tasks in this area included evaluation activities, practical applications of concepts, and figuring out what to do in certain situations, such as if one is lost. Observed learning tasks included leisure activities (i.e., chess, fishing, etc.), mathematics, budget planning, meal preparation, and orientation and mobility instruction.
- 5.Perceptual tasks: Tasks in this area included awareness of environmental situations, interpreting sensory (auditory, visual, and tactile) information accurately, and developing socially appropriate ways of sensing and discerning external activity. Activities observed in this area included shopping activities, orientation and mobility instruction, social activities, and woodworking and shop classes.

With regard to teaching strategies, teachers in the national survey responded to open-ended questions and provided a variety of responses which project staff subsequently categorized into six strategies: (a) repetition and practice, (b) use of concrete objects, (c) experiential learning, (d) use of a variety of stimuli, (e) task analysis strategies, and (f) use of language to express concepts. These are operationally defined as follows:

1. Repetition/practice: These methods encouraged rote learning, memorization through repetition, and drill. There were different types and systems of reinforcement, including continuous, variable, and intermittent schedules with various methods and frequency of cues and prompting.

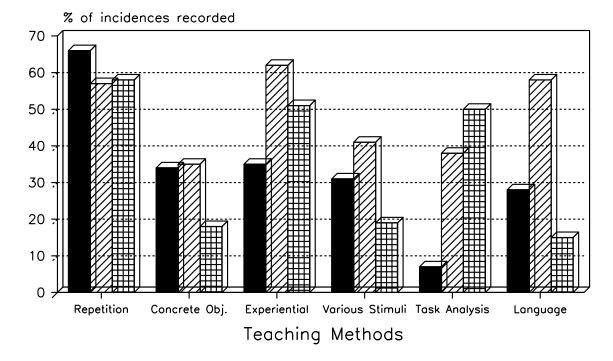
- 2. Concrete objects: Use of concrete objects assisted the students in grasping the tasks. For example, a segmented box helped students learn their daily schedules. Each different activity was represented by a concrete object and then the objects were placed in order of sequence.
- 3. *Experiential:* These activities guided students through the particular experience to be learned. The experiential method included frequent field trips and learning-by-doing activities. This method also included trial and error activities and practical experiences.
- 4. Variety of stimuli: This method included the use of many teacher made and commercial materials. A student was shown a variety of different sensory stimuli to enhance the concept to be learned.
- 5. *Task analysis:* This method included the division of a specific task into a sequence of smaller elements to be learned. Behavioral management techniques such as forward and backward chaining, shaping, and operant conditioning were adapted for use in this type of methodology.
- 6. Language: This included different types of explanatory information- sharing techniques such as written, braille, and large print materials; teacher explanations via total communication, sign, and voice; lectures; class discussions; and verbal and signed descriptions.

After the national survey was completed, project staff asked teachers at each of the data collection sites to respond to the same questions about teaching methods. Their responses were compiled for computerized analysis. At this juncture, two self-report measures about teaching methods were available, one from the national survey and the other from the project sample. A third measure was added by project staff who, during periods of observation on site visits, recorded behavioral observations of the methods teachers actually used. This process triangulated three perspectives about teaching methods used. These perspectives were then presented in a matrix that was organized with specific types of cognitive tasks down the left side and specific instructional methods across the top.

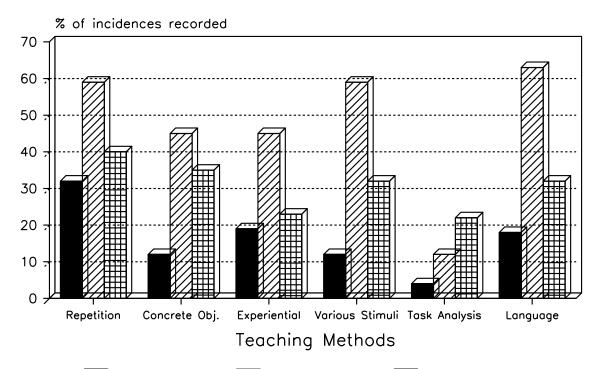
The research staff hoped that the mixture of responses from the three perspectives would provide insight into the types of teaching methods used for various types of learning tasks. Results indicated that a variety of methods were used. Figures 1 through 5 show the percentage of responses in each of the learning areas for the triangulated views mentioned above.

Teachers in the national survey and those participating at research sites self-reported more frequent use of all teaching strategies than project staff actually observed during site visits. One exception to this general observation involved repetition and practice. Project staff recorded a greater percentage of incidents using this method when learning objectives involved perceptual information and remembering concrete information.

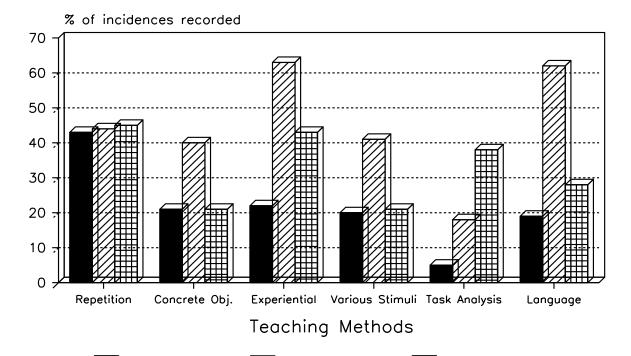
Generally speaking, teachers in the national survey reported less frequent use of all teaching strategies except task analysis than did teachers at the observational data collection sites. Project staff reported that task analysis was the least frequently used teaching method observed during site visits.



Observers N=143 All Teachers N=53 Bloom Not'l Survey N=124
Figure 1: Teaching methods for REMEMBERING CONCRETE
INFORMATION: self-report measures and behavioral observations

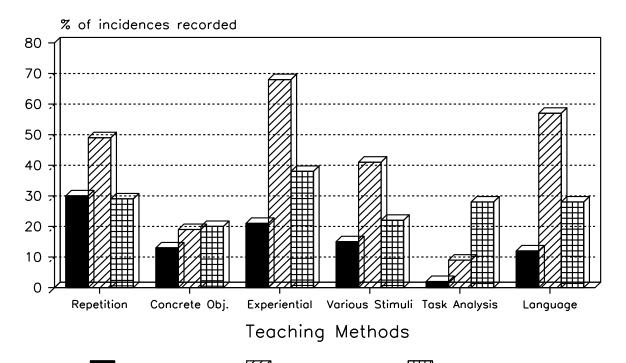


Observers N=143 All Teachers N=53 Bloom Not'l Survey N=124
Figure 2: Teaching methods for REMEMBERING ABSTRACT
INFORMATION: Self-report measures and behavioral observations

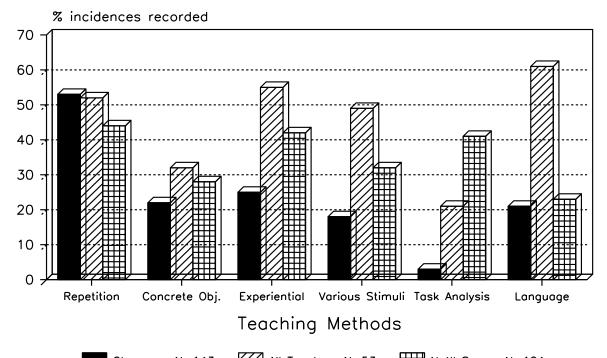


Observers N=143 All Teachers N=53 Mot'l Survey N=124

Figure 3: Teaching methods for LEARNING CONCEPTS: Self-report measures and behavioral observations



Observers N=143 All Teachers N=53 Mot'l Survey N=124
Figure 4: Teaching methods for PROBLEM SOLVING: Self-report measures and behavioral observations



Observers N=143 All Teachers N=53 Wot'l Survey N=124

Figure 5: Teaching methods for PERCEPTUAL TASKS: Self-report measures and behavioral observations

Language methods reflected the greatest perceptual variability among self-report and observational perspectives. Teachers participating in the observational study reported substantively more application of this strategy than did teachers in the national survey. Project staff observed language strategies substantively less than was reported by both samples of teachers. A similar pattern was found in relationship to the method of presenting a variety of stimuli for all learning skill areas.

These discrepancies or perceptual differences are consistent with the notorious understanding that behavioral observations and self-report measures frequently do not match. Discrepancies between words and deeds in this situation may have been attributable to or a function of the length of time evaluators spent observing teachers.

CHAPTER 4

OBSERVED PRACTICES

Program and Curriculum Practices

Generally, the curriculum used at all facilities was based on specific student needs. The exception to this was seen with evaluation procedures where students were exposed to a variety of situations to determine specific areas of instructional need. Formal assessment procedures varied across sites to the extent that the 12 students were exposed to 31 different evaluation instruments to measure aptitude, achievement, intellectual ability, and language comprehension (See Appendix for the listing of evaluation instruments). The heart of the assessment procedures appeared to be based on the long term living and working goals of the students and the informal observations and opinions of teachers, parents, associated professionals and, whenever possible, the students themselves.

The living and working goals were determined primarily by what community resources were available to the students and not solely on the student's individual preferences or skills. For example, a student may have been interested in and capable of semi-independent apartment living; but, if such a resource did not exist in the community where the student planned to live, then the goal was changed to that of a group home situation. The individual student curriculum was changed to reflect that goal. It was interesting to note that, whenever possible, skills necessary to achieve higher level goals were included in the curriculum to avoid limiting the student's potential by lack of appropriate skills. In the example presented, higher level curriculum skills included the concepts of budgeting and bill paying, asking neighbors for help, planning meals for one or two people, arranging transportation to the store, and the like.

Independent living goals. Students who were in a regular high school diploma program were also involved in supplementary living and vocational training programs beyond the regular high school curriculum. Simulated and/or actual semi-independent apartment living situations were available to all higher level students. In each situation, the student shared the apartment with another roommate or roommates and curriculum objectives included the social and practical applications of these living situations. In most cases, roommates were not deaf-blind, although they had a sensory disability. No nondisabled roommates were included among the programs observed. This was more of a practical than philosophical issue.

All students were given opportunities to develop skills to assist them in living cooperatively with others. Activities were tailored for the particular facility and the individual student. Students in one residential facility were given rotating opportunities to prepare lunch for others in their class or living facility. Others were given the opportunity to cooperatively suggest and develop recreational and leisure time activities. Another facility had a student advisory committee to provide input to the cafeteria staff about preferred foods and meals. In one situation, a student was learning to play cards to participate with other nondisabled workers who played

cards during lunch break at the work site. In general, students were encouraged to be considerate of others and to be aware of the people in their environment.

Most activities were age appropriate. Those that were not were adapted in order to make them as appropriate as possible. The major causes of non-age-appropriate activities were the logistics of collective living situations, student preferences, and/or liability issues. The majority of these instances occurred outside the instructional day and in the residential and living areas. Examples of non-age-appropriate activities included older students who wanted to be pushed on a swing, hugging staff and strangers, and rules and restrictions placed on the independence of older students (i.e., having to report where they were at all times, inability of students to go to town alone or with a friend, or lights out at a specific time). In all cases, the preference or safety of the student or the logistics of congregate living were the primary reasons for these activities.

All independent living instructional activities were conducted in functionally appropriate environments. If a student was learning to make a bed, it was done once a day in the student's room and before breakfast. If a student was learning to set the table, it was done in the eating area before a meal and was reinforced three times a day at the appropriate times. The students were not drilled on these activities in a classroom environment, although they may have been reinforced via instructional materials. For example, one student with residual vision was presented a picture which included a set table during a language arts activity related to structuring questions. This was done to reinforce the table setting instruction in the independent living module of the student's curriculum.

Recreational and leisure activities. Students in residential programs had fairly strenuous schedules with periods of unplanned activity occurring primarily before and after the evening meal. Most of the residential facilities also made organized activities available if the students wanted to participate during these times. These activities included shopping trips to the mall, fishing, roller skating, swimming, going to restaurants, movies, football and baseball games (spectator and participant), organized games such as dodgeball, after school extracurricular activities such as clubs, sports, and cheerleading, and continuing education classes such as aerobics. Students participated in their own leisure or planned activities which included watching television (captioned and uncaptioned), exercise activities, informal games, crafts, puzzles, personal maintenance and cleaning, visiting or socializing with others (friends, family, volunteers, staff, and the research observers), attending church, listening to the radio, doing family chores, and idle activities such as sitting outside on a swing, laying in the grass, napping, and catching fireflies. During these idle times, mid-level and lower functioning students were sometimes observed signing or talking to themselves. In one instance, a student was observed signing to some fireflies.

Vocational goals. Vocational opportunities for the higher level students included work experience jobs in the community and on campus. The students were generally in continuum programs where they first had a fairly closely supervised on-campus work experience, then moved to a less supervised on-campus experience, and finally moved into a community based situation with progressively less

supervision by school personnel until they were totally supervised by community based employers. This emphasis was also true for the majority of students observed in the project no matter what their functioning level. There were two exceptions. One program in a rural area had no community based employment opportunities due to high local unemployment rates and lack of funding and staff to develop such opportunities. The other exception was the project which was totally community based. Students in that program started their work experience in the community with supervising teachers. Community based work experience placements included electrician's assistant, dishwasher operator at a hospital, salad preparer at McDonalds, and warehouse worker. On-campus work experience opportunities included cafeteria worker, catering activities, furniture refinisher, chair caner, dishwasher, clerical/office helper, library assistant, messenger, and janitorial assistant.

Not all students observed had started their actual work experience program, but all were expected to include that component in their academic programs. Several students were involved in work adjustment activities to build job-keeping skills. These were primarily production and assembly activities in what would be termed a "prevocational area" which was designated for the purpose of developing a realistic concept of work. In two classrooms, prevocational activities such as sorting were observed. In one case, when a student had sorted materials in a work corner for 20 minutes, she was given a penny and allowed to go independently to a bubble gum machine several buildings away. She was observed by a researcher to dance, laugh, and jiggle during that trek. Having lived a very sheltered, restricted life prior to coming to the school, this young woman obviously delighted in both the reinforcement and independence made available to her in this context.

Academic curriculum. Students in residential facilities had a more comprehensive academic program. The three students in the full time community based work experience programs were not participating in what would be considered a traditional academic curriculum. Rather, they were involved primarily in vocational training and independent living activities. The information in this section was derived from observations of the programs of the remaining nine students.

Most students were involved in language and communication activities as part of their daily curriculum. These activities included speech therapy, sign language instruction, how to phrase questions, grammar, vocabulary growth, braille skills, comprehension. writing skills, penmanship skills, reading augmentative communication materials such as communication books, and the use of electronic communication aids (such as a microcomputer, Telecommunication Device for the Deaf, assistive listening devices, or closed circuit televisions). Class activities in all language skills areas were often developed to reinforce vocational and living goals. For example, if the student was working on writing skills, s/he wrote a letter home about learning to ride the bus. If a student was learning to ask questions, s/he used examples appropriate to their goals such as: "Who cooks dinner today?" "Will you go roller skating with me?" "Where is the rest room?" or "Will you give me a ride home tomorrow?" Vocabulary development was focused on the practical use of words that were appropriate for vocational and living goals.

Mathematics classes and instruction were focused primarily on practical applications, with the exception of the standard classes for diploma students. Banking, budgeting, measuring, making change, shopping, consumer math, counting, and work applications were emphasized. Skills such as adding and subtracting were put in the context of everyday living. Some rote memorization took place, but it was usually given an interesting context such as counting things that the student liked in an environment that the student liked.

Social studies applications varied from learning about American history to developing social skills. There was a very wide scope, but, again, the practical and functional applications were emphasized. Some career development activities were included as students learned about different jobs that individuals had and what job tasks were involved. Some students learned this in classroom discussions, while others took field trips to observe people working firsthand. For some students, career development activities were emphasized; for others, career development was simply incidental learning.

Health and science studies ranged from horticulture classes to first aid and included sex education, dating etiquette, biology, botany, simple chemistry, home safety, and personal hygiene.

Whereas individual teachers taught a variety of academic subjects, woodshop activities were taught by a different instructor at each site and were held in well equipped, well organized woodshops. Both male and female students were very interested in the woodshop activities and appeared to enjoy producing the items and selling them or giving them away. In all cases, the woodshop instructors were skilled in sign language and experienced in working with individuals with deaf-blindness. Some activities allowed students to make an entire item from beginning to end, some activities were team projects, while other activities were designed as a production activity where students had a small routine part in producing a number of similar items. Items produced included a book case, book ends, tool boxes, paper towel holders, knick-knacks, and a small stool. There was also a caning, weaving, and furniture refinishing shop located in one facility.

Home economics classes included cooking and sewing. Cooking was related to the students' goals of being as independent as possible. Kitchen safety was emphasized, and, as much as possible, reading and mathematics were included in the curriculum. Students were involved in the process from the very beginning of menu planning, finding recipes, shopping, food preparation, following a recipe, inviting friends for meals, and cleaning up. Foods varied from toast or sandwiches to full meals of chicken and vegetables or spaghetti and tossed salad. One class was involved in an ongoing catering activity and contracted with organizations in the community to provide food dishes for special occasions such as church suppers and parties.

General comments about program practices. Students did not spend long periods of time waiting for activities to begin or waiting in line. Exceptions occurred during a few field trips. Behavior problems were minimal. When there was free time, some of the higher functioning students often asked less capable students to go for a walk or participate in an informal activity. At one facility, students in particular dormitory units ate together. After going through the cafeteria line, they

went to their chairs and stood behind them until their dorm mother was seated at the table. They stood tall and waited very quietly with almost military pride in the orderliness of the task. Then they said grace and sat down together, talking with great animation and excitement.

In general, students appeared to enjoy the majority of activities and each activity was, in and of itself, often a motivating factor for students. The teachers worked diligently to make the activities meaningful for students and to have students understand the value of the skill or knowledge being taught. There was very little, if any, of what might be considered "busy work."

In summary, the observed practices related to program and curriculum included:

- 1.Use of a functional curriculum, directed toward vocational and living goals;
- 2. Age appropriate activities;
- 3. Activities which were meaningful for students;
- 4. Full schedules for students, with little time waiting for activities to begin;
- 5.Instruction for students in the ways to appropriately entertain themselves during free or leisure time;
- 6.Emphasis of curriculum and program activities on independent living skills and vocational goals.

Communication Practices

One obvious major difficulty for individuals with deaf-blindness relates to communication and language barriers. This is especially troublesome for students who are congenitally or prelingually deaf. The severity of the communication problem depends on the level of intellectual functioning, other disabling conditions, combinations of severe visual loss, residual hearing levels, early detection, family support, and educational programming.

Sensory aids. It is appropriate that students who are sensorially impaired and who participate in special education services receive evaluation and training in the use of suitable sensory aids. Periodic reevaluation is indicated when students enter new environments or when they experience change in their vision or hearing. Sensory aids in this context are defined as those appliances or aids which compensate for a visual or auditory loss by enhancing visual or auditory input. In the area of vision, "low vision services" is a term usually applied to a series of evaluations, training, and services to individuals with visual impairments which emphasize the enhanced functional use of residual vision rather than visual loss (Jose, 1983, p. 61). Low vision services often involve the prescriptive recommendation of visual aids such hand-held magnification devices, stand mounted magnifiers, magnification devices, or monocular devices. It should be noted that these are prescriptive devices, not the kind one might buy at a drug store. Proper use of low vision aids involves training by a low vision specialist or knowledgeable clinician. Issues like tracking problems, physical discomfort such as headaches or nausea, and incorrect or inefficient usage can discourage individuals from using aids that, with proper training, might be beneficial to them.

