This paper summarizes the results of a symposium on assessment procedures at the Florida School for the Deaf and Blind, a residential/day school for children with sensory impairments. Experience with top down assessment utilizing a wholistic approach is emphasized. First a brief description of assessment in the parent infant program is given. Then a case study of a deaf blind boy, 15 years 11 months of age, illustrates assessment principles and procedures used to determine his intelligence (moderate to mild mental retardation) and instructional recommendations. The third section discusses the interdisciplinary team assessment approach used at the Florida School for the Deaf and Blind. (DB)
SYMPOSIUM ABSTRACT

THE SENSORY IMPAIRED IN A RESIDENTIAL/DAY SCHOOL

ASSESSMENT PROCEDURES

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This symposium will address the difficulties encountered in the assessment of individuals who are sensory impaired. Experiences in utilizing a top down approach to assessment in order to have a wholistic view of functioning will be presented. Delineated will be alternative assessment procedures heading toward the goal of effective intervention at the Florida School for the Deaf and the Blind (F. S. D. B.). Areas addressed are:

1) program assessment procedures for infants and toddlers who are sensory impaired as a continuum process of assessment which follows the evolution of the child through assessment from the home based Parent Infant Program to center based assessment at F. S. D. B. 2) an innovative approach to the assessment of a student who is dually sensory impaired, complete blindness and profound deafness 3) a multidisciplinary team approach to assessment and problem solving for students, ages 3-21, who are sensory impaired and have special needs. Discussion will follow the presentation.
SYMPOSIUM

THE SENSORY IMPAIRED IN A RESIDENTIAL/DAY SCHOOL
ASSESSMENT PROCEDURES

SKILL AREA: Assessment

DESCRIPTORS: Low Incidence Handicaps
Relationships with other Professions
Sensory Impaired Residential/Day School
SUMMARY

THE SENSORY IMPAIRED IN A RESIDENTIAL/DAY SCHOOL

ASSESSMENT PROCEDURES

This symposium addresses assessment procedures in a residential/day school for the sensory impaired. The difficulties found with assessment of individuals with sensory impairment will be discussed and the experiences the presenters have found in top down assessment utilizing a wholistic approach will be shared.

The Parent Infant Program

Evaluation of children from birth to three with sensory deficits begins with a vision examination by a physician or an audiological and auditory brainstem response. This is the initial determination for home based services. Initial program assessment with the Callier-Azusa, Hawaii Early Learning File (HELP), INSITE check list, and SKI*HI Language Development Scale are used to determine baseline development, provide goals for the family support plan (IFSP), and plan for compensation for the sensory impairment. Other assessments used to evaluate the progress of the sensory deficit include the INSITE functional vision evaluation and the use of repeated audiologials, with and without hearing aids, if appropriate.

Continued assessment throughout the home intervention period is carried out in the home with assistance of family members. The assessment provides important information about the progress of the child, and at the same time, teaches the family members to look for developmental milestones. Very important factors to keep in mind during the assessment process with any very young
child, and especially with a child who has vision or hearing loss are 1) the frequency of assessment (must be done at least quarterly) 2) setting (must be ecologically valid) 3) the appropriateness of the tool (matched with the sensory loss) 4) team input to create a wholistic, qualitative picture of the strengths of both the child and family upon which to build desired outcomes.

An Innovative Approach To The Assessment Of A Dually Sensory Impaired 15-11 Year Old Male

Since no standardized instrument has been established to assess the intellectual level and pattern of learning in the severely handicapped, an assessment process for a 15-11 year old residential male student was focused on current level of functioning. File review had yielded great inconsistencies in previous assessment findings. Conclusions from the assessments ranged from categorization of profoundly retarded to average. A review of a videotaped assessment by an expert in the field of dual sensory impairment revealed use of a few items of Hiskey-Nebraska subtests and examiner devised materials.

In order that the youngster should have every opportunity for an accurate assessment, the two examiners decided that he should be familiar with the examiner, the environment in which the assessment would occur, and the materials used in the assessment. One examiner would be in direct personal interaction with the student, the other would act as notetaker, helper with materials and videotape recorder. Both examiners would observe interactions in the school/dormitory settings and compare their observations in terms of completing standardized instruments, the
Vineland Adaptive Behavior Scales and the Basic Life Skills Screening Inventory - An instrument to Assess Vocational Training Readiness in the Deaf-Blind Developmentally Disabled.

For the desired familiarization, a week of training was scheduled. Test items were decided upon in terms of previous assessments and program needs. As a result of the assessment, fourteen recommendations were made for educational programming. The psychological report of this evaluation follows.

CHILD STUDY CENTER
PSYCHOLOGICAL EVALUATION

SEX: Male
AGE: 15-11

DATE OF EVALUATION: 4-22--5-1-91
EXCEPTIONAL STUDENT IDENTIFICATION: Deaf-Blind
EXAMINERS: Mildred N. Koger, Ed. D.
Joann Gates, Sp. A.