Other nonprescriptive aids which involve minimal training and are readily available include bold lined paper, felt tip markers, enhanced lighting, and color contrasting appliances. For the purpose of this discussion, these types of enhancements are considered instructional media rather than sensory aids.

Assistive listening devices (ALDs) are used to enhance hearing, especially in noisy environments or in situations where students need to hear at a distance, such as in a lecture auditorium. Although not always prescriptive in nature, they are often recommended by speech and hearing clinics. Many ALDs, such as the amplification devices found in some large churches or civic auditoriums, can be used by groups. In general, ALDs are rather expensive and can be used in conjunction with hearing aids and appliances. Schools and classrooms for the deaf often use devices which link teachers and students through special assistive listening devices. Some of these involve tethering the student to a unit with earphones, while other systems run on a FM or infra-red frequency and allow students to move freely in the environment.

Although the programs observed in this project were sensitive to the use of sensory aids, very little was being done in this area with the project students. Among the 12 students observed in the project, 9 had useful residual vision and 5 had moderate residual hearing; however, instruction in the use of low vision aids or assistive listening devices was not observed. Project staff observed two students using low vision aids on a limited basis. One program had low vision services on campus, but they were limited primarily to travel aids and closed circuit television systems. Several students used hearing aids and glasses and were reminded about proper care of these aids. Other nontraditional aids were typically not observed. Students did use instructional media which was enlarged or enhanced.

Use of an interpreter. At the sites visited, there were no interpreters used for instructional purposes because all staff were fluent in sign language. For the benefit of those who may be working with deaf individuals for the first time and do not have sign skills, it is appropriate to insert a few comments here about working with an interpreter. Interpreters are certified according to their levels of proficiency by both state and national organizations. Interpreters are usually paid for their work on an hourly basis. Fees vary according to levels of certification, location, and availability of interpreters.

Interpreters for the deaf may not have the skills or experience necessary for working effectively with individuals with deaf-blindness. Before contracting the services of a specific interpreter, it is beneficial to have someone familiar with the particular communication needs and preferences of the student, as well as the student, meet with the interpreter and the instructor. The purpose of the meet is to ensure that communication and signed vocabulary skills are compatible. This is also an opportunity to clarify the expectations placed on the interpreter.

If a student is a tactile signer, meaning that s/he places her/his hands on those of the interpreter, it may be very tiring for the interpreter unless provisions are made for the interpreter to have breaks. In lengthy interpreting assignments, it may be necessary to have more than one interpreter available. It should be noted that the student may also tire from lengthy instructional sessions; breaks every 15 to 20 minutes can be beneficial for everyone.

Guidelines exist to help interpreters become sensitive to specific methods and expectations of interpreting for individuals with deaf-blindness. Several publications giving insights for interpreters are referenced here and in an annotated bibliography written as a companion to this text (Kates & Schein, 1980; Raistrick, 1988; De Pietro, 1978). Interpreters may need to develop skills in interpreting environmental cues and visual information for visually impaired students.

Before actually starting instructional sessions with an interpreter, it is important to develop a list of special vocabulary which might be used so that the interpreter and student can learn or confirm knowledge of any unusual signs. For example, if a student is taking a woodworking class, it would be important to include vocabulary like electric sander, lathe, awl, drill press, and so forth.

Interpreters have no responsibilities other than interpretation of communication to and from the student. They do not tutor, teach, explain, guide, supervise, or ask questions. They have a stringent code of ethics established through the National Registry of Interpreters for the Deaf (NRID) which includes confidentiality issues. If an instructor has never worked with an interpreter before, it would be helpful to become familiar with that code.

Interpreters can be extremely helpful, but instructors should also be aware of the importance of having personal physical contact with the students. This is especially important with students who have no usable or functional vision. Handson demonstrations and coactive learning activities can be extremely beneficial and do not require the use of an interpreter. Often students can develop their own impressions of the instructor and the activity if given ample opportunity; otherwise, they rely totally on the interpreter's ideas and interpretations.

Expressive communication. It is noteworthy to mention here that in recording observations in this study, the research staff had difficulty recording each expressive communication of the teacher to student because, in many cases, the students were bombarded with numerous and varied simultaneous communications. Teachers used different types of instructional media: written communication including braille, sign language (Signed Exact English [SEE], Total Communication [TC], American Sign Language [ASL], and/or combinations and variations), fingerspelling, voice and audio aids such as record players, communication books, gestures, physical prompts, coactive movement, shadowing, and demonstration. Very rarely did a teacher limit expressive communication to use of only one or two simultaneous methods.

All teachers and staff who were observed working with students were fluent in some type of sign language or manual communication. Also, teachers and staff signed to all students whether or not they appeared to possess the cognitive skills to understand. There are many regional differences in sign vocabulary and in methods of sign expression, especially with some signed English transliteration. Students who had more than one teacher were expected to accommodate any variation in sign vocabulary among teachers. It was interesting to note that the students appeared to understand most of the signs, even when there was significant difference in the specific signs used by teachers. Teachers who used a lot of fingerspelling with ASL students had some minor difficulty introducing new concepts because students did not

immediately recognize the English equivalent to some signs; but with a little extra effort, effective communication was clearly established.

Two teachers working individually with profoundly deaf students used their voices for the benefit of the research staff. One deaf teacher did not use her voice at all, but signed all communication. Several teachers used ASL, which does not always accommodate simultaneous English translation.

Students' expressive communications included various types of sign language, fingerspelling, use of communication books, physical prompts, speech and voice, gesture, grunts, written communication including braille, demonstration, and behavior. Students tended to use only one or two means of communication at a time. Lower functioning students with limited expressive communication often responded to teacher suggestions or directives through behavior rather than language communication. For example, a teacher asked a student to put away some instructional materials; the student responded by doing what was asked, thereby demonstrating or expressing his/her understanding.

Behavioral expression through body language, facial expression, movement, emotions, and physical interaction with the environment were frequently the major type of communication of lower functioning students. Sometimes teachers were not able to understand the specific cause of a particular behavior, but were able to interpret the student's behavior into a communicative message. For example, one student was working rather intensely at an activity she enjoyed; suddenly, she stood up, stomped her foot, then sat down, and continued working. There were several possible causes of the behavior, such as an observer sitting too close, an error in what she was doing, something she was thinking about, or any one of a number of other stimuli. The observer moved further away and there was no reoccurrence of the behavior. The teacher could not say for certain what caused the behavior, but she felt that the student was expressing displeasure. It was interesting to note that teachers were reluctant to interpret the specific meaning of a behavioral communication beyond a meaning about which they were sure.

Receptive communication. Among teachers and support staff directly observed teaching the students in this study, there were only one deaf and no visually impaired personnel; however, some facilities employed deaf-blind, visually impaired, and deaf personnel. The staff received the majority of communications from students via either visual or auditory modes. Methods of communication received by teachers included sign language, fingerspelling, written communication including braille (which was read visually), gestures including frequent use of pointing, voice and speech, directed noise (e.g., tapping the table to get attention), nondirected noise (e.g., the sound of something breaking), behavioral cues, demonstrations of understanding, and communication books.

Most of the mid-level functioning students signed to themselves or read to themselves using sign. Teachers sometimes interpreted students' comprehension or understanding by whether or not a read word was signed or fingerspelled. A familiar sign which was fingerspelled when read might mean that the student did not understand the written word as meaning the same as the sign.

Higher level students did a lot of reading "aloud" in sign in and out of class. If the student signed a written word in the wrong context, the teacher detected the misunderstanding. For example, the word "date" can mean a specific day on the calendar, a type of fruit, or a social occasion. The sign for each of the different meanings is different. In one situation, a student used the sign for a day on the calendar in the context of "the boy and girl had a date to go to the movies"; then the teacher identified the error. It was not known if the reading to oneself in sign outside of class was a result of in-class activities or a naturally occurring strategy that students used to clarify their understanding.

Students received communication directly from the expressive cues of the teacher, instructional materials, and from their own perceptions of the environment. Teachers frequently gave the students environmental cues to enhance their full understanding of various situations. For example, one teacher told a student that the observers were in the room. Occasionally, a peer in the class cued a student. In one work experience placement, one of the nondisabled coworkers took a student's hand and placed it on an observer so that the student would know she was there. From that point on, as the student worked he would intermittently (about every 5 to 10 minutes) check the same spot with his hand to see if the observer was still there. Sometimes the students interpreted their own environmental cues. One observer wore a very distinctive perfume and the students took care to track her using the scent of her perfume.

In summary, the following communication practices were observed:

- 1.1.A high emphasis was placed on varied and simultaneous multiple communications;
- 2. Student behavior was considered as potential communication;
- 3. Staff signed all communication whether or not the student could understand it;
- 4. Teachers constantly assessed student understanding based on behavior and expressive cues or demonstrations of understanding;
- 5. Teachers did not attribute meanings of which they were not sure to students' behavior;
- 6. Students were made aware of environmental circumstances as much as possible;
- 7. All instructional staff were fluent in manual communication.

Assessment and Learning Style

According to Sabra and Ysseldyke (1981), educational assessment is a multifaceted process of gathering information, using appropriate tools and techniques, for the purpose of making educational decisions about placement and individualized educational programming for a particular student. Assessment components named by Sabra and Ysseldyke in Scholl's (1986) publication, Foundations of Education for Blind and Visually Handicapped Children and Youth, are (a) identification and screening, (b) classification, (c) instructional planning, (d) pupil evaluation, and (e) program evaluation. Each of these areas will be discussed briefly with related observations from the project site visits.

Identification and screening. Identification and screening determines whether or not students are eligible for special education placement. The presence of a handicapping condition is determined, along with implications for educational need

in a special education program or environment. Some students may have medical disabilities, but their disabilities alone do not prevent them from achieving academic success without special intervention. This is not the case for students with deaf-blindness.

The identification and screening components for the students observed were made up primarily of medical records and included annual ophthalmological reports, audiological reports, and physical exams. In some cases, it was difficult to obtain an accurate vision or hearing measure. With the students involved in this project, the presence of significant vision and hearing loss was so obvious that the lower level students, who might be considered more difficult to assess, clearly possessed severe vision and hearing losses significant enough to cause educational difficulties.

Classification. The purpose of classification is to place the student in the appropriate special educational program or service. This involves more intensive assessments to assist in determining the least restrictive environment and particular class and service placements for students.

All students observed in this study were in programs specifically designed for those who are deaf and blind. The philosophical approach of each program was different with regard to interpretation and implementation of least restrictive environment issues.

Instructional planning. A comprehensive assessment in all educational and functional areas is necessary for instructional planning to determine what and how to teach. Measures of functional vision, intelligence or aptitude, and achievement are included in the overall assessment (Scholl, 1986, p. 188). One problem in assessing the intellectual abilities of students with deaf-blindness is the lack of appropriate and valid assessment instruments.

It is particularly difficult to measure a student's learning capacity when the student has experienced sensory deprivation and, thus, a lack of incidental learning opportunities. Congenitally deaf-blind students are sometimes said to possess characteristics similar to those who are mentally retarded. Many assessment instruments are very dependent on language fluency, especially for older students, and use of the English language is a deficit area for many deaf-blind students. There is a caution against labeling the student inaccurately and potentially limiting the educational opportunities for him/her. Yet the question of how to tap into the intellect and motivate the student to be interested in learning remains unanswered for many.

Although all students in this study had received different types of formal assessments to assist in determining Individualized Educational Plan goals, there was very little formal assessment available to facilitate the teachers' discovery of how to most effectively present instructional tasks to students. It should be noted that the 12 students were assessed on 19 different formal assessment instruments. Only two of these, the Callier-Azuza and the Functional Skills Screening Inventory, were specifically developed or adapted for use by students who have deaf-blindness.

Students had varying levels of success in completing the formal assessments, and teachers questioned the validity of the results of many of them. Narratives by psychologists describing assessment encounters were, in some cases, more revealing

than the results of the assessment instruments themselves. Teachers also relied heavily on their own observations and those of other staff with whom they frequently consulted. Students who completed different assessments for intellectual functioning often had conflicting results. The most notable example involved one individual who was rated as having an I.Q. range from 130 on the Haptic Intelligence Scale to borderline low-average on the Wechsler Adult Intelligence Scale - Revised. In this particular case, the examiner expressed concern that the formal evaluations were not accurate because of the student's combined disabilities. The examiner supplemented the formal evaluation with an especially helpful informal narrative assessment.

Whenever possible, parents were closely involved in the assessment process. Their informal comments were valued and encouraged by the instructional staff. Parental concerns were seriously considered in the process of instructional planning. Three students lived at home and all but two other students had regular contact with their families. Some families came to the schools to visit students and some students traveled home to visit families. All school programs encouraged at least monthly visits. Parental involvement was encouraged beyond the Individual Educational Plan (IEP) staffings.

One currently popular consideration in developing appropriate instructional planning for a particular student is the identification of the student's learning style. Learning style has a number of varying definitions. Blakemore, McCray, and Coker (1986), in their guide to learning style assessment, broadly summarize the definitions and describe the various learning style assessment tools. The research staff preferred a definition cited in this publication from Della-Dora and Blanchard (1979) which states that learning style is a personally preferred way of dealing with information and experience. Learning style inventories available currently are primarily self-report and ranked answer instruments which require a rather sophisticated respondent. These instruments were not used in programs participating in this research project nor were they considered useful with this population.

For purposes of this study, research staff adapted a teacher generated assessment developed by Mercer and Mercer (1981) to ascertain students' preferences and to determine if teachers considered these in instructional plans. Areas of learning style preference included in the instrument were (a) learner expectancies, (b) instructional techniques, (c) modality, (d) interactions with peers and family, (e) instructional organization, (f) teacher, (g) environmental and external stimuli, (h) instructional style, (i) instructional media, and (j) preferred student response types.

Although teachers did not use a formal instrument or check list of similar learning style considerations, they were conscientiously aware of students' preferences in the content areas examined. Often, if a student's adverse reaction to a particular instructional task was expected, the teacher adapted the environment and materials to make the experience as pleasant as possible for the student.

Research staff developed three new learning tasks for teachers to present to each student. Selection of who would present the task, where it would be presented, at what time of the day, and in what format were all accommodated to the student's preferences. Scheduling and external influences impacted somewhat on this process,

but consideration of student preferences was an automatic and natural phenomena that occurred at all sites without interference from the research staff.

Pupil evaluation. Another component of assessment involves monitoring student progress and determining the effectiveness of instructional methods or teaching strategies used. Grades, achievement of educational objectives and IEP goals, and informal evaluations by teachers are often a part of this procedure. The Functional Skills Screening Inventory (FSSI) was used with several students to formally monitor this component. However, it should be mentioned that the teachers observed in this project continually informally evaluated the students and their own effectiveness in presenting information. In some cases, it was difficult to separate

teacher effectiveness from student skill acquisition because the teachers assumed virtually total responsibility for students' progress and achievement.

Whenever possible, parents were encouraged to provide feedback and evaluation of student progress based upon personal observations. This was particularly helpful from parents who had routine visits from the students in the home environment.

Program evaluation. Program evaluation and assessment of the success of instructional procedures, program design, and instructional strategies are often measured, in part, by individual student progress or achievement. Administrators and supervisors in the observed programs closely monitored student progress and satisfaction as an integral part of measuring the effectiveness of especially new and innovative procedures or programs.

Although formal procedures for parental input in this area, except for IEP meetings, were not observed, it was evident that parental feedback was encouraged and sought by teachers. Research staff did not observe any formal mechanisms for program evaluation by other professional peers outside the appropriate program accreditation processes. Instructional personnel and administrators appeared to be open to new ideas and to constructive criticism.

In summary, assessment and learning style observations included the following:

- 1. Formal assessments were interpreted rather loosely with more credence given to informal teacher and parent assessments.
- 2. In designing instructional plans, emphasis was placed on student preferences.
- 3. Teacher effectiveness and program evaluation were very closely linked to student achievement.
- 4. Parents were an integral part of the assessment process.

Teacher/Student Interaction

One outstanding characteristic of the interaction between students and their teachers was the obvious affection and respect they demonstrated toward each other. During the course of observations, students were consistently treated with concern for their personal dignity. Respect for students was demonstrated in a variety of ways, from teachers asking students' opinions about political, social, and educational

issues, to the enthusiastic interest shown in students' activities, to teacher concern over mild changes in students' behavior.

In general, students demonstrated interest in the educational process and a genuine respect for their teachers and the instructional staff. They were curious about things that were unfamiliar and asked questions either in a language form or through gestures and expressive mannerisms. Although they were initially curious about the research observers, they quickly adjusted and focused on the instructional activities and staff, basically ignoring the observers unless the observers somehow came into play. For example, one student who changed classes regularly in a busy high school atmosphere would check periodically to make sure the observers were not "lost" when trying to follow her to classes.

The staff was animated, enthusiastic, interested, and, at times, very intense in their interactions with students. The level of intensity of these attributes increased when new activities and tasks were being presented, especially on cognitive tasks such as remembering a sequence of events or processing new concepts. These activities were usually conducted one-to-one, with the exception of those presented to students who had good residual vision and could still benefit from small group instruction.

In general, teachers encouraged students to take decision making responsibility whenever appropriate. Students were frequently given opportunities to choose activities, peer partners, materials, or reinforcers. This was consistent in both instructional and relaxed living atmospheres. Throughout the programs, teaching staff prompted and reinforced student behavior when the student was trying to impact the environment or a particular situation, thereby transmitting a sense of internal locus of control.

Teachers assumed major responsibility for the student's mastery of a task. Teachers would try one method of presentation and, if that was not successful, they would assume that their methods were ineffective rather than assume that the student was not trying. Student apathy or disinterest was interpreted to mean that the activity was not appropriate or that presentation of the material was ineffective; therefore, teachers would reevaluate their plans. Teachers also reinforced the idea that the students were responsible for their actions and how they took advantage of opportunities.

In some cases, students were given opportunities to engage in activities of their own choosing which had limited success potential. Students were advised of the difficulty; if they still chose to do the activity, they were then allowed to experience the natural consequences. Certain safety limits and boundaries were established. Generally, students learned that when an activity was not successful and the natural consequences occurred, it was not the end of the world. Failure is a common experience among all people and teachers readily self-disclosed personal failures to some students who were struggling to understand and cope with failure issues. For example, one student was unhappy with her work experience placement and decided to quit. Her teacher told her that jobs were difficult to find and since this was a part-time position, she should find another job before she quit. The teacher shared from her own experiences of being out of work. The student decided to quit without a two week notice and then had to suffer the consequences of lost income, inability to return to the previous job because of the nature of the severance, and a long delay in finding

other work. The cause-effect relationship of the student's action was made clear to her. The implication of accepting responsibility for one's decisions was reinforced by the difficulty the student encountered in finding another work experience placement.

Introduction of new learning tasks. In order to examine similar learning tasks across all students at all sites, the project staff developed three novel learning tasks which addressed perception, memory, information processing, and problem solving. Each task was designed in such a manner that the nature of the disability would not impact performance; that is, the task could be identified through a variety of sensory modalities. The level of difficulty, presentation methods, communication techniques, supplemental instructional media, learning objectives, and the sophistication of the learning tasks were left for teachers to determine and develop. No two teachers in the study presented a task in the same way. Teachers presented all learning tasks developed by the Rehabilitation Research and Training Center on Blindness and Low Vision (RRTC-BLV) one-to-one. In most cases, teachers limited the presentation of new material to less than 20 minutes.

When a new learning task was presented, the teachers usually had a lesson plan written out with several different approaches. Some of these lesson plans were detailed, some were simple notes. For students who did not have functional vision, alternative instructional materials were developed by the teacher. These included jigs, templates, communication enhancement aids, printed instructions, or environmental adaptations. In some cases, students and teachers made these materials together as a part of the learning process. One example involved creating a page in a communication book with the new vocabulary and concepts and discussing each picture as it was cut out and prepared by either the student or the teacher.

New activities were usually presented with special consideration for the student's learning style. A student's preferences for location, instructor, instructional format, and time of day were considered in setting up the instructional design and environment for new learning activities. When a new task was presented, a teacher would also try to reduce other distractions as much as possible and might check out the student's mood and attitude before actually starting the activity. This was particularly true for students with behavior problems. Less flexible students had their preferences accommodated more frequently. Teachers tended to want the students "at their best" for new activities.

Instructional strategies. Teachers used different instructional methods for different types of learning tasks. Specific methods identified in the project were grouped under the previously mentioned areas of (a) repetition and practice, (b) use of concrete objects to illustrate a concept, (c) experiential activities, (d) task analysis, (e) use of a variety of stimuli, and (f) language and discussion. Teachers frequently used several methods in combination. For example, using a system of task analysis (breaking a task down into small elements to be learned in a sequence) and simultaneously presenting the instruction with a variety of stimuli, one teacher used repetition and drill until the student mastered the particular element of the task before moving on to the next sequential step.

When choosing a particular method, teachers considered severity of sensory loss (especially visual loss), students' learning and cognitive styles, and the attributes of the particular material being considered for presentation. Table 1 reflects the most frequently used methods in all categories of instruction for all students based upon 143 learning observations of the project staff. As can be seen from this table, the most frequently used method was repetition and practice. The second most frequently used method related to experiential presentation of information. Task analysis was the least used method of instruction. Most instruction took place in functional environments with practical applications, and the students performed the actual task rather than theorizing about it.

| Table 1: Instruction methods used to teach cognitive skills to deaf-blind youth | | | | | | |
|---|-------------------------|------------------|-----------------------|--------------------|------------------|----------|
| | Repetition/ practice | Concrete objects | Experiential learning | Variety of stimuli | Task analysis | Language |
| Remembering concrete information | 66.2% | 34.5% | 34.8% | 31.0% | 6.3% | 27.5% |
| Remembering abstract information | 32.4% | 12.0% | 19.1% | 12.0% | 3.5% | 18.3% |
| Learning concepts | 44.4% | 21.1% | 22.7% | 19.7% | 4.9% | 19.0% |
| Problem solving | 31.0% | 14.1% | 22.1% | 14.8% | 2.8% | 12.7% |
| Perceptual tasks | 53.9% | 23.4% | 25.7% | 18.3% | 3.5% | 21.2% |

Note:(1) Percentages indicate occurrence of a particular method used to teach a particular cognitive area.

Across all skill areas, strategies involving repetition and practice, experiential activities, and language were utilized more frequently for students functioning in intermediate and low ranges than for those in higher levels. For skill areas related to remembering concrete and abstract information, concept formation, and perception, experiential learning strategies using a variety of stimuli and language were particularly emphasized with intermediate level students. For lower functioning students, strategies employing the use of concrete or tangible objects were stressed when conceptual and perceptual skill areas were the goals of instruction.

Teachers demonstrated their respect for student's abilities and potential in a variety of ways. Cognitive tasks were usually taught one-to-one and in very intense interactions. Often both the teacher and the student would forget the presence of observers as they became engrossed in the instructional process. In some situations, the interaction between the student and the teacher appeared to be the primary

⁽²⁾ Percentages represent combined observer responses to 143 learning observations.

motivator and reinforcer for both. Traditional reinforcement often took the form of praise or physical contact by the teacher and, at the beginning of new instructional tasks, reinforcement was continuous. As the instruction continued, reinforcement became intermittent. Eventually, the teacher attempted to manipulate the situation so that the task itself and the student's success in achieving the task became the reinforcer. This allowed the student to become self-reinforcing.

At no time did the research staff observe any compliance training. Compliance training is used primarily in custodial situations when students are required to provide instant and unquestioning obedience when directed to an activity.

In summary, the observed practices related to student/teacher interaction included the following observations:

- 1. Students were encouraged to maintain internal locus of control as much as possible.
- 2. Initial instruction was as distraction-free as possible.
- 3. When instruction was unsuccessful, the teacher presented the task again using other methods and strategies.
- 4. Cognitive tasks were usually conducted one-to-one.
- 5. Students were encouraged to take decision making responsibilities.
 - 1. 6.A team approach to instruction was used when appropriate; learning reinforcement was demonstrated across different activities.
- 6. Students were expected to generalize appropriately.
- 7. Teachers accepted the responsibility for instructional success.
- 8. The more severe the visual loss, the lower the student/teacher ratio.
- 9. Different teaching methods were used for teaching different skill areas.
- 10. Instructional sessions tended to be short (10-20 minutes) and intense even if the class period was longer.
- 11. The most frequently used instructional methods included repetition and practice and experiential learning strategies.
- 12. Students were allowed to attempt activities with limited success potential; they were allowed to fail.
- 13. Reinforcement schedules tended to be initially continuous and then intermittent. The goal was for the student to become self-reinforcing.
- 14. No compliance training was used.
- 15. Students' cognitive abilities were addressed and challenged across all functional levels.
- 16. Teachers prepared students well in advance for upcoming activities; daily schedules, reminders, and association activities were examples of instructional strategies used in this process.
- 17. Students were encouraged to appropriately explore and problem solve.
- 18. Many instructional interactions allowed higher functioning students to solve specific problems, e.g., "How are we going to build this bookcase?"
- 19. Student preferences for teacher, location, materials, and environment were accommodated as often as possible.
- 20. Intensity of student/teacher relationships was often the primary motivator for both student and teacher.

- 21. The teachers' goal was to progressively limit their own involvement as much as possible as students acquired skills.
- 22. Students were treated with dignity and respect.
- 23. Most students worked with multiple teachers, but had one primary instructor. If feasible, student preference was considered in the selection.
- 24. Students were given daily responsibilities for the common good, emphasizing awareness of the needs of others.

Family Involvement Observations

All students observed in this project were very involved with their families. Even those at residential facilities were able to interact with their families on a regular basis. Families showed a special interest in all the students' activities. Programmatic efforts of the schools encouraged parental involvement by scheduling regular weekends and vacations for the students to travel home, by corresponding with and calling parents on a regular basis, by encouraging students to write home on a regular basis, and by involving the parents in ongoing decisions about the students' educational progress outside the regularly scheduled IEP meetings.

During data collection procedures, the research staff met with parents who spoke highly of their children's current educational experiences. They did not have the same high regard for past educational experiences and generally felt the current programs were more open and responsive to their opinions, concerns, and suggestions.

CHAPTER 5

LEAST RESTRICTIVE ENVIRONMENT OBSERVATIONS

The teaching staff observed in this study were extremely cognizant of the need for students to experience working, learning, and socializing in environments which were not specifically acclimated for individuals with deaf-blindness. Not only did staff avail themselves of convenient opportunities, they also worked to create opportunities when none existed. None of the students was observed in academic classes for nondisabled persons, but one student was observed taking classes with deaf students. Another student attended classes at a school for the deaf; but, because of scheduling problems, the research staff was not able to include that experience in their observations. That student had good residual vision and indicated that very little was needed to accommodate him at the school for the deaf other than seating arrangements and testing accommodations. It should be noted that both of these students were in the higher functioning group.

Community work experience was the most frequently observed educational opportunity for students to leave specialized educational settings. In all cases observed by the research staff, students were taught their job responsibilities by an experienced teacher from the deaf-blind program and concurrent instruction was provided for students' supervisors and coworkers. The teacher then reduced involvement with the students and transferred responsibility to the supervisors. Research staff viewed this procedure in a variety of stages. When teachers were totally removed from the setting, there was very little interaction between students and nondisabled persons at the work site. There was one exception to this involving a very productive low functioning totally deaf-blind student whose supervisor truly enjoyed him. The supervisor joked with the student, communicated with him about breaks and work tasks, and appeared to delight in the experience, taking personal pride in all the student's achievements.

In other settings, other than an initial greeting, very little interaction took place between students and others at the work site. One student worked throughout the day with almost no human interaction. In another situation, it was noticed that if the student made an error or had a problem, the supervisor did not let the student know; rather, the supervisor personally corrected or had a coworker correct the problem. For example, one student was placing silverware upside down in a dishwasher. Rather than instruct the student in the proper way to place silverware in the dishwasher, a coworker redid the task when the student wasn't watching. It appeared that, for the supervisor, the effort to communicate with the student was greater than the effort to redo the work.

Some students were able to travel independently into social and recreational settings in the community; but, in most cases, students required the assistance of a friend or an interpreter/companion in order for the experience to be beneficial or enjoyable. Students learned to travel specific routes using buses, taxis, trains, and airplanes with varying degrees of independence.

Students at all levels were observed shopping with varying degrees of independence at three sites. Some facilities provided transportation to a mall or shopping center, let the students shop and buy whatever they needed, and met them

at a specific time and place to drive them back to the school. In areas where this was a frequent occurrence, shop owners and clerks were sensitive to the students and would occasionally comment to the observers about "those amazing kids from the blind school." Clerks were observed helping students make change, select items, and find their way around the store.

Students were also observed in both fast food and sit down restaurants. At one facility, students learned how to order food by writing their orders on a piece of paper or showing a picture of the item or using a communication book. At one restaurant, a student had not written down his order or taken a pen and paper with him. Since this had been stressed in class preparation for the trip, the teacher indicated to him that he would have to find a way to order himself; she would not "rescue" him. He found a napkin, borrowed a pen from a stranger, and wrote his order on the napkin. Because asking others for paper and pen was uncomfortable, the student assured everyone he would never make that mistake again!

In more formal restaurant settings, the students were instructed in how to order for themselves, although someone would have to read the menu to them and show them where the items were so that they could point when giving their choice to the waitress. Some would write down their order and others would select whatever was pictured on the menu. Items such as choice of salad dressing or type of potato caused difficulty for waitresses. Rather than working through the interchange, waitresses expressed impatience with the students' attempts to communicate and turned to other sighted/hearing persons nearby for assistance. Students itemized and paid costs and tips themselves. No waitresses were observed turning down tips. Students in high- and mid-level functioning groups were observed participating in this restaurant activity.

In general, all the programs tried to integrate students into the community either in groups or singly. The students appeared better able to deal with community-based experiences than did the people in the community. The major barrier between students and members of the community appeared to be communication difficulties. In several situations, teachers were working with students to develop communication skills which would be more readily usable in the community. None of the students observed in this project had intelligible speech.

Educational practices observed in the area of least restrictive environment are as follows:

- 1. Natural and appropriate settings were used for instruction.
- 2. Social interaction with nondisabled persons and peers was encouraged.
- 3. Whenever possible, students were integrated into activities with less disabled or nondisabled peers. This usually occurred in conjunction with a teacher or teacher's aide who normally worked with the individual with deaf-blindness.
- 4. In more mainstreamed settings and when instructional staff members were not present, there was very little interaction between students and supervisors, student peers, or coworkers.

CHAPTER 6

SUMMARY OF FINDINGS, IMPLICATIONS, AND RECOMMENDATIONS

The primary purposes of this study were (1) to investigate and identify current effective practices in teaching youth who are deaf-blind, and (2) to develop instructional guidelines based on those observed practices. In this chapter, results of this study are synthesized. The chapter also presents a discussion of implications of these findings and recommendations that teachers and rehabilitation professionals may find useful in their efforts to serve deaf-blind youth.

This study was not designed to collect outcome information about deaf-blind youth in such a way as to test the relative effectiveness of specific instructional practices. Nevertheless, project staff collected a substantial amount of information from instructional personnel, administrators, families, rehabilitation professionals, and others who concurred that there are many "right" ways of teaching deaf-blind youth, but what is "right" for one student may not be "right" for another. The instructional process is highly individualized and depends upon characteristics of the educational situation or context, the teacher, the family, and, of course, the student.

Summary of Effective Practices

Teacher characteristics. Teachers in this study were characterized by flexibility and diversity. They did not fall into any particular educator typology or personality category. Educational backgrounds of most of the instructional staff were not specific to deaf-blindness and the techniques they used were more frequently developed as a result of their own experimentation, experience, and formal or informal interactions with other teachers in the education setting.

Teaching methods. A variety of instructional strategies were used in teaching specific cognitive tasks. Frequently, several methods were combined to achieve particular objectives. Selection of teaching method or strategy was tempered by severity of the sensory loss, the student's learning style, attributes of the particular material being presented, and nature and level of difficulty of the task. With lower functioning students, the natural and functional approach to teaching activities seemed the most effective; that is, learning to dress oneself in the morning in the dorm before breakfast was observed rather than buttoning activities in the classroom after lunch.

Program and curriculum practices. Age-appropriate activities emphasized independent living skills that were meaningful to individual students. Facilities used a functional curriculum directed toward individual student goals. No compliance training was used. As a whole, teachers deemed it important to provide students with such opportunities, which were then reinforced by positive means.

Communication practices. Effective communication between students and teachers was a key to learning. Teachers considered all behavior as potential communication. Teachers were challenged to stimulate the students' interest in

learning about the world around them. Maximizing the students' curiosity about the immediate environment, those who inhabit it, and how the students could impact both environment and people was a major educational objective observed among teachers in this study. They utilized various and simultaneous communication methods to achieve this goal.

Teacher/student interaction. Openness, trust, rapport, and intensity characterized relationships between students and teachers. These positive relationships were generally established through extensive periods of one-to-one interactions. It was observed that the more severe the visual disability, the greater the necessity for one-to-one student/teacher interaction. This one-to-one student/teacher interaction mode was carried over into mainstreamed settings as well.

Family involvement observations. Instructional personnel and administrators included families in all facets of the educational process. They encouraged frequent communication among students, teachers, and families and valued parental input.

Least restrictive environment observations. Concerted efforts were made to integrate students into community-based social situations and work activities with less or nondisabled persons. Most nondisabled persons in mainstreamed settings did not take advantage of these opportunities for meaningful interaction with the students. With the notable exception of one community based work supervisor, observed meaningful interactions occurred with disabled peers and instructional staff. This may have been attributable to the communication barriers imposed by deaf-blindness or to the fears that many nondisabled individuals have about interacting with this population.

Implications

This study enabled research staff to observe many exemplary program and instructional practices that have promising potential to improve the educational success of persons with deaf-blindness. Careful examination of these practices over time will be required to demonstrate whether, in fact, they translate into better vocational outcomes for deaf-blind youth.

While some educational programs for deaf-blind youth are certainly better than others, the educational system is not alone in its efforts to improve vocational and quality of life outcomes for persons who have this dual disability. The education system's level of success with this population is closely related to the relative success of the larger social and rehabilitation communities. Given the nature of deaf-blindness and its associated service needs, meaningful improvement in educational outcomes has to be tied to a larger service and community environment with the capacity to provide opportunities for meaningful participation.

As noted above, opportunities for meaningful interactions with nondisabled peers are not necessarily enhanced in mainstreamed settings. For those who are deaf-blind, the least restrictive environment may be the one where they have the most opportunity to act freely and to enjoy friendships with those who can communicate with them. Mainstreamed programs will be effective and meaningful for the student only when an individual in that environment takes a special interest in that student. There is still a major need for community education about the abilities of those who are deaf-blind. Transition into the community, therefore, will necessitate staff-intensive opportunities to help the community adjust to the unique needs of the deaf-blind individual.

For teachers who are newly confronted with this type of educational instruction, implications of this study are both encouraging and discouraging. With regard to teaching deaf-blind students, there is no one "right" way of doing anything. The most effective instructional strategies appear to be those that are individualized, functional, and occur in a natural context. Keys to learning are effective communication and the relationship between student and teacher. Positive one-to-one interactions are extremely difficult to accomplish when there is a high ratio of students to teachers.

Recommendations

This study's findings suggest a number of actions that OSERS and instructional personnel may want to consider in their efforts to improve the educational system's effectiveness and the quality of education for deaf-blind youth. The following recommendations propose ways in which OSERS and instructional personnel might facilitate this process at local, state, and national levels by (a) promoting the development of appropriate programs, (b) continuing to stimulate research in educational issues related to deaf-blindness, and (c) encouraging innovative professional development strategies for teachers who work with this population:

- 1. Encourage the development of opportunities for teachers new to the area of deaf-blindness to observe and/or interact with experienced teachers.
- 2. Encourage the development of inservice training opportunities for teachers involved with those who are deaf-blind to learn sign language.
- 3. Encourage the development and implementation of instruction in a natural and functional environment.
- 4. Evaluate existing instructional programs for the deaf-blind for utility in terms of standards of excellence observed in this study.
- 5. Stress the importance of development of language skills for students who are deaf-blind.
- 6. Promote additional research into the areas of cognition and memory of those who do not have verbal language skills.
- 7. Promote research into the team teaching versus individual teacher (Helen Keller-Annie Sullivan approach) models of teaching and the effectiveness of each.
- 8. Stimulate realistic community education concerning the skills, abilities, and talents of people who are deaf-blind and the contributions they can make to our society.

TEACHING STUDENTS WHO ARE DEAF-BLIND: OBSERVED PRACTICES

Part II: Instructional Activities

Instructional activities observed during this study are included in Part II. These activities are organized according to instructional area and are intended to serve as models for instructional personnel who are designing and developing individualized teaching activities.

AREA: Academics - Health

STUDENT LEVEL: High Functioning

ACTIVITY:

-Health and home-based first aid.

PURPOSE:

-To enable the student to handle home medical situations, knowing when to call the doctor.

MATERIALS:

-None.

METHODS OF PRESENTATION:

- -Teacher asked the students what to do in case of different home health situations (i.e., "What do you do if you have a headache? What if you have a sore throat one morning? What if it lasts 2 or 3 days? If you have a fever? What if your arm is bleeding? Flu? Earache? Constipation?") Each question stimulated a variety of responses and a lively discussion in sign language.
- -Unit included headaches, severe bleeding, fever, hereditary factors, physical and emotional illness.
- -Medications of the home-remedy kind and the necessity of following directions when taking either over the counter or prescription medicines was emphasized as well as when to call the doctor.

COMMENTS FROM INSTRUCTIONAL OBSERVATIONS:

-Full class participation and involvement. Class consisted of 7 deaf students in a semi-mainstreamed setting.

AREA: Academics

STUDENT LEVEL: High Functioning

ACTIVITY:

-Social Studies.

PURPOSE:

-To review and pass a 9 weeks test. Topics: Constitution, Branches of Government, Indians of America (concepts of work and sources of food supply).

MATERIALS:

-Maps (large pull down type).