PURPOSE OF EVALUATION: This triennial assessment was conducted in order (1) to ascertain current level of intellectual functioning and (2) to develop program recommendations for the educational plan.

RELEVANT HISTORY: Diagnosis by the Children's Medical Center Ophthalmology Clinic, 7/22/76, was total retinal detachment, causing complete blindness, with microphthalmic eyes, the right eye smaller than the left. No surgical correction was possible. The report also mentions no speech skills and no response with hearing aids. Although there are references in his file to the possibility of some hearing, an audiological in 1989 indicated no response at all, not even a startle response, to a 95dB tone.

This student has a diagnosis of CHARGE Syndrome. The name "CHARGE" comes from the acronym of the more common birth defects or features seen in this syndrome. Coloboma of the eye, Heart defect, Atresia of the choanae, Retardation of growth and/or development, Genital hypoplasia, Ear malformations. There is, also, a diagnosis of microcephaly and cleft palate. His record lists handicapping conditions of secondary anemia, nystagmus, and undescended testicles.

A physician's referral to a children's specialty clinic was
made, February 28, 1990, because of problems with mega colon. There has been on a regimen of Haley’s MO for the mega colon, a regimen which has only recently been diminished. There is a history of encropresis, and staff report that being soiled is not of particular discomfort to him.

There, also, has been suffering with breathing difficulties, although presently these problems have diminished. He seems to be responding well to vitamin therapy. He does tend to self abuse when upset or frustrated. Primarily he bites his hands. The wearing of glasses has diminished his tendency to poke at his eyes when he is upset. In an educational assessment report, dated February, 1988, an educational consultant mentions a malfunction or possible malformation which caused regurgitation of food, part of which would flow into his lungs.

The subject was evaluated at the chronological age (CA) of 3 in a Florida city. On that social assessment he attained a physical age of 1 year, 6 months, self-help skills of 2 years, 4 months, a social age of 1 year, and an academic age of 10 months. Communication age was 2 months. Placement was in a class for profoundly mentally handicapped in the city.

At the CA of 6-10-26 he was administered a Slosson Intelligence Test and attained a MA of 18 months. A Developmental Profile II yielded these Developmental Ages: Physical, 2 year, 6 months; Self-Help, 1 year, 10 months; Social Age, 14 months; Academic Age, 1 year 7 months; Communications Age, 10 months.

An intake evaluation at the Florida School for the Deaf and Blind (F. S. D. B.), 1-31-85, CA of 9-8, was given with selected items of the Merrill-Palmer, the Perkins Binet, and the Learning Accomplishment Profile. Non-verbal items were passed at the 4, 5, and 7 year levels on the Merrill Palmer. He attained the 48-53 month level throughout, although two items were passed at the 60 and 65 month level. The examiners concluded that he was able to perform concrete manipulative tasks at or above the TMH level. They noted that language, reasoning, memory and conceptual thinking, all parts of intelligence, could not be assessed without a communication system. Specific abilities on the Learning Accomplishment Profile measured cognitive matching at 14-48 months, and cognitive counting below 36 months. The range of scores on the Uzgeris-Hunt Ordinal Scales of Psychological Development measured a range of scores from 15 months to 30 months.

A master’s level student under the direction of a professor in the Florida State University Department of Special Education, July 1988, reported on the class demonstration assessment of Van Dijk. That videotaped assessment has been reviewed by the two present evaluators. Based on portions of bead stringing, paper folding, and partial block design of the Hiskey-Nebraska, as well as Van Dijk’s own materials, the subject was judged to be average in intelligence, although Van Dijk stated sometimes he is right.
and sometimes he is wrong. The student was unable to perform on the rhythm test, a test which measures the ability to remember and imitate a pattern. This failure was in the area of recall, organizing, sequencing, and storing information in a logical context for retrieval and later use.

Extensive educational assessments with suggestions for activities and co-active interaction with the child are enumerated in consultative reports, dated 1988, 1889, and 1990. Suggestions for dorm/school coordination and a tutor companion are also given. The activity box and weekly/daily calendar box are presently being utilized in the classroom. The student has responded very well to a new classroom setting and a new teacher. Posture and affect are improved.

The student was discharged from Physical Therapy at F. S. D. B. 1-24-89. The discharge reports goals of greater spatial awareness and high level balance skills met. It was recommended that he continue physical education for general fitness and vestibular input. He does participate in Special Olympics, running with a person and guide rope at either side of him.

EVALUATION PROCEDURES: File review provided much conflicting information concerning functioning. Assessment methods in the past varied considerably. Review of the Van Dijk classroom tapes indicated only sparse sampling of the standardzized items, and these were the easier items in the test category.

The examiners wanted there to be every opportunity for an accurate assessment. It was decided he should be familiar with the materials, the examiner, and the environment. Only one examiner, Joann Gates, would be directly involved in personal interaction, since file consultant recommendations were that there should be limited, consistent interaction. The other examiner would take notes, help with materials, and video tape the sessions. Both examiners would observe interactions in the lunchroom and compare their observations in terms of completing standardized