METHODS OF PRESENTATION:

- -Information for review was in the form of class discussion. Teacher asked questions and guided students' responses.
- -Compared and contrasted the Northwest Indians with the Woodland Indians.
- -Emphasized the work differences and main sources of foods.
- -Reviewed important points of the Constitution and Branches of Government by continuing to ask questions and guide students' responses.
- -Reward for participation was in extra points for grading purposes.

COMMENTS FROM INSTRUCTIONAL OBSERVATIONS:

- -Student participated with other students who were deaf. All instruction used total communication voice, sign, and media materials.
- -Students also referenced textbooks and notes.
- -This was a mainstreamed deaf environment; only accommodation for the student with visual difficulties was seating placement.

AREA: Academics

STUDENT LEVEL: High Functioning

ACTIVITY:

-Mathematics.

PURPOSE:

-To review fractions, division, and reduction emphasizing common factor usage.

MATERIALS:

- -Blackboard, overhead projector.
- -Mimeographed sample work sheets.
- -Material used "The Mad Minute": A Race to Master the Number Facts.

METHODS OF PRESENTATION:

- -Brief review by teacher on blackboard using overhead projector of examples of previous day's lesson.
- -Explanation of common factor usage in a "reducing problem" (i.e., $\underline{10}$, $\underline{25}$, etc.).
- -Verbal and signed questions prompted by teacher for clarification.
- -Examples of fraction common factor reduction were continuous, consistent, and reinforced.
- -Total communication was used including voice, sign language, blackboard, overhead projector, and mimeograph work sheets.
- -Repetition, practice, and drill were used extensively, both individually and in group.
- -Use of work sheets and overhead projector materials combined abstract ideas with sequencing steps and parts.
- -Experiential: guided learners through steps related to practical experience.
- -Used a variety of stimuli modalities.

COMMENTS FROM INSTRUCTIONAL OBSERVATIONS:

- -Home work sheet for take home practice.
- -Student was in mainstreamed environment of a class for deaf students.

AREA: Academics

STUDENT LEVEL: High Functioning

ACTIVITY:

- -Science.
- -Topic: Scientific study of behavior and your environment.

PURPOSE:

-To understand the environment which "includes everything around you and everything you do."

MATERIALS:

-Blackboard and chalk.

METHODS OF PRESENTATION:

- -Very detailed information was presented by teacher using voice, sign, gesture, and the blackboard.
- -Explanations were presented and examples given to differentiate two types of behavior.
- -Examples of instinctive behavior were: baby born crying, birds flying south, sucking behavior of infants, female cats bathing their newborns, spiders making webs.
- -Examples of learned behavior were: something that must be taught, e.g., learning how to skate, tying shoes, bathing oneself, swinging on a swing.
- -Teacher used common examples to illustrate concepts and relationships of the definite topic.
- -Teacher used questions as a form of instruction to encourage student participation, understanding, and continuity of subject matter.
- -Summary at the end of class was presented by teacher using a chart on the blackboard and signed explanation.

COMMENTS FROM INSTRUCTIONAL OBSERVATIONS:

- -Encouraged student independence by emphasizing that there was more than one correct answer.
- -Homework used as review of class session.
- -Class discussion was encouraged by asking students to present examples. The discussion was done in sign. Students (9) were very involved in the discussion.

AREA: Academics

STUDENT LEVEL: High Functioning

ACTIVITY:

-Mathematics - Review for test.

PURPOSE:

- -Teach and explain changing fractions to mixed numbers.
- -Practice and review changing mixed numbers to fractions.

MATERIALS:

- -Blackboard and chalk.
- -Paper and pencil.

METHODS OF PRESENTATION:

- -To review and practice changing mixed numbers to fractions.
- -To teach changing fractions to mixed numbers.
- -Used examples such as 2-2/3, 1-5/8, etc., to practice changing mixed numbers to fractions.
- -Used examples such as 31/5, 48/3, etc., to teach changing fractions to mixed numbers.
- -Repetition, practice, reinforcement, and drill were constantly used.
- -Experiential: guided students through steps and sequence of operations involving division and multiplication of fractions and whole numbers.
- -Task analysis involving division and multiplication functions.
- -Exercises were put on the blackboard for individual teaching, step by step explanation.

COMMENTS FROM INSTRUCTIONAL OBSERVATIONS:

-Student mixed well into class group of deaf students. Visual demands of class were not a problem for the student.

AREA: Academics

STUDENT LEVEL: High Functioning

ACTIVITY:

- -English.
- -Review for a test.

PURPOSE:

- -To refresh students' memory and stimulate questions.
- -Areas reviewed:

Abbreviation of words;

How to use the library - reference materials and card catalogue;

Parts of a book;

Parts of a newspaper;

Prefixes and suffixes.

MATERIALS:

-Overhead projector.

METHODS OF PRESENTATION:

- -Question and answer format structured for student involvement.
- -Material covered included:

Abbreviation examples: A.M., P.M., Apt., Ave., P.O., pt., qt.;

Library: References, atlas, maps, newspaper, dictionary;

Parts of a book: title page, index;

Parts of a newspaper: front page, editorial page, etc.;

Prefixes: pre, com, il, etc.;

Suffixes: able, ly, er, ward, without, etc.;

Teacher used repetition, practice, and drill.

COMMENTS FROM INSTRUCTIONAL OBSERVATIONS:

- -Communication involved the use of sign, gestures, voice, demonstration, fingerspelling, and written words on overhead projector.
- -Students wrote correct answers on overhead so everyone could see clearly. Students discussed answers together.

AREA: Academics

STUDENT LEVEL: High Functioning

ACTIVITY:

- -Language usage in written sentences.
- -Identifying the proper format of a friendly letter.

PURPOSE:

- -Reviewed the rules of punctuation when there is:
 - a. no punctuation
 - b. indirect discourse
 - c. definition.

MATERIALS:

- -Overhead projector used as a blackboard.
- -Mimeographed assignments for completion and practice during class time.

METHODS OF PRESENTATION:

- -Teacher had students individually sit at overhead and write out sentences, then class would discuss what was written out.
- -Teacher had student write a sentence in the first person.
- -Teacher had student punctuate with correct quotation marks,

then delete quotation marks and change verbs to past tense.

- -Repetition/drill/practice was used to reinforce concepts.
- -Communication was fingerspelling, sign, voice, gesture, demonstration, and written.

COMMENTS FROM INSTRUCTIONAL OBSERVATIONS:

-Student participated in a semi-mainstreamed setting with a class of deaf students.

AREA: Academics

STUDENT LEVEL: High Functioning

ACTIVITY:

- -Language arts.
- -Multiple meanings and uses of words.

PURPOSE:

-To build accurate signed vocabulary for English words with same sound but different meaning.

MATERIALS:

- -Overhead transparencies.
- -Overhead projector.
- -Definitional pictures on transparencies.
- -Context clues multiple meanings; Spache and Spache Project Achievement Books: A Scholastic Series.

METHODS OF PRESENTATION:

- -Group presentation to class of deaf students where student with visual difficulties was "mainstreamed."
- -Words were presented on overhead projector transparencies.
- -Examples were used extensively to facilitate understanding of multiple meanings of words, to use the correct sign for the word meaning by context. Example:

"Date" "Model"

- a. a calendar date
- a. to sit as a model for artist
- b. a boy/girl date
- b. to show how clothes look
- c. a fruit date
- c. something to copy (model airplane)
- -Repetition, practice, drill, prompting, and cues were used throughout session.
- -Communication consisted of fingerspelling, sign, gesture, voice, demonstration, written, and pictorial.

COMMENTS FROM INSTRUCTIONAL OBSERVATIONS:

- -Homework lessons from same series book.
- -Question and answer format encouraged student discussion. Teacher promptly clarified issues when needed.

AREA: Academics

STUDENT LEVEL: High Functioning

ACTIVITY:

-Social studies discussion about American Indians.

PURPOSE:

-To fulfill academic curriculum requirements for a high school diploma.

MATERIALS:

- -Maps.
- -Globes.
- -Mimeographed information sheets.

METHODS OF PRESENTATION:

- -Signed and verbal lecture and discussion with class of deaf students.

 Teacher started with introduction explanation about the discovery of America. Discussion included Columbus, the Spaniards, and information from homework assignment about different indigenous Indian tribes in America.
- -The teacher used maps and globes to highlight and illustrate routes, landings, and geographic placements. Students demonstrated information using media.
- -Analysis of topic was sequential, with individual help and followup for clarification and understanding.

COMMENTS FROM INSTRUCTIONAL OBSERVATIONS:

- -Student discussion was animated.
- -This was a classroom of deaf students with seating as the only accommodation for the student with visual difficulties.

AREA: Academics

STUDENT LEVEL: Intermediate Functioning

ACTIVITY:

-Telling time and recognizing time concepts.

PURPOSE:

-To understand time; set a clock; to be at a place on time and to know what time an activity starts and how long it lasts.

MATERIALS:

-Three model clocks with raised print and braille numbers and easily moveable hands. (Available from the American Printing House for the Blind)

METHODS OF PRESENTATION:

- -Teacher signed and gestured, as well as questioned with voice, "What time do you come to school?" "What time do you go to Physical Education?" etc.
- Teacher asked questions to students individually and to the group together, always being careful to include the student with visual limitations.

COMMENTS FROM INSTRUCTIONAL OBSERVATIONS:

- -Drill, practice, and repetition were used functionally to connect the abstract idea with the concrete object of time.
- -Times used were related to specific times that the students needed to know for their daily schedules.
- -Students seated were at a table with teacher, conversing in sign and gesture, answering and asking questions about time. Student answered in sign and used clock to set correct time. Each student had a clock.

AREA: Academics

STUDENT LEVEL: Intermediate Functioning

ACTIVITY:

-Cutting and eating pumpkins.

PURPOSE:

-Halloween activity to stress seasonal activity and to show where Jack-O-Lantern comes from and what it tastes like.

MATERIALS:

-Electric frying pan, spices, water, garbage bag, a pumpkin, colander, cooking oil, knife, brown sugar.

METHODS OF PRESENTATION:

- -Students were seated around a U-shaped table with teachers.
- -Pumpkin was cut into a Jack-O-Lantern (teacher cut pumpkin).
- -Pumpkin was then cut in half; student participated in smelling, de-seeding, and tasting the raw pumpkin, conversed about color of pumpkin and the room odor of pumpkin, and felt the inside and outside textures of pumpkin.
- -Pumpkin pieces cut by teachers were cooked in an electric frying pan; students asked questions and teachers responded while cooking the pumpkin.
- -Sign, voice, gestures, and demonstration with tactile reinforcement were used extensively.

COMMENTS FROM INSTRUCTIONAL OBSERVATIONS:

- -Halloween was emphasized as a seasonal activity.
- -Presentation related to concept of time (date) and holiday (month) celebrated with the cooking and eating of pumpkin.
- -Two classes joined for this "experimental activity" and the students seemed to enjoy it.

AREA: Computer Class

STUDENT LEVEL: Intermediate Level

ACTIVITY:

-Use of computer software program called *Count and Add*. This elementary program is very clearly visible with characters and numbers appearing in columns.

PURPOSE:

-To provide computer experiences to reinforce math and counting concepts.

MATERIALS:

- -Apple IIe Computer and printer.
- -Software programs:
 - 1. Count and Add
 - 2. The Print Shop

METHODS OF PRESENTATION:

- -Computer assisted instruction program, *Count and Add*, was used; the student was already familiar with the routine, so he basically did what the computer program instructed.
- -Teacher's role was primarily to provide encouragement and help student learn to solve problems if they arose.
- -When time was almost completed, student was able to make a poster to take with him using *The Print Shop* program.

COMMENTS FROM INSTRUCTIONAL OBSERVATIONS:

- -The reward was to make a sign of an apple from *The Print Shop* program or whatever logo chosen by the student.
- -Student extremely motivated by the computer class he loved working with the computer.

AREA: Academic

STUDENT LEVEL: Low Functioning

ACTIVITY:

-Mathematics.

-Counting and adding to 10.

PURPOSE:

-Count and add in sequence.

MATERIALS:

-Small wooden blocks.

METHODS OF PRESENTATION:

- -Teacher encouraged student to respond independently and used constant reinforcement through praise.
- -Activity was introduced in review, i.e., count and add in sequence: 1 + 3, 1 + 4, 2 + 7, etc.
- -Teacher gave student small blocks (1/2" square) and asked "How many?" Student would count in different combinations (1 + 4, 2 + 5, 3 + 1, etc.).
- -Teacher drilled student to try to identify amount before counting (i.e., T: "4 + 1 is how many? Now think. 4 plus 1 more is how many?" S: "5." T: "Thank you, that is good.")

COMMENTS FROM INSTRUCTIONAL OBSERVATIONS:

-Teacher kept student focused on task, continually prompting both in sign and verbally.

AREA: Academic

STUDENT LEVEL: Low Functioning

ACTIVITY: Physical Education

- -Exercise and warm ups before a game.
- -Learn a game.
- -Play different relays with different objects.

PURPOSE:

-To enhance students' physical conditioning and to learn "team sports" and cooperative play.

MATERIALS:

- -Three orange plastic cones.
- -Rope to be used as a guide in relay.
- -Baton.
- -Scoot board.

METHODS OF PRESENTATION:

- -Teacher gave relay race instructions to entire group (12 students) with an aide interpreting.
- -Teacher had students divide into two teams and sit on "scooter board" to follow a rope to a large plastic cone, then pass off the cone to another student. The activity was repeated a number of times with variations of who was on which team.

COMMENTS FROM INSTRUCTIONAL OBSERVATIONS:

-Student was somewhat withdrawn from the activity but used the waiting time for visiting with another student when not "racing."

AREA: Counseling

STUDENT LEVEL: High Functioning

ACTIVITY:

-Counseling session with staff School Psychologist.

PURPOSE:

- -To visit and catch up on matters important to the student.
- -To discuss problems, needs, and interests.

MATERIALS:

-None.

METHODS OF PRESENTATION:

- -Tactile signing utilized in the hour long session.
- -Psychologist and student determined content based on needs.
- -Psychologist fluent in sign language.
- -Psychologist scheduled sessions in order to give the student an opportunity to
 - a. visit & talk about interests;
 - b. express needs;
- c. talk of problems and aid and assist student using a holistic approach to the student's well-being.

COMMENTS FROM INSTRUCTIONAL OBSERVATIONS:

- -Information was private and confidential.
- -Long standing relationships from student's elementary school days.

AREA: Social - Leisure

STUDENT LEVEL: Low Functioning

ACTIVITY:

-Exercise on equipment (i.e., stationary bicycle, row boat, etc.)

PURPOSE:

-To help student establish a regular daily routine of physical exercise.

MATERIALS:

- -Gymnasium equipment.
- -Mats.
- -Rubber and game balls.

METHODS OF PRESENTATION:

- -Teacher allowed student to choose exercise equipment and timed each used.
- -Student started at one piece of equipment and rotated to the next piece of equipment every 10 minutes, exercising and participating in the program at own pace.
- -Student knew where each piece of equipment was located in the exercise gym and spent time on each piece of equipment.

COMMENTS FROM INSTRUCTIONAL OBSERVATIONS:

- -Student's favorite piece of equipment was the stationary bicycle and a considerable amount of time was spent on it.
- -Transferred skills from one piece of equipment to another for mastery.
- -Student independence was praised.

AREA: Arts and Crafts - String Art

STUDENT LEVEL: Low Functioning

ACTIVITY:

-To design the "Eye of God" decoration as an arts and crafts project.

PURPOSE:

- -To develop enjoyable leisure activities and to reinforce fine motor skills necessary to do task.
- -Enhance signed skills by increasing vocabulary, including recognizing colors.

MATERIALS:

- -Wood square.
- -5 nails.
- -multi-color yarn for wrapping around the nails.
- -communication book for color names.

METHODS OF PRESENTATION:

- -Teacher demonstrated step-by-step process, showing specific elements of the task and shadow techniques using the frame for the "Eye of God," nails, and hammer.
- -Gross gestures were used to show the student what to do with the hammer and nails; shadowing helped the students imitate the teacher.
- -Extensive use of imitation and copying from the sample and teacher's demonstration.
- -Prompts were verbal and signed and were used continuously.
- -Repetition and drill on the color names were reinforced in sign.
- -Remembered concrete information by using a variety of stimuli such as colored and textured materials.
- -Experiential: guided the student through steps relating to practical experience of making craft using concrete objects.

COMMENTS FROM INSTRUCTIONAL OBSERVATIONS:

- -First introduction to string art.
- -New information in familiar context.
- -Knowledge and learning experience resulted in a specific product the "Eye of God" craft.
- -Encouraged student independence.

AREA: Physical Education

STUDENT LEVEL: Low Functioning

ACTIVITY:

-Physical education games: jogging on track for a warm up, then Tug of War, Rope Pulling.

PURPOSE:

-To promote physical conditioning, group social/recreational activities and game participation.

MATERIALS:

-Long rope.

METHODS OF INSTRUCTION:

- -Teacher ran through warm-up exercises by taking student's hands, facing her, and doing the exercises in mirror image fashion. This included jumping jacks, toe touches, sit-ups and, in a modified fashion, push-ups and rotating arms in small circles. Then, using sighted guide techniques, teacher and student jogged two laps around field with rest of class.
- -Introduction to Tug of War game: T: "Today we play a new game where you pull on a rope hard, pull hard (physically demonstrates). The first time we have two people, one stands here, one stands there (points), and they pull hard. First two volunteers, the rest watch, ok?" An aide interpreted all this for the blind student and she was one of the ones picked to go first. The aide coactively demonstrated what she was to do. Students engaged in the activity. Then teacher added two more students, then two more.

COMMENTS FROM INSTRUCTIONAL OBSERVATIONS:

- -Although it was a large group (35 students), the group was subdivided into smaller groups (8-12). The student, who had no usable vision, was only involved one-on-one with either the teacher, aide, or another student.
- -Student is on a timed program to speed up dressing activities; if she dresses in a designated period of time, she gets a reward. On this day she ran late and was mad that there would be no reward.
- -When student was no longer participating in the activity, she visited with another student while sitting in the grass, then laid back in the grass and enjoyed the warm sun.

AREA: Language and Communication

STUDENT LEVEL: High Functioning

ACTIVITY:

-Reading and writing braille for comprehension.

PURPOSE:

-To improve braille reading skills, develop better reading comprehension, and improve short term memory skills.

MATERIALS:

-Teacher provided student with a braille (grade 2) copy of a short story containing high interest materials which were on student's favorite topics.

METHODS OF PRESENTATION:

- -Student read short phrase from braille copy, then signed them from memory to teacher until he reached the end of the sentence. Then he reviewed the entire sentence to teacher.
- -Student and teacher would discuss, using tactile sign, words and phrases in the sentence that the student didn't understand or about which he had comments. For example: T: "What does it mean to faint?" S: "Faint means to lose control of muscles and mind and fall on the ground." T: "That's right!" S: "In America, many soldiers fainted in Viet Nam because they saw their friends tortured." T: "That's right, it was terrible for them to see their friends tortured and hurt, so they fainted."
- -Some of the discussion was very intense and personal. The teacher did not expect the student to reveal things about his own feelings that she was not willing to reveal about herself. For example, after having a discussion about the meaning of the word despair (meaning more than depression) the following dialogue was exchanged: T: "Can you remember a time in your life when you were in despair?" S: "Yes, when I became blind, I felt despair. When in your life did you feel despair?" T: "When I became divorced."

AREA: Language and Communication

STUDENT LEVEL: High Functioning

ACTIVITY:

-Class meeting for junior class elections for "Most Popular Boy" and "Most Beautiful Girl."

PURPOSE:

-Student initiated and orchestrated activity.

MATERIALS:

-None.

METHODS OF PRESENTATION:

-Class president, with supervision from class sponsor, met with the junior class, promptly stated the purpose in sign language, proceeded to accept nominations and votes for the candidate. Students elected the Most Popular Boy and the Most Beautiful Girl of their choice.

COMMENTS FROM INSTRUCTIONAL OBSERVATIONS:

- -Sign language was used throughout the session.
- -Activity involved group discussion and voting led by student.
- -Activity was conducted by president of junior class.
- -Sponsor served as a recorder for the 15 minute session.

AREA: Language and Communication

STUDENT LEVEL: High Functioning

ACTIVITY:

- -Reading and writing Braille.
- -Combination of history, science, and language.

PURPOSE:

- -To enhance Braille reading and writing skills.
- -To enhance student's ability to retain whole Braille sentence while reading.

MATERIALS:

- -Perkins Brailler.
- -Braille paper.
- -Brailled book of historical events.

METHODS OF PRESENTATION:

- -Teacher provided a story of student's favorite topics in Grade II Braille.
- -Student responded by Brailling his understanding of the story lesson to check comprehension.
- -Extensive discussion by the use of tactile sign language for word definition and understanding.
- -Teacher acted in capacity of a dictionary as to the meaning of words and the interpretation of concepts and ideas being conveyed by the author.
- -Experiential techniques were used, guiding the student step-by-step, relating practical experiences and familiar information.
- -Communication was precise and use of drill, repetition, and practice was extensive.
- -Information was both abstract and concrete, with teaching emphasis on conceptual accuracy and understanding.

COMMENTS FROM INSTRUCTIONAL OBSERVATIONS:

-Student and teacher were intense and coactively involved throughout the lesson.

AREA: Language and Communication

STUDENT LEVEL: Intermediate Functioning

ACTIVITY:

-Learning to use a Telecommunication Device for the Deaf (TDD).

PURPOSE:

-To develop telecommunication skills to enhance student's ability to live independently.

MATERIALS:

- -Printed text for conversation on TDD.
- -TTY with large print display.

METHODS OF PRESENTATION:

- -Teacher had TDDs set up in two separate classrooms. Student had previously learned the dialing procedures and had prepared a text for what she wanted to discuss on the TDD.
- -Student went in one room and dialed teacher; teacher had the line fixed so it was busy and student had to problem solve. Student waited patiently and tried again.
- -Student used prepared text to help her with the initial conversation. She was very careful, fingerspelling to herself as she typed in the text, then using "GA" command to indicate other person's time to talk.
- -The task was then repeated without a prepared text. Teacher reviewed spelling and grammar errors with student at end of lesson using a printout of the conversation from the TDD.

COMMENTS FROM INSTRUCTIONAL OBSERVATIONS:

-Student was able to reinforce this activity by using TDD in residence when she achieved a basic level of skill. This was a major motivation for her.

AREA: Language and Communication

STUDENT LEVEL: Intermediate Functioning

ACTIVITY:

-Matching vocabulary and spelling with the correct signs.

PURPOSE:

-To learn the correct sign for each vocabulary word and expand vocabulary.

MATERIALS:

-Laminated cards.

METHODS OF PRESENTATION:

- -Teacher used many and varied aids, such as laminated name tags, pictures, etc., to get the point across and to facilitate automatic recall and rote memorization by the student.
- -Teacher used repetition, practice, drill, reinforcement, prompts, and cues.
- -Teacher made discussion relevant by guiding student through animated discussion using pictures and examples of people they knew, such as principal, teacher, school.
- -Teacher used questions to prompt students to problem-solve.
- -Teacher introduced interaction and socialization into every segment and situation.

COMMENTS FROM INSTRUCTIONAL OBSERVATIONS:

-Teacher worked hard to make the process of building sign vocabulary interesting and relevant.

AREA: Language and Communication

STUDENT LEVEL: Intermediate Functioning

ACTIVITY:

-Daily morning review of calendar including activities of the previous evening and for the day ahead.

PURPOSE:

-To help student anticipate daily activities and to place things into the concept of time and space.

MATERIALS:

- -Teacher-made calendar with laminated pictures, words, and menu items.
- -Materials to make a get well card.

METHODS OF PRESENTATION:

- -Teacher informed students (3) in the class that the teacher in the next room was in a bad automobile accident the previous night. They discussed her injuries. The students were very concerned and wanted to send her a get well card. The teacher helped them make a card.
- -The teacher kept the students on task by going through the activities of the day and what would be served in the cafeteria at lunchtime.
- -The teacher's approach was to ask questions using total communication and to have the students respond in sign and with voice (if applicable). Teacher had many laminated pictures organized in an alphabetic format so students could further enhance their response by finding the correct picture or printed word. Teacher guided the students with enthusiastic questions and playful banter.

COMMENTS FROM INSTRUCTIONAL OBSERVATIONS:

-The teacher was extremely enthusiastic and energetic in working with the students. At some times, she swept them into the activity through sheer force of her personality.

AREA: Language and Communication

STUDENT LEVEL: Intermediate Functioning

ACTIVITY:

- -Is it a Person, Place, Thing?
- -Is it a "Who"?
- -Counting to win.

PURPOSE:

- -Used drill, practice, and repetition to reinforce noun-picture of "who."
- -Reinforce counting skills.

MATERIALS:

-Laminated colorful pictures of nouns (i.e., mailbox, woman, car, girl, etc.).

METHODS OF PRESENTATION:

- -Teacher presented the activity as a game. The student with the most correct answers won a prize (candy).
- -Teacher asked each student by showing a picture and signing, "Is that a who?"
- -When student responded correctly, the student kept the picture and was reinforced positively (Add 1).
- -Student having most pictures at end of drill and practice was rewarded positively (Total).
- -Learning activity was turned into a fun and competitive game; rewarded winner at the end; reinforced during activity by collecting correct responses.

COMMENTS FROM INSTRUCTIONAL OBSERVATIONS:

- -Teacher accumulated wrong answer pictures.
- -Teacher used various types of communication techniques during this activity (i.e., voice, sign, fingerspelling, gestures, media).
- -Teacher used enthusiasm and colorful, lively media to stimulate learning and enjoyment in this activity.

AREA: Language and Communication

STUDENT LEVEL: Intermediate Functioning

ACTIVITY:

- -Reading and communication.
- -Practice spelling.

PURPOSE:

-To practice reading and spelling, fingerspelling, and signing clearly, including the usage of plurals, where appropriate.

MATERIALS:

- -Crayons.
- -Paper towels.
- -Communication book pictures.
- -Red Reading Book.

METHODS OF PRESENTATION:

- -Student read using sign; teacher cautioned the student to sign clearly and include plurals.
- -Practice, repetition, and drill were used in this activity.
- -Picture/word presented had to have missing letter or letters placed for completion and correct spelling [Ex: _ATS = CATS].
- -Total communication was used as activity was repeated and practiced.
- -Complete sentences, including adjective articles, signed and fingerspelled correctly using Signed Exact English (SEE).
- -Variety of stimuli modalities used.
- -Teacher guided student through step-by-step, allowed student trial and error, then modeled for correction.

AREA: Language

STUDENT LEVEL: Intermediate Functioning

ACTIVITY:

-Learning and understanding a calendar to learn days, weeks, months, and year.

PURPOSE:

-To develop language skills to assist with independent living. Also helped to organize student's anticipated activities.

MATERIALS:

- -Teacher made all the materials used by the student.
- -All articles were laminated, which added to the life of the cards.

METHODS OF PRESENTATION:

- -Teacher used a calendar for date, day, time, week, month, year on an attractive bulletin board with words, numbers, and printed signs.
- -Used a box called "lunch box" which contains the menu in the cafeteria for each day.
- -Student went through the box and found the picture to match each word item on today's menu.
- -Very clear signing and fingerspelling in sentence form were used.
- -Repetition, practice, and drill were used extensively.
- -Menu items paired with picture to reinforce menu contents and food names.
- -Experiential: guided learner through steps related to practical experience and knowledge.

COMMENTS FROM INSTRUCTIONAL OBSERVATIONS:

- -Used a variety of teacher made media materials to stimulate thinking and signing.
- -Materials were textured, large pictures.

AREA: Language and Communication

STUDENT LEVEL: Intermediate Functioning

ACTIVITY:

-To learn vocabulary words for food items.

PURPOSE:

- -To learn signed, written, and fingerspelled vocabulary for food items.
- -To reinforce shopping trips for food items on the menu and the needed ingredients to complete the menu.

MATERIALS:

-Flash cards with pictures of food items and others with written names of food items.

METHODS OF PRESENTATION:

- -Student was shown a picture of a food item and asked to sign the word, then was shown a card with written word for the item.
- -Student was encouraged to talk about food and drink items.
- -The teacher encouraged and praised student.
- -Teacher reviewed and drilled list of food words and kept repeating the list with the student.
- -Used fingerspelling and sign language to aid vocabulary development, word comprehension, and teaching the sign for a particular item.
- -Student matched pictures and words using correct signs.
- -In discussion teacher asked questions like, "What's in a salad?" "Can you spell cheese?" "What do you eat with cheese?" "Can you spell peanut butter?"

COMMENTS FROM INSTRUCTIONAL OBSERVATIONS:

- -Student became actively involved in the task of creating menus.
- -Student enjoyed talking about the foods he liked.

AREA: Language and Communication

STUDENT LEVEL: Intermediate Functioning

ACTIVITY:

-Letter writing to parents.

PURPOSE:

- -To write a weekly letter to parents reinforcing good language skills and written communication.
- -Since this was a new school year and student was new to teacher's class, she was also assessing his skill level.

MATERIALS:

- -Bold lined notebook paper.
- -Black felt tip pen.
- -Envelope.
- -Stamp to take final letter in envelope to campus mail box.

METHOD OF PRESENTATION:

- -Teacher worked intensely with student in an area free of distractions. Teacher asked student questions and helped where appropriate. For example: T: "Let's start with the date. What is the month?" S: "September." T: "Right, that's good, write it down." S: "It is 19, right?" T: No, you're almost right, go look at the calendar." S: Looks at calendar, then returns and writes 23. T: "Now what do you write?" S: Signs, "Dear Mom and Dad." S: Asks, "What write?" T: Fingerspells D E A R. Student wrote small "d" and teacher demonstrated capitol "D" and said, "No, write big D."
- -Student and teacher had lively discussion about contents of letter. Student wanted to include things he did not know how to spell so teacher wrote the words for him and he copied them into his letter.
- -Teacher reinforced him with signed and spoken words of praise. He was also reinforced by being given the opportunity to take the letter to the mail box after class.

COMMENTS FROM INSTRUCTIONAL OBSERVATIONS:

- -Modeling, coactive information, and repetition were used until the letter was correct and completed.
- -Fingerspelling, sign, gestures, voice, demonstration, touch, prompts, and imitation were used extensively during this lesson.

AREA: Language and Communication

STUDENT LEVEL: Intermediate Functioning

ACTIVITY:

-Speech - recognizing long and short sounds for "m" and "i."

PURPOSE:

-To enhance student's speech and reading skills.

MATERIALS:

- -Long and short sticks.
- -Box of word cards with Braille and large print.

METHODS OF PRESENTATION:

- -This was a small group activity (3 students) where each student interacted in turn with the teacher.
- -Students sat in chairs in a small circle. When it was a student's turn, s/he was given a box with word cards (in Braille and large print). S/he would choose a card. If s/he did not recognize a word, teacher would sign. Student said word. Teacher would then repeat word and group would say it together several times.
- -If the word had a long "m" sound, the student would give teacher a long stick; if it was a short "m" sound, s/he would give a short stick.
- -Teacher kept the pace of the activity because students would become easily distracted when it was not their turn.
- -Activity was then repeated using "i" sounds.

COMMENTS FROM INSTRUCTIONAL OBSERVATIONS:

- -Repetition and drill were used until a close facsimile of the word was given. Student had some speech difficulties due to physical abnormalities in the mouth area.
- -Teacher used sign, speech, and media in an enthusiastic manner.

AREA: Language and Communication

STUDENT LEVEL: Intermediate Functioning

ACTIVITY:

- -A group activity to involve everyone in a conversation about the previous night's activities, using voice and sign language.
- -To discuss activities for today's plans (going shopping; going on a field trip).

PURPOSE:

- -To improve communication and social skills.
- -Converse in sign language, incorporating "train," "escalator," and "shopping center" in the conversation.
- -To emphasize use of complete sentences and good grammar and vocabulary.

MATERIALS:

-None.

METHODS OF PRESENTATION:

- -The teacher guided the students through various segments of conversation using voice and signs and asking questions (i.e., "What did you do last night?").
- -Teacher kept all students focused on person who was speaking.
- -Students were encouraged to ask questions of each other.
- -When students gave one word answers, teacher prompted them to use complete sentences (i.e., T: "What do you like to do?" S: "Books." T: "Can you say, `I like books'?" S: "I like books." T: "Good, ____ likes books, what else do you like?").

COMMENTS FROM INSTRUCTIONAL OBSERVATIONS:

- -Teacher prompted students with questions about the activity and asking them to clarify their expression of it.
- -One totally blind student in the group participated through the use of an aide who interpreted the conversation for her in tactile sign.

AREA: Language and Communication

STUDENT LEVEL: Intermediate Functioning

ACTIVITY:

- -Speech, using a student and teacher-designed speech/phonics book.
- -Letters of the alphabet were written on pages by sound groups for practice.
- -Review and drill of sounds previously learned.

PURPOSE:

-To enable student to communicate with others using voice and signs. Also encouraged reading skills.

MATERIALS:

- -Speech/phonics book.
- -Alphabet cards.

METHODS OF PREPARATION:

- -This activity was familiar to the student and included review of sounds he could read and recognize already, but had not yet mastered.
- -Teacher would ask him to make the sounds and then would either praise him or have him copy a sound she would make. She placed her face very close to his when demonstrating for him and spoke in a loud voice.
- -Student was distracted by wanting to tell the teacher in sign about an event of the previous evening that he had already shared. Teacher was very firm in keeping him on task and not letting him get sidetracked.
- -This was not a particularly enjoyable activity for the student. The teacher kept the instruction to about 15 minutes, then rewarded the student by letting him listen to music for a short time. He was permitted to operate the record player by himself, much to his enjoyment.

COMMENTS FROM INSTRUCTIONAL OBSERVATIONS:

-Although there were other students and an aide in the classroom, the student essentially worked one-to-one with the teacher.

AREA: Language and Communication

STUDENT LEVEL: Low Functioning

ACTIVITY:

-Learning to read and write braille and filling out questions in an application.

PURPOSE:

-Improve braille skills and learn to answer questions appropriately.

MATERIALS:

- -Perkins Braille Writer.
- -Braille paper.

METHODS OF INSTRUCTION:

- -Student had a cold, was tired, and not feeling well, so the teacher was continually trying to keep her attention on task. Teacher encouraged the student to attend to task by promising her a reward when they finished a certain amount of work.
- -Initially the teacher brailled a short sentence with the student's fingers on top of hers on the Brailler. Student read the sentence, then teacher asked student a question to answer using the Brailler. Question: "Who is your parent?" Student: "Momma." T: "What is your momma's name?" Student didn't answer. Teacher fingerspelled her mother's name and said, "I want you to write (mother's name) on the Brailler."
- -Teacher then placed student's hands on Brailler keys and teacher placed her fingers on top of student's fingers.
- -The teacher cued the student as to which keys to depress by applying gentle pressure to the fingers on the right keys and speaking the letters loudly to the student at the same time.
- -After a series of questions, the teacher asked the student to read some braille letters the teacher had prepared. The student read the letters with one hand and fingerspelled with the other. The teacher patted her shoulder and said "good" at every correct response.
- -When the lesson was finished, the teacher promptly rewarded the student as promised.

COMMENTS FROM INSTRUCTIONAL OBSERVATIONS:

-Teacher was in physical contact with the student throughout the lesson.

Many different methods of communication were used with the student.

AREA: Language and Communication

STUDENT LEVEL: Low Functioning

ACTIVITY:

-To learn days of the week; to prepare pictures in the communication book to indicate same; and to pair these pictures and words with appropriate signs.

PURPOSE:

- -To learn the signs for each day of the week and to provide students with a viable method of expressive communication.
- -To pair the picture in the communication book with the sign and the written word.

MATERIALS:

- -Communication book.
- -Assorted pictures, glue, scissors, tape.

METHODS OF PRESENTATION:

- -Teacher introduced activity by explaining concept of doing different things on different days.
- -Since student went home every Friday, teacher started with block named "Friday" and asked student what happened. Student didn't know. Teacher signed "home" and showed pictures of parents, emphasizing Friday was a day to go home. Student smiled recognition, pointed to himself, and signed "home," then pointed to Friday in book.
- -Student and teachers then cut out pictures and glued them in communication book emphasizing signs, written word, and pictures.
- -Student selected pictures to go in book.
- -Teacher constantly encouraged and reinforced student to keep him on task and focused.

COMMENTS FROM INSTRUCTIONAL OBSERVATIONS:

- -Teacher was very aware of student's "likes and wants" and used them as incentives and rewards.
- -Lesson also provided fine motor skill activities cutting, etc.

AREA: Mobility and Orientation

STUDENT LEVEL: High Functioning

ACTIVITY:

-Bus travel.

PURPOSE:

-Independent travel to work from home via public transportation - bus.

MATERIALS:

- Published schedule of bus routes and times.
- -Prewritten card to show in case of emergency indicating who to call.

METHODS OF PRESENTATION:

- -The primary methods were discussion and demonstration (with increasing withdrawal of teacher involvement) and prompting.
- -The sequence of instruction observed was as follows:
- 1. Presentation and discussion of specific tasks to be accomplished;
- 2. Travel together with instructor demonstrating activity;
- 3. Travel together with student initiating tasks (such as paying driver) until student achieves tasks without prompting;
- 4. Student travels independently with teacher following in car;
- 5. Student travels independently with teacher waiting at bus stop;
- 6. Student travels independently on bus.

COMMENTS FROM INSTRUCTIONAL OBSERVATIONS:

- Student participating in this activity had some residual vision.
- -Teacher also worked on safe street crossing and travel from bus stop to employment location.
- Street crossings must initially be taught by a certified Orientation and Mobility Instructor.

AREA: Orientation and Mobility

STUDENT LEVEL: High Functioning

ACTIVITY:

-To travel independently from the school to a downtown location in a cab, pay the cab driver and tip him, then go into a store and make a purchase. Travel several blocks independently and meet the O&M Instructor at a specific location.

PURPOSE:

-To learn to travel independently and safely and to increase student confidence. This was also an evaluation. If the student passed, he could have permission to go into town unescorted.

MATERIALS:

-Large print map of a few city blocks.

METHODS OF PRESENTATION:

- -Teacher met with student (deaf, partially sighted) at school and, in sign, explained his assignment to him. She then showed him a map of the downtown area and marked where they were to meet. She asked if he had any questions and he said, "No."
- -Student wrote out information asking someone to call a cab and indicated his location and destination. He then went to the reception area and asked the receptionist to call him a cab, handing her the information.
- -The O&M Instructor did not keep visual contact with the student in the early phases of this activity, but drove downtown to where the cab was to drop him, parked her car, and watched from a distance.
- -The student completed everything as asked, including crossing streets independently. He did not seem to be aware that the teacher was watching him.

COMMENTS FROM INSTRUCTIONAL OBSERVATIONS:

- -Student was highly motivated by desire to travel into town unescorted.
- -The community is somewhat sensitive to having deaf-blind people travel in the area because of the school.

AREA: Orientation and Mobility

STUDENT LEVEL: Intermediate Functioning

ACTIVITY:

-Simulated activity to reinforce safe street crossing by role playing with toys and a tactile map.

PURPOSE:

-This activity was developed in conference with a certified orientation and mobility instructor to remediate the problem of student moving head both ways at street crossings, saying "fine," and starting across street without really looking both ways or attending to traffic. The new approach was to have the companion/aide look both ways and the student was not to go until the aide signed and said "fine."

MATERIALS:

- -A large tactile map of the area from the residence to the class building made from lego blocks, boxes, and colored paper.
- -Toy figures of boy, girl, man, and woman.
- -Matchbox cars and trucks.

METHODS OF PRESENTATION:

- -Teacher explained the problem to student indicating the importance of looking for cars and waiting for the aide to say "fine" before starting across street.
- -Teacher and student used toy figures to walk through the task. Traffic was indicated by the little cars with student operating them sometimes.
- -Teacher took woman doll, student took boy. Teacher and student walked the dolls through to the first street crossing then stopped. Teacher said, "Who looks?" Student said, "Teacher." Teacher said, "Right, who says `fine'?" Student said, "Teacher." Teacher gave student enthusiastic praise. Drill was repeated several times.

COMMENTS FROM INSTRUCTIONAL OBSERVATIONS:

-Student seemed enthusiastic about the activity, especially turning dolls to look for traffic and operating cars.

AREA: Mobility and Orientation

STUDENT LEVEL: Low Functioning

ACTIVITY:

-Orientation and mobility instruction to learn class routes between buildings. Student knew basic routes but tended to veer to the left in the sidewalks and walked with an inconsistent, ambling gait.

PURPOSE:

-To enhance student's independent travel skills around the campus and between classes and to improve specific mobility techniques (i.e., shorelining).

MATERIALS:

-White travel cane with red tip measured to correct prescriptive length for student.

METHODS OF INSTRUCTION:

- -Student tried to get out of the activity by saying she was sick, but the teacher indicated they would be doing it anyway. Since the student enjoyed riding the stationary bicycle, the teacher said when they finished the lesson she could ride the bicycle. That seemed to satisfy student. Teacher understood her sickness was a way to say she didn't want to do the activity.
- -The instruction took place outside on the actual routes. Teacher walked next to student on left side where student had free hand. Using her index finger to simulate the arch movements of the cane, teacher worked to reinforce moving the cane further to the right to keep in touch with the grass edge of the sidewalk.
- -Teacher reinforced orientation through the identification of certain objects on the shoreline or edge of the sidewalk. Occasionally the teacher would help the student find objects with her cane by communicating into her hand.

COMMENTS FROM INSTRUCTIONAL OBSERVATIONS:

- -Student had no usable vision and very little residual hearing but was able to travel considerable distances independently outside between buildings. When changing classes, she usually traveled without assistance.
- -Teacher was in physical contact with the student during most of the instructional time so she could communicate with her immediately when appropriate.

AREA: Daily Living Skills

STUDENT LEVEL: Intermediate Functioning

ACTIVITY:

-Learning to answer questions about personal information such as address, parents' names, etc.

PURPOSE:

-To provide student with relevant information to assist with self identification and completing applications.

MATERIALS:

- -Cards color-coded for each student.
- -Teacher had a copy of student's information (helped with questions responses correction praise).

METHODS OF PRESENTATION:

- -Teacher made laminated "answer tags" which were color coded for each student and contained written information about them (i.e., small tags labeled with student's name, student's address, student's social security number, student's birthdate, etc.). One student had all pink tags, others were blue, green, etc.
- -Students sat in a circle around a table with teacher who would ask students questions: "What is your name? What is your social security number?" The student would respond in sign and voice, then find the correct tag. If they were unsure of the answer, they could refer to the answer tags.
- -Prompts, drill, repetition, and cues were used as appropriate.
- -Sign, gesture, and voice reaction was displayed from teacher toward student for correct responses.

COMMENTS FROM INSTRUCTIONAL OBSERVATIONS:

- -Teacher would ask other students to verify the right answers, so students also had to attend to each other's information.
- -Teacher was extremely enthusiastic throughout the activity.

AREA: Daily Living Skills

STUDENT LEVEL: Intermediate Functioning

ACTIVITY:

-Use school bank procedures and count change.

PURPOSE:

-To develop independent living skills and obtain money for a field trip.

MATERIALS:

- -Withdrawal and deposit slips.
- -Money bills and coins.

METHODS OF PRESENTATION:

- -Teacher reviewed procedures for going to the school bank with a class of four students.
- -Each student went to the bank to get money to go skating.
- -Each student counted money upon return from bank to verify amount.
- -Each student set aside correct amount for skating admission and refreshments.
- -Sign, voice, fingerspelling, and demonstration used.
- -Using various denominations of coins, the teacher used drill, practice, and repetition <u>with</u> prompting.
- -Student also practiced the activity without prompting (going to bank alone).

COMMENTS FROM INSTRUCTIONAL OBSERVATIONS:

-Each student was rewarded with a piece of candy, as well as by getting money.

AREA: Daily Living Skills

STUDENT LEVEL: Intermediate Functioning

ACTIVITY:

-Food shopping at the supermarket.

PURPOSE:

-To provide independent living skills and help the student to understand the complete cycle of food preparation.

MATERIALS:

- -Laminated cards with names of items and pictures taken directly from labels, packages, or photographs.
- Shopping list with quantities, etc.
- -Grocery cart.

METHODS OF PRESENTATION:

- -Students and teachers previously made grocery list as part of classroom activity. Several students went to the store, but each one worked one-to-one with the teacher.
- -Teacher kept list and sent students to get items one at a time. Teacher involvement varied depending upon student's level of independence and vision.
- -Example: Teacher showed the student a picture of an onion, indicating that, "we need only one." Student got one onion and brought it to teacher. She said, "Good, what does the onion go in?" Student put the onion in a bag and then into the cart and went to teacher for his next assignment. Sometimes teacher would help student by saying, "Look on aisle 14 for this item." Student could locate large aisle numbers.
- -Student took laminated card and matched it with items on the shelves. When looking for brownie mix, he had difficulty finding the right one, so he went to the teacher for help. She went with him and he showed her the brownie mix section and a few similar boxes. She helped him scan a larger area, and he found the right one.

COMMENTS FROM INSTRUCTIONAL OBSERVATIONS:

-Student paid the bill at the cashier, but needed help counting money.

AREA: Daily Living Skills

STUDENT LEVEL: Intermediate Functioning

ACTIVITY:

-Cooking hotdogs for lunch.

PURPOSE:

-To develop and enhance independent living skills toward the goal of student managing in a semi-supervised apartment.

MATERIALS:

- -Hotdogs, buns, condiments.
- -Pots, pans, plates, napkins, cutlery.
- -Teacher-made recipe and cooking guide with directions and pictures.

METHODS OF PRESENTATION:

- -Teacher provided printed recipe and directions to student and provided instructions in sign and voice as to what the student should do.
- -Student then worked independently with close teacher supervision but minimal teacher intervention other than encouragement and signed prompts of praise.

COMMENTS FROM INSTRUCTIONAL OBSERVATIONS:

- -Student was highly motivated due to eagerness to live independently.
- -There were many distractions in the work area (kitchen) due to the fact that several other students and teachers were working in same area. This added the dimension of having to share work space and be cautious about others in the area.

AREA: Daily Living Skills

STUDENT LEVEL: Intermediate Functioning

ACTIVITY:

-Group preparation consisting of hot dog casserole, carrots, salad, and brownies, with appropriate related activities such as table setting, table etiquette, and clean up.

PURPOSE:

To prepare student for independent living by meeting the following objectives:

- -To learn to cook a casserole of hot dogs and baked beans, salad, and baked brownies.
- -To learn to follow directions for meal preparations.
- -To eat the meal and clean up the kitchen.

MATERIALS:

- -Bowl, knife, tray, cutting board, can of baked beans, box of brownies, hot dogs.
- -Egg, baking pan, measuring spoon, mixing spoon, scissors, spatula.
- -Apron, oven mitts, timer with light, can opener, dishes, glasses, cutlery, napkins.
- -Special large print recipes.

METHODS OF PRESENTATION:

- -Students had previously shopped for all ingredients and put them away in the kitchen area.
- -Students went through routine of washing hands, putting on aprons, etc., then met with teacher to go over the daily food preparation plan.
- -Teacher indicated to each student what his/her cooking responsibilities would be and gave each a copy of a recipe in a mode they could understand. Student used the specially made recipes to follow a sequence of operations (see attached sample recipe). They worked fairly independently and without interaction with each other. The teacher intervened only when they asked her for help.

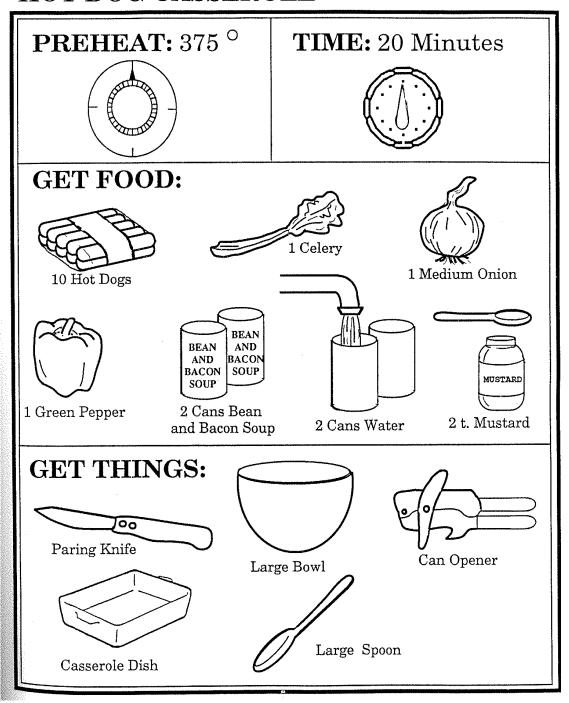
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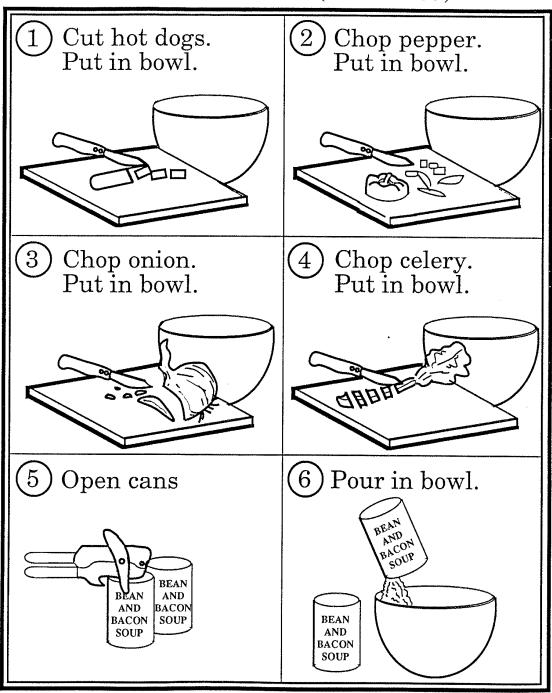
COMMENTS FROM INSTRUCTIONAL OBSERVATIONS:

- -Safety precautions were emphasized.
- -Juice was poured from the can into a pitcher before pouring in glasses.
- -Scissors were used instead of knives for salad preparation.
- -When possible, foods were cooked in the oven rather than on the stove.
- -Practice and prompting; experiential teaching; learning by guiding learner through steps; materials and ingredients with check list provided in braille, large print, and pictures.

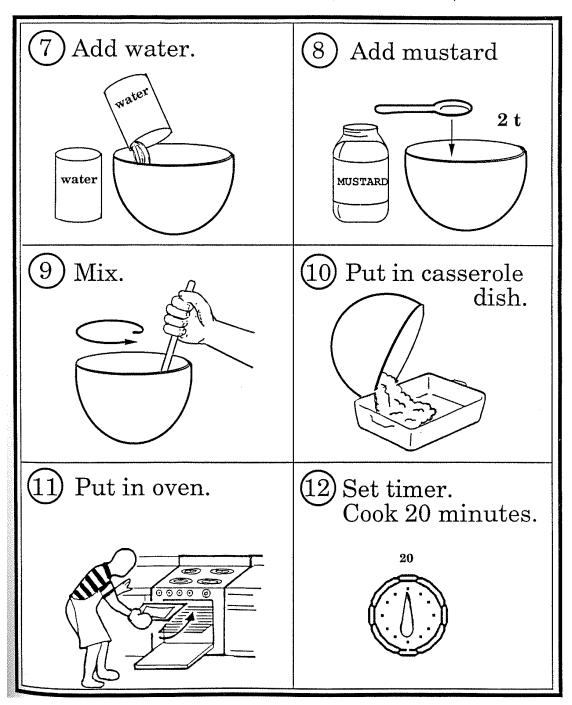
HOT DOG CASSEROLE



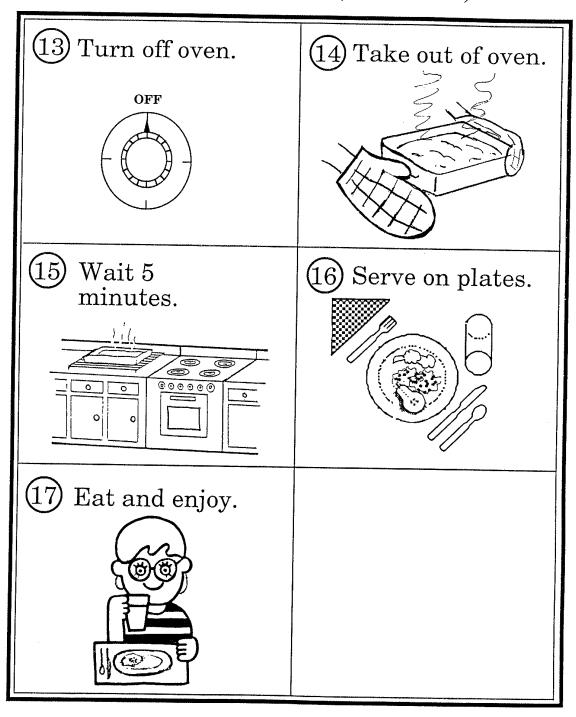
HOT DOG CASSEROLE (Continued)



HOT DOG CASSEROLE (Continued)



$\textbf{HOT DOG CASSEROLE} \ (\textbf{Continued})$



AREA: Daily Living Skills

STUDENT LEVEL: Intermediate Functioning

ACTIVITY:

-Discussion of responsibilities involved in living in an apartment with a roommate.

PURPOSE:

-Prepare student for semi-supervised apartment living with another deaf-blind roommate.

MATERIALS:

- -Sample lease to sign.
- -Sample budgets for food allowance and other bills.
- -Sample schedule to share work, i.e., cooking, washing dishes, washing clothes, shopping.

METHODS OF PRESENTATION:

- -Teacher stressed the importance of the discussion by introducing the concept of preparation for successful apartment living.
- -Teacher reviewed vocabulary, then asked student a series of questions in sign and voice, including:
 - 1) Why do you want an apartment?
 - 2) What do you want to do when you finish school?
- 3) If you want a cheese sandwich for lunch, and your roommate wants peanut butter, what will you do?
 - 4) What areas of cleaning do you like?
- -Teacher was very structured with lists and samples of materials for student.
- -After discussion, student and teacher went to the apartment to explore and be oriented to it.

COMMENTS FROM INSTRUCTIONAL OBSERVATIONS:

- -Teachers worked at trying to help student understand the responsibility involved and the importance of good communication with roommate.
- -Student was visibly moved with the importance of this step.
- -Student had some difficulty with questions asking "Why?" Teacher had to restate these frequently.

AREA: Daily Living Skills

STUDENT LEVEL: Low Functioning

ACTIVITY:

-Vacuum bedroom.

PURPOSE:

-Prepare student to care for personal area for possible placement in group home.

MATERIALS:

-Vacuum cleaner.

METHODS OF PRESENTATION:

- -Activity was done daily in student's room before class.
- -Teacher was working with student on "Yes/No" head shakes and pointing activities in anticipation of a possible group home placement where sign skill is limited (i.e., Teacher pointed to vacuum and then under chair and as student moved in to vacuum, teacher nodded "yes" and smiled).
- -Teacher was working on student moving through activity in a timely manner with minimal prompting. She kept a very specific record of the frequency of prompts. At this point in the instruction, student needed frequent prompts or she would abandon task or only vacuum in one place.

COMMENTS FROM INSTRUCTIONAL OBSERVATIONS:

- -Student was slightly distracted by research staff and required a little more prompting than usual. This was first morning of observations. Teacher explained that researchers were visitors and student should focus on tasks. This was done with about three signs and pointing to task.
- -Student had minimal language.

AREA: Daily Living Skills

STUDENT LEVEL: Low Functioning

ACTIVITY:

- -To fold towels of various sizes properly after drying.
- -Took place in a laundry room specifically used for clothing maintenance training.

PURPOSE:

-To teach student a specific system of folding towels of various sizes and pillow slips for storage after washing and drying. (It was felt this might have some possible job potential for working in hospital laundry facility.)

MATERIALS:

- -Towels in different sizes.
- -Washcloths.
- -Pillow slips.

METHODS OF PRESENTATION:

- -Towel folding was presented by the teacher using signed explanations and hand-over-hand techniques with the student (co-active).
- -The instruction was presented as follows: match corners, fold the towel in one-half, match corners, fold towel in one-half again, match corners using chin to help hold the towel in place to again fold in one-half.
- -Placed on table until ready to put in appropriately designated place.
- -Signed explanations were used repeatedly during the process of demonstration.
- -Repetition, drill, and practice were used in guiding the student until six towels were properly folded and student could do task independently.
- -Teacher encouraged student who was reminded often to "use the chin" to aid in the folding process.
- -Task analysis by using step by step prompting throughout the learning process.

COMMENTS FROM INSTRUCTIONAL OBSERVATIONS:

-Student had no residual vision but appeared to enjoy the textures of the towels.

AREA: Daily Living Skills

STUDENT LEVEL: Low Functioning

ACTIVITY:

-Laundering personal clothing in the dorm laundry room.

PURPOSE:

- -To teach self-help skills for personal maintenance.
- -To familiarize student with the operation of the washer and dryer in dorm area.

MATERIALS:

- -Washing machine, soap powder, water.
- -Dryer for drying clothes.
- -Long tables wide width for folding clothes.
- -Basket for laundry.

METHODS OF PRESENTATION:

- -Washer and dryer timers and mechanisms were brailled.
- -Teacher pointed out brailled direction knobs and signed the meaning of each cycle.
- -Hands-on demonstration for every activity, coactive techniques, and signed explanations were step-by-step.
- -Teacher provided continuous prompts with praise for good work.

COMMENTS FROM INSTRUCTIONAL OBSERVATIONS:

- -Student independence was encouraged and praised.
- -Focus on task reminders by sign and touch prompts.
- -This activity was taught in the area where it would be appropriate. All instruction was reinforced by the dormitory staff.

AREA: Daily Living Skills

STUDENT LEVEL: Low Functioning

ACTIVITY:

-Setting places at the table, selecting breakfast items, and eating breakfast.

PURPOSE:

-Learn to go independently through buffet breakfast line, get breakfast items, and complete eating breakfast within time allotted.

MATERIALS:

- -Kitchen dishes, utensils, etc.
- -Cereal and bananas.

METHODS OF PRESENTATION:

- -Student set up his own and teacher's place setting each morning.
- -Use of communication book to state "wants" and "needs."
- -Used repetition, drill, and practice daily.
- -Student had previously learned this activity and was practicing the task independently with the teacher only prompting him.
- -Student went into pantry and filled bowl with rice krispies and banana.
- -Milk pitcher was on the table.
- -Student learned concept of breakfast, the activities involved, and how to accomplish them.
- -Teacher used verbalizations and sign both for direction and for reinforcement of performance skills.

COMMENTS FROM INSTRUCTIONAL OBSERVATIONS:

Intermittent reinforcement was used by teacher to:

- -Help student relax.
- -Encourage his decision making choices.
- -Lessen distress.
- -Respond to student's verbalized sounds of anxiety.

AREA: Home Economics

STUDENT LEVEL: High Functioning

ACTIVITY:

Part I

-Team preparation of a meal of Chicken Marengo, Broccoli, Tater Tots, Apple Crisp.

PURPOSE:

-To help student learn independence and kitchen safety.

MATERIALS:

- -Braille menu and recipes.
- -Ingredients and kitchen utensils, pans, etc.

METHODS OF PRESENTATION:

- -Teacher had menu and recipes in braille ready on the counter when student arrived.
- -Student gathered all utensils and food items and placed them on work counter.
- -Put on apron, started preparing Apple Crisp by coring, peeling, and quartering each apple before placing in dish, preparing one apple at a time
- -Teacher encouraged independence and intervened only slightly.
- -Student was totally deaf-blind. Teacher prompts were mostly reminders about safety considerations, such as lighting the oven before preparing the apples or standing too close to oven. Reminders were in tactile sign and by physical touch.
- -Teacher reminded students to put on oven mitts when checking oven and racks to make sure no other food items were on the racks before placing covered dish in oven.

COMMENTS FROM INSTRUCTIONAL OBSERVATIONS:

-The student attended to task; previous cooking experiences generalized to this activity.

AREA: Home Economics

STUDENT LEVEL: High Functioning

ACTIVITY:

Part II

- -Preparing a meal with other students.
- -Specific tasks: Preparation of fresh broccoli in microwave and Tater Tots in oven.

PURPOSE:

-To promote independence in the kitchen.

MATERIALS:

- -Knife.
- -Colander.
- -Microwave.
- -Oven pan for Tater Tots.
- -Scissors.

METHODS OF PRESENTATION:

- -There were three students working together to prepare a meal.
- -Instructions, including cooking utensils needed, were in the recipe.
- -The teacher divided the cooking responsibilities among the students and they worked semi-independently thereafter.
- -When they needed help, they would call the teacher and ask questions by gesturing or signing (i.e., student "water-cook-broccoli?" Teacher demonstrated measuring 1/4 cup and pointed to the correct line on cup for student. Then student did it himself.)

COMMENTS FROM INSTRUCTIONAL OBSERVATIONS:

- -Student was an experienced and independent cook.
- -Minimal prompts and reminders.
- -Teacher available for questions when needed.
- -Teacher mainly focused on safety precautions.

AREA: Home Economics/Sewing

STUDENT LEVEL: High Functioning

ACTIVITY:

-Follow the directions on a pattern to lay out material correctly.

PURPOSE:

-To enable student to sew a simple outfit.

MATERIALS:

- -Scissors.
- -Pins.
- -Pattern.
- -Blackboard and chalk.

METHODS OF PRESENTATION:

- -Demonstration and modeling by teacher on the pattern while signing and fingerspelling to a group of students.
- -Repetition, reinforcement, and cues used in conjunction with demonstration on concrete objects and materials to explain parts in correct sequence for successful performance.
- -Prompts were verbal, physical, and signed and were communicated through written words on blackboard, touch, fingerspelling, sign, gesture, voice, and demonstration.

COMMENTS FROM INSTRUCTIONAL OBSERVATIONS:

- -Students had previous experience sewing smaller articles and items.
- -Students' first attempt at a larger article involved coactive instruction and involvement with teacher.

AREA: Home Economics

STUDENT LEVEL: High Functioning

ACTIVITY:

-To make a cake.

PURPOSE:

- -Part of the catering class activity as a prevocational activity.
- -Division of labor by class participants in all phases of the activity.
- -Clean up and set up included in the process.

MATERIALS:

- -Equipped kitchen.
- -Cake pans and cooking utensils.
- -All ingredients for cake making.

METHODS OF PRESENTATION:

-Teacher provided class of nine students with signed instructions for the day. She broke the class into three groups and provided each group with a printed recipe.

COMMENTS FROM INSTRUCTIONAL OBSERVATIONS:

- -Encouraged student independence.
- -Every student knew what to do and enjoyed doing it.
- -Students worked cooperatively in teams as tasks were completed.
- -While cake was in the oven baking, every student cleaned up and set up for the icing portion of the activity.
- -Students were very self-directed and divided individual tasks among themselves.
- -Everyone was busy and involved. If students had difficulty, they would try to solve it among themselves before asking teacher. Usually they handled it on their own.
- -Students were motivated by task itself.

AREA: Home Economics

STUDENT LEVEL: Low Functioning

ACTIVITY:

-Sewing class planned a trip to a fabric shop in town to buy material to make a circular tablecloth for a table used to exhibit student-made products.

PURPOSE:

-To help students understand where material comes from and to purchase all the needed sewing items.

MATERIALS:

-Sample of type of material wanted.

METHODS OF PRESENTATION:

- -To pick out the material and threads in a fabric shop, the teacher had the students tour the shop and feel the textures of the different fabrics.
- -Teacher used a variety of stimuli to stimulate tactile senses of the students to help differentiate fabrics (smooth, textured, weight).
- -Reinforced the idea of cloth being used to sew a tablecloth to cover the table.
- -Explanations were in sign, fingerspelling, and touch.
- -Hand-on-hand explanations and demonstration with signed and gestured words to reinforce the concept of "different cloths" and the use of each.

COMMENTS FROM INSTRUCTIONAL OBSERVATIONS:

- -Encourage student questions to explain name of fabric and usage.
- -Since this was a group field trip, there was some peer interaction in the shop, i.e., students helped each other feel the different fabrics. The store owner was very supportive of having the students there. The teacher had notified the store in advance.

AREA: Home Economics

STUDENT LEVEL: Low Functioning

ACTIVITY:

- -Cooking sausage patties in a microwave oven.
- -Cleaning up after snack.

PURPOSE:

- -Repeated from previous day.
- -To cook and eat sausage and biscuit.

MATERIALS:

- -Cooking utensils.
- -Paper towels.
- -Meat for patties.
- -Microwave oven.
- -Microwave dish.
- -Brailled timer on microwave.
- -Plates.
- -Forks.
- -Biscuits.
- -Juice and cups.

METHODS OF PRESENTATION:

- -Teacher and learner, step-by-step, coactively involved in task. Physical prompting was continuous from teacher to student to wash hands to handle food, put on apron, go to the freezer, get the meat patties, get the utensils to cook with.
- -Student did not need prompts to perform the activity or to complete steps in the task, but needed prompting to persevere.
- -Repetition, drill, and practice was done with concrete objects for sequencing purposes.
- -Used variety of stimuli modalities to accomplish task.

COMMENTS FROM INSTRUCTIONAL OBSERVATIONS:

- -Praise was continuous.
- -Reinforcement was the eating.
- -Washing dishes and putting things in the appropriate place took prompting, both physical and signed.

AREA: Vocational/Cooking

STUDENT LEVEL: High Functioning

ACTIVITY:

- -Cook lasagna in the home economics kitchen.
- -Clean up kitchen and restore order.

PURPOSE:

-This class was set up to cater special events; today's activity was to cook lasagna for a church supper. The labor was divided among nine students divided into three groups. There were three separate kitchens in the home economics areas, one for each group.

MATERIALS:

- -All needed cooking utensils and food supplies.
- -Recipes.
- -Notes on stove and sink as reminders.

METHODS OF PRESENTATION:

- -Information presented at the beginning and the end of session by teacher was very detailed.
- -To understand the meaning of recipe, all "meanings" were clarified in sign, verbal and written.
- -Students were experienced cooks in this advanced class.
- -Questions were answered by teacher as they arose.
- -Materials and ingredients were collected and placed on counter before cooking started.
- -Written recipes and task labor division were on the blackboard for referral.

COMMENTS FROM INSTRUCTIONAL OBSERVATIONS:

- -Verbal and signed explanations were used with written communication, fingerspelling, demonstration, and coactive involvement.
- -Every group knew and understood responsibilities and performed appropriately.
- -Student independence encouraged and praised.

AREA: Vocational/Sewing

STUDENT LEVEL: High Functioning

ACTIVITY:

-Sewing - pattern adjustment.

PURPOSE:

-To be able to make outfit from pattern.

MATERIALS:

- -Filmstrips.
- -Projector.
- -Pattern book.
- -Type of pattern.

METHODS OF PRESENTATION:

- -Class of five students viewed filmstrips about cutting out a pattern.

 Teacher signed along with pictures. A student operated projector.
- -Preparations to sew the pattern were presented by filmstrip, using signed and verbal discussion by teacher to promote questions, clarification, and understanding.
- -Repetition, practice, drill, reinforcement, and cues, both verbal and signed, were used continuously.
- -Concrete materials and objects were used to introduce, prepare, and plan for the activity.
- -Experiential: Guided student through the steps relating to the practical experience of pattern cutting and sewing.
- -A variety of stimuli modalities were used for showing and telling about the total activity.

COMMENTS FROM INSTRUCTIONAL OBSERVATIONS:

-Student was motivated to make an outfit for herself and appeared to enjoy the class.

AREA: Vocational Training

STUDENT LEVEL: Intermediate Functioning

ACTIVITY:

-Alphabetizing index cards. Step #1: recognizing letters and organizing cards into correct order based on one letter.

PURPOSE:

-To teach a clerical job skill to enhance employability.

MATERIALS:

-Index cards, black marker, paper clips, small box, magnifiers.

METHOD OF PRESENTATION:

- -Teacher had student recite alphabet and briefly discussed concept of right order.
- -Teacher marked index cards in upper left corner with a large black letter (about 1-1/2 inch) of the alphabet. Student read letters aloud as they were written.
- -Teacher shuffled cards and said, "Can you put these in the right order?" Student responded "Sure!" and started the task.
- -Student started by looking for "A," then "B," etc. At "G" she began to have difficulty keeping track of the cards in her hands and they became disorganized. Teacher suggested, "Would it help if you spread out more?" Then, "Can you find a way to make it easier and organize yourself?" Student tried a few things that didn't work. Then the teacher showed her several different ways and let her pick the way she liked best.
- -As the student continued the task, the teacher quickly asked her to look again if she made a mistake (i.e., "R" instead of "K").
- -Teacher always kept the activity light and enjoyable, encouraging the student often.

COMMENTS FROM INSTRUCTIONAL OBSERVATIONS:

-Student did this activity in the break room of a community based work experience placement. The student was a volunteer worker and was given instruction during the work day at the work site. This was primarily because she loved being at the work site and was very motivated to do well before her teacher, the observers, and coworkers.

AREA: Vocational Training

STUDENT LEVEL: Intermediate Functioning

ACTIVITY:

-Alphabetizing index cards. Step #2: using the first 2 and 3 letters in a word.

PURPOSE:

-To enhance employability through increased job skills.

MATERIALS:

-Index cards, black magic marker, box.

METHOD OF PRESENTATION:

- -Teacher marked several cards in upper left hand corner (A,E,H,I...) and had student put them in order, even though some letters were missing. Student verbalized and fingerspelled to herself as she did the task.
- -Teacher then took the cards and had the student watch her put a big "S" in front of each letter, explaining that when there are two letters, that was how you put them in order. Student said she understood, so the teacher shuffled the cards. The student sorted them by making piles in order on the long lunch table, then picked the piles up in order.
- -When the student was finished, the teacher asked, "Did you do it right?"

 The student said "Yes" and the teacher gave her a big hug and lots of praise.
- -The task was repeated several times using more cards and, eventually, more letters in each word. The piles the student made using two letters were further divided using three letters.
- -The teacher always gave the student the opportunity to problem solve before she suggested possible solutions (i.e., she wrote the name Matthew on a card, and asked, "How would you find Matthew in this stack of cards?").

COMMENTS FROM INSTRUCTIONAL OBSERVATIONS:

- -As the task became more difficult, the teacher became more enthusiastic about her praise and encouragement of the student.
- -See part #1 for information concerning the environment.

AREA: Work Experience

STUDENT LEVEL: High Functioning

ACTIVITY:

-To cane a 130 year old chair.

PURPOSE:

- -To provide skill and work experience.
- -Student is an experienced caner who knows how to cane, what size/width of cane is used on a "diameter," how to soak the reeds to make them moldable, and how to staple reeds together when finished.

MATERIALS:

- -Chair.
- -Cane reed of various sizes and widths.
- -Braille ruler to measure.
- -Knife to pick edges and an icepick to clean out corners.
- -Other tools of the trade.

METHODS OF PRESENTATION:

- -All communication between student and teacher was signed; tactile use of materials and objects.
- -Teacher presented chair to be caned.
- -Student asked, "How much is the pay for the job and how long will it take to complete the job?"
- -Student was paid for this task and the teacher aided the student in determining time needed for completion of job (2 weeks).
- -Student had previous experience in caning; was very focused on the task.
- -The rewards were payment, learning new techniques, and the satisfaction of the work which the student enjoys.

COMMENTS FROM INSTRUCTIONAL OBSERVATIONS:

- -Student independence was encouraged: the student applied skills and knowledge to the task of accepting the job, evaluating the cost, and completing the task.
- -When student had a question or problem, asked for help by raising hand and calling teacher's name.

AREA: Career Development/Work Experience

STUDENT LEVEL: High Functioning

ACTIVITY:

-Community-based work experience as a salad preparer in a fast food restaurant.

PURPOSE:

-To provide practical work experience and employment.

MATERIALS:

- -Well equipped salad preparation work table.
- -Chart/diagram for step-by-step salad preparation with pictorial list.
- -Ingredients for kind of salad to be prepared (chicken, ham, cheese, lettuce, etc.).
- -No specialized, teacher-made materials were used.

METHODS OF PRESENTATION:

- -Job coach established signed explanation of daily schedule and food preparation techniques through prompts, repetition, practice, and drill with the student.
- -Sign, gestures, and visual cues were used for orientation to equipment and food items.
- -Job coach sought to establish rapport with other employees and supervisors.
- -Hand-over-hand and one-to-one interaction was consistent between job coach and student throughout training.
- -Once student had the basics, the teacher left the work area but stayed in restaurant in case she was needed by the student or the employer.

COMMENTS FROM INSTRUCTIONAL OBSERVATIONS:

- -The wall chart diagram developed by the employment organization was both pictorial and listed step-by-step directions for tasks to be done.
- -The chart was hung on the wall by the salad preparation table.

AREA: Work Experience - Off Campus

STUDENT LEVEL: High Functioning

ACTIVITY:

Community-based work experience tasks:

- -Mop floors.
- -Refill napkin/straw/ketchup dispensers.

PURPOSE:

-To accomplish duties as assigned by employer as a viable work experience.

MATERIALS:

- -Mop.
- -Bucket.
- -Napkins.
- -Straws.
- -Ketchup gallon.

METHODS OF PRESENTATION:

- -Job coach (teacher) had guided student step-by-step through the practical experience.
- -Teacher used a variety of stimuli modalities with varied communication techniques for on-the-job training.
- -New information was presented in a familiar context.
- -The task provided reinforcement because the results of work efforts were easily seen.

COMMENTS FROM INSTRUCTIONAL OBSERVATIONS:

-Task was well defined and scheduled to occur daily.

AREA: Work Experience - Off Campus

STUDENT LEVEL: High Functioning

ACTIVITY:

Job tasks which included:

- -Wash dishes, pots, and pans.
- -Clean equipment and kitchen area.

PURPOSE:

-To learn all aspects of the job as required by employer.

MATERIALS:

-Soap, water, scrub brush, pots, pans, dishes, equipment.

METHODS OF PRESENTATION:

- -Appropriate sequence of tasks was presented and reinforced by signed explanation, demonstration, and practice.
- -Student independently proceeded to wet area of kitchen and washed, dried, and put utensils in designated areas.
- -Familiarity of facility and context aided in independent actions of student.
- -Minimum of prompts and cues needed.
- -On the job training tasks were performed and results were successful.
- -Appropriate structure and relationships were carried out in the familiar context of the employment area.

COMMENTS FROM INSTRUCTIONAL OBSERVATIONS:

- -Praise and pay check used as rewards.
- -High motivation on part of student to accomplish tasks and please employer.

AREA: Work Experience - Off Campus

STUDENT LEVEL: Intermediate Functioning

ACTIVITY:

-Operating an industrial dishwasher and putting dishes away.

PURPOSE:

-To develop job skills for independent living and working.

MATERIALS:

- -Mechanized dishwasher.
- -Racks, dishes, silverware, trays, pots, glasses, cups, and saucer.

METHODS OF PRESENTATION:

- -Student learned to use industrial dishwasher in cafeteria on campus first. After successful work experience there, she was placed in an off-campus setting.
- -Student was initially taught the tasks by a job coach from the school, who explained tasks to her with new supervisor present.
- -At the point of observation, student was working totally without school supervision. She was dropped off at the entrance of hospital and picked up there at a specific time. All else was her responsibility keeping track of work load, time, taking lunch break, etc.
- -Coworkers communicated with her by keeping her work (dishes) coming in and smiling. Student "policed" her work area very carefully to be sure everything was right. She required no direct supervision.

COMMENTS FROM INSTRUCTIONAL OBSERVATIONS:

- -Student was extremely attendant to details, i.e., checking that gloves were clean before removing clean dishes, etc.
- -Student enjoyed experience, smiling at other workers and to self periodically.

AREA: Work Adjustment

STUDENT LEVEL: Low Functioning

ACTIVITY:

-Production activity: stuffing envelopes with tags.

PURPOSE:

-To provide student with simulated work experience to teach appropriate work skills and work benefits (pay check).

MATERIALS:

Work supplies and containers:

- -envelopes.
- -tags.
- -bins where each item would be assembled and a completion bin.
- -communication book.

METHODS OF PRESENTATION:

- -Student was encouraged to remember a sequence of operations, both in the specific task and in the overall experience (i.e., clocking in and out, etc.).
- -Materials were organized in a sequential and consistent manner. Teacher demonstrated what was expected, watched the student do it once, then left student to work independently.
- -Teacher returned often to check work and for prompting, reinforcement, and open encouragement.
- -The activity was essentially drill with firm reinforced attention to task.

COMMENTS FROM INSTRUCTIONAL OBSERVATIONS:

- -The student had good memory skills of task sequence.
- -Transfer of assembly skills was easily accomplished.
- -Intermittent prompts by teacher.
- -The teacher encouraged the student by conveying a highly positive attitude about the daily work.
- -Student prompted verbally, physically (pat), in sign, and with communication book.
- -Activity occurred in separate area, simulating a workshop.

AREA: Work Adjustment

STUDENT LEVEL: Low Functioning

ACTIVITY:

- -Woodworking shop.
- -Securing metal brackets to each side of a board with screws.

PURPOSE:

- -To teach work adjustment attitudes, rather than specific woodworking skills, for any job in any factory.
- -Safety precautions were primary.

MATERIALS:

- -Piece of wood.
- -2 metal brackets.
- -2 metal screws.
- -Power tools of all sorts.
- -Apron.
- -Safety goggles.
- -Sander.

METHODS OF PRESENTATION:

- -Specific skill taught was through demonstration with hand-over-hand coactive learning and sign language.
- -Mind set was developed "for work" and to enjoy work.
- -Skill acquisition per se was secondary.
- -Familiarity with people at work in a factory such as the workers, the boss, the inspector, etc.

COMMENTS FROM INSTRUCTIONAL OBSERVATIONS:

- -Repetition, drill, and practice, prompting for safety precautions, and continuous reinforcement were used extensively.
- -Use of concrete objects was mainly for abstract learning of "work attitude" concept.
- -Experiential: guiding learner through steps related to a practical experience for skill achievement.
- -Tactile learning was emphasized along with emphasis on task analysis and step-by-step instruction on a sequence of events.
- -Communication was verbal along with touch and sign.

AREA: Work Adjustment

STUDENT LEVEL: Low Functioning

ACTIVITY:

-Using a rachet-type phillips head screw driver to put screws into metal brackets for wall hanging shelves.

PURPOSE:

- -Work related skills for possible production type job.
- -To teach student about jobs and the real world of work.

MATERIALS:

- -Jig rigged for placement of brackets and screws on the board-shelf.
- -Apron, safety goggles, tools, wood, machines, sanders, and drills.

METHODS OF PRESENTATION:

- -All communication for directions and implementation were conducted by sign and gesture, and by hand-on-hand directions.
- -Hand-on-hand demonstration between teacher and student in a step-by-step process of placing the wood plank on the bending machine.
- -Hand-on-hand guiding used to line up the brackets on the back side of the hanger and to put two screws into the brackets and bring them to the other side of the table for assembly.
- -After initial demonstration, student worked independently with occasional prompts.

COMMENTS FROM INSTRUCTIONAL OBSERVATIONS:

-Student was involved in one small segment of an assembly production task. Issues covered included (a) waiting for and asking for more materials, (b) another person needing more materials from student, (c) how one small repetitious task can help produce a finished product, (d) value of finished products to be sold.

AREA: Prevocational

STUDENT LEVEL: Low Functioning

ACTIVITY:

-Prevocational activity of sorting items of different sizes, shapes, and textures.

PURPOSE:

-Student was learning to work independently for extended periods of time without prompting. It was anticipated that she would be placed in a work activities program when she reached a certain level of independence.

MATERIALS:

- -Bottle caps, buttons, paper clips, screws, popsicle sticks.
- -Tactile timer.
- -Pennies for reward.

METHODS OF INSTRUCTION:

- -The teacher had a work table set up in a "work corner" of the classroom. The area had sorting bins and a large work area with sides to keep the items from falling on the floor. A variety of tactually discernable items were placed in the work area. Student stood in the sorting area. The teacher told her that if she worked independently for 25 minutes or until the task was finished, whichever came first, she would be rewarded with pennies for gum.
- -The student helped teacher set the timer, which was placed where she could reach it to check the time.
- -Initially teacher prompted student a few times to encourage her to keep on task, then she moved back to work with other students in the class and glanced at student periodically but did not interact with student except one more time.
- -Student started laughing to herself and stopped working. Teacher asked her what was funny, student did not reply but continued smiling. Teacher told her to return to work. Student started working again, this time a little faster.
- -Student completed task before 25 minutes was done and was immediately rewarded.

COMMENTS FROM INSTRUCTIONAL OBSERVATIONS:

-Student seemed very motivated by desire for the specific reward.

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APPENDIX

ASSESSMENT RESOURCES FOR TECHNICAL ASSISTANCE

ASSESSMENT RESOURCES FOR TECHNICAL ASSISTANCE

AAMD-Adaptive Behavior Scale (ABS), School Edition

CTB/McGraw-Hill

Del Monte Research Park

Monterey, CA 93940

(408) 649-8400, (800) 538-9547; in California (800) 682-9222

(Children and teens, ages 3 to 16, whose adaptive behavior indicates possible mental retardation, emotional disturbance, or other learning handicaps)

Adolescent Emotional Factors Inventory

Associated Services for the Blind

919 Walnut Street

Philadelphia, PA 19107

(215) 627-0600

(Measures emotional and personality factors for visually handicapped adolescents)

The Affective Perception Inventory (API)

Soares Associates

111 Teeter Rock Road

Trumball, CT 06611

(203) 375-5353

American Association of Deaf-Blind

805 Easy Street

Silver Spring, MD 20910

Rod McDonald

(301) 589-7279

(National consumer organization)

The Association for Persons with Severe Handicaps

Technical Assistance Northwest Region

Teaching Resource Division

345 N. Monmouth Avenue

Monmouth, OR 97361

Nancy Johnson Dorn

(206) 242-9400 Ext. 3930

(Diagnosis and evaluation; consultative and counseling services for professionals, parents, and others; preservice and inservice training)

Basic Life Skills Screening Inventory

South Central Region Center

Dallas, TX

Beery-Buktenica Test of Visual and Motor Integration Modern Curriculum Press Inc. 13900 Prospect Road Cleveland, OH 41136 (216) 238-2222

Bender - Koppitz Visual Motor Gestalt Test Koppitz Developmental Scoring System American Orthopsychiatric Association, Inc. (The) 1775 Broadway New York, NY 10019 (212) 586-5690

Blind Learning Aptitude Test (BLAT)

(Elizabeth Koppitz (1964, 1975) conducted the first comprehensive research of the Bender-Gestalt with young children. She carried out an extensive normative standardization of the test on large numbers of children, evolving a Developmental Scoring System for children ages 5 to 12. In addition, using the Bender-Gestalt as a type of projective technique, she described a set of 10 "Emotional Indicators" for detecting psychological disturbance in children. The use of the Koppitz scoring system, or similar developmental scoring procedure, with the Bender-Gestalt to measure young children's developmental and maturational levels has proved to be of great practical value for both child psychologists and school diagnosticians. Koppitz has demonstrated that the Bender has a rough but direct relationship to mental ability with normal and retarded children from ages 3 to 10.)

University of Illinois Press
54 E. Gregory Drive
Box 5081 Station A
Champaign, IL 61820
Institutions (800) 233-4175; Individuals (800) 638-3030 or (217) 333-0950
(Evaluates the academic aptitude of blind children ages 6 to 16 years; sixty-one item, verbal/touch test of tactile discrimination involving patterned dots and lines on 61 embossed plastic pages)

The Brigance Diagnostic Inventory of Essential Skills

Curriculum Associates, Inc.

5 Esquire Road

North Billerica, MA 01862-2589

(800) 225-0248; in Massachusetts (617) 667-8000

(Assessment and diagnosis of strengths and weaknesses of students with special needs in Grades 6 through 12)

Callier Azuza Scale: G Edition

Callier Center for Communication Disorders

The University of Texas at Dallas

1966 Inwood Road

Dallas, TX 75235

(214) 783-3000

(Development scale for deaf-blind and severely and profoundly handicapped children)

The Children's Apperception Test

C.P.S., Inc.

Box 83

Larchmont, New York 10538

No Business Phone

Coactive Movement

VanDijk, J., & Delev, L. (1975)

Penny Robinson (Ed.)

State Department of Indiana

Northern Regional Service Center

South Bend, Indiana

(An educational approach utilizing developmental sequencing and the coactive movement theory)

Colorado Pre-Language Curriculum

Colorado School for the Deaf and Blind

Colorado Springs, CO 80903

(303) 636-5186

(Totally blind/visually impaired/multihandicapped curriculum)

Community Intensive Instructional Model

Arizona Diagnostic Testing and Education Center

Arizona State School for the Deaf and The Blind

P. O. Box 5545, Tucson, AZ 85703-0545

(602) 628-5357

Deaf-Blind Curriculum
Illinois School for the Visually Impaired
658 East State St.
Jacksonville, IL 62650
(217) 245-4101
(Visually and multihandicapped deaf-blind children)

Deaf-Blind Program
The Lighthouse for the Blind, Inc.
2501 South Plum Street
P. O. Box C-14119
Seattle, WA 98144
Marthalee Galeota
(206) 322-4200 (Voice/TTY)

(Education and training, community class, workshops, communication center, interpreters, internships, employment, and consultation)

Deaf-Blind Service Center
1900 East Madison
Seattle, WA 98122
Laurel Poulisse
(206) 323-9178 (Voice/TTY)
(Information and referral, advocacy, contents.)

(Information and referral, advocacy, coordination of out-of-state referrals, coordination of services)

Denver Developmental Screening Test Ladoca Publishing Foundation Laradon Hall Training and Residential Center East 51st Avenue & Lincoln St. Denver, CO 80216 (303) 296-2400

Developmental Test of Visual Motor Integration Modern Curriculum Press Inc. 13900 Prospect Road Cleveland, OH 44136 (216) 238-2222

Ecological Assessment Form C.O.P.D. Deaf-Blind Project 268 W. Adams Tucson, AZ 85705 (602) 792-1906 Functional Skills Screening Inventory

Functional Resources Enterprises, Inc.

2734 Trail of the Madrones

Austin, TX 78746

(512) 327-1741

(Inventory to measure student progress for severely handicapped and deaf-blind students)

Haptic Intelligence Scales Stoelting Company 1350 S. Kostner Avenue Chicago, IL 60623 (312) 522-4500

(Measures the intelligence of blind and partially sighted adults; used as a substitute for or supplement to the Wechsler Adult Intelligence Scale)

Helen Keller National Center Curriculum

111 Middleneck Road

Sands Point, NY 11050

(516) 944-8900

(Curriculum directed at deaf-blind youths and adults)

Helen Keller National Center for Deaf-Blind Youths and Adults

111 Middle Neck Rd.

Sands Point, NY 11050

(516) 944-8900 (Voice/TTY)

(National center with expertise in the instruction of adults who are deaf-blind. Provides training to individuals and programs, including seminars for professionals throughout the country, technical assistance programs, and regional representatives)

Hiskey Nebraska Test of Learning Aptitude

5640 Baldwin

Lincoln, NE 68507

(402) 466-6145

(Evaluates learning potential of deaf children, ages 2-1/2 to 18-1/2, and those with hearing, speech, or language handicaps; used to establish how deaf individuals compare with those who can hear)

Kahn Intelligence Test (KIT-EXP): A culture minimized experience

Psychological Test Specialists

Box 9229

Missoula, MT 59805

No Business Phone

(Assesses individual intelligence of subjects from infant to adult; used for people who are blind, deaf, or from different educational and cultural backgrounds)

Kaufman Assessment Battery For Children (K-ABC)

American Guidance Service

Publisher's Building

Circle Pines, MN 55014

(800) 328-2560; in Minnesota (612) 786-4343

(Measures intelligence and achievement of children age 2-1/2 to 12-1/2)

Kaufman Test of Educational Achievement (K-TEA)

PRO-ED

5341 Industrial Oaks Blvd.

Austin, TX 78735

(512) 892-3142

(Measures achievement in basic skills of reading, mathematics, and spelling of students in Grades 1 through 12, including those whose primary language is not English)

Learning Styles Inventory (LSI)

Creative Learning Press, Inc.

P. O. Box 320

Mansfield Center, CT 06250

(203) 423-8120

(Assesses the methods or ways through which students in Grades 4 through 12 prefer to learn about subject matter content; used to assist teachers in individualizing the instructional process)

Leiter International Performance Scale

Stoelting Company

1350 S. Kostner Avenue

Chicago, IL 60623

 $(312)\ 522-4500$

(Measures intelligence and mental age for individuals 2 through 18 years of age including the deaf, cerebral palsied, non-English speaking, and culturally disadvantaged in a non-verbal task assessment test)

McDermott Multidimensional Assessment of Children

Psychological Corporation (The)

7500 Old Oak Blvd.

Cleveland, OH 44130

(216) 234-5300

(Integrates data from psychological evaluations, classifies childhood exceptionality, and designs Individualized Educational Plans)

Meadow-Kendall Social-Emotional Assessment Inventory for Deaf and Hearing-Impaired Students Available from Gallaudet College Bookstore

(Guides teachers' observations and assessments of students' classroom behaviors reflecting social and emotional adjustment; used for hearing-impaired students ages 7 to 21)

Merrill-Palmer Scale Stoelting Company 1350 S. Kostner Avenue Chicago, IL 60623 (312) 332-6277

Michigan School for the Blind 715 West Willow St. Lansing, MI 48913 (517) 373-3730 (Prevocational skills for deaf-blind)

Myers-Briggs Type Indicator (MBTI) Consulting Psychologists Press, Inc. 577 College Avenue P. O. Box 60070 Palo Alto, CA 94306

(Measures personality dispositions and interests of adolescents in Grades 9 through 12 and adults, based on Jung's theory of types; used in personal, vocational, and marital counseling; executive development programs; and personality research)

Pacific Consultants 8511 15th N.E. Seattle, WA 98155 Jackie Hyman and Willie Burner, Specialists in Deaf-Blindness (206) 523-2551 (Voice/TTY)

(Training, consultation, and technical assistance for individuals, families, and service providers; fosters education, research, and the development of model programming)

Peabody Picture Vocabulary Test - Revised American Guidance Service Publisher's Building Circle Pines, MN 55014 (800) 328-2560; in Minnesota (612) 786-4343 Parent/Infant Program for Preschool Visually Impaired Hillsborough County Schools 2704 Highland Avenue Tampa, FL 33602 (813) 251-5344

Perkins Benet Test of Intelligence for the Blind Forms N & U Perkins School for the Blind Watertown, MA 02172

(Assesses both verbal and performance function of low-vision and blind children ages 3 plus and adults; used for clinical evaluation)

Perkins School for the Blind Watertown, MA 02171 (617) 924-3434

(A variety of curriculum and media aids are available for blind, deaf-blind, visually impaired, and multi-impaired children and youth; also professional training, technical assistance, and publications available)

Piers-Harris Children's Self-Concept Scale (PHSCS) Western Psychological Services A Division of Manson Western Corporation 12031 Wilshire Blvd. Los Angeles, CA 90025 (213) 478-2061

Productivity Environmental Preference Survey Price Systems, Inc. Box 1818 Lawrence, KS 66044-1818 (913) 843-7892

Rally Reading Program
Division of Urban Education
Harcourt, Bruce and Jovanovich, Inc.
Natures Mysteries
555 Academic Court
San Antonio, TX 78204-2498
(800) 228-0752

The Reading Style Inventory (RSI)
Learning Research Associates, Inc.
P. O. Box 39, Dept. 8
Roslyn Heights, NY 11577
(800) 331-3117; in New York, Alaska, and Hawaii (516) 248-8002

Saint Paul - Ramsey Medical Center Low Vision Clinic 640 Jackson St. St. Paul, MN 55101 (612) 221-8782

School Environment Preference Survey Educational and Industrial Testing Service, Inc. (EDITS) P. O. Box 7234 San Diego, CA 92107 (619) 222-1666

The Schultz Measures
University Associates Inc. Learning Resources Corp.
8517 Production Avenue
P. O. Box 26240
San Diego, CA 92121
(202) 376-6270

The Self-Perception Inventory (SPI) Soares Associates 111 Teeter Rock Road Trumbull, CT 06611 (203) 375-5353

Slosson Intelligence Test Slosson Educational Publications Inc. P. O. Box 280 East Aurora, New York 14052 (800) 828-4800; in New York (716) 652-0930

The Standard Progressive Matrices - Raven Standard H. K. Lewis & Co., Ltd. /U.S. Distributor - Psychological Corporation, (The) 7500 Old Oak Blvd. Cleveland, OH 44130 (216) 234-5300

Stanford Early School Achievement Test (SAT) Psychological Corporation, (The), (Psy Cor) A Subsidiary of Harcourt Brace Jovanovich, Inc. 7500 Old Oak Blvd. Cleveland, OH 44130 (216) 234-5300

State Coordinator for Deaf-Blind Children 1410 South 200th Seattle, WA 98148 Terry Rafalowski (206) 242-9400

(Assessment and curriculum development, consultation, workshops for parents and educators, services for individuals ages birth to 21, newsletter for parents and friends)

TARC Assessment System for Severely Handicapped Children H & H Enterprises Box 1070-T Lawrence, KS 66044 (913) 843-4793

Task Force on Deaf-Blindness P. O. Box C-14119 Seattle, WA 98144 Joann Enos (206) 322-4200 (Voice/TTY)

(State task force to study, develop, and improve services for people with deaf-blindness; members include consumers, parents, and professionals)

Test of Nonverbal Intelligence (TONI) PRO-ED 5341 Industrial Oaks Blvd. Austin, TX 78735 (512) 892-3142

(Measures intelligence and reasoning in subjects suspected of having reading, writing, speaking, or listening difficulties, especially in mentally retarded, stroke patients, bilingual and non-English-speaking persons, speech or language-handicapped individuals, and the learning disabled)

Texas School for the Blind Concrete Calendar Curriculum 1100 West 45th St. Austin, TX 78756 (512) 454-8631 (Curriculum useful for children and youth who are deaf-blind)

Total Communication Receptive Vocabulary Test By Patricia Scherer, Ph.D., 1981 Mental Health in Deafness Resources, Inc. P. O. Box 1083 Northbrook, IL 60062

Vineland Adaptive Behavior American Guidance Service Publisher's Building Circle Pines, MN 55014 (800) 328-2560 in Minnesota (612) 786-4343

Vineland Social Maturity Scale American Guidance Service Publishers Building Circle Pines, MN 55014 (800) 328-2560 in Minnesota (612) 786-4343

Washington State Deaf-Blind Citizens
P. O. Box 20354
Seattle, WA 98102
Dan Mansfield
(206) 346-6346 (TTY only)
(State consumer group of persons who are deaf-blind)

Wechsler Adult Intelligence Scale - Revised Psychological Corporation (The) A Subsidiary of Harcourt Brace Jovanovich, Inc. 7500 Old Oak Blvd. Cleveland, OH 44130 (216) 234-5300

Wechsler Intelligence Scale for Children - Revised Psychological Corporation (The) A Subsidiary of Harcourt Brace Jovanovich, Inc. 7500 Old Oak Blvd. Cleveland, OH 44130 (216) 234-5300 Wide Range Achievement Test - Revised Jastak Associates, Inc. 1526 Gilpin Wilmington, DE 19806 (302) 652-4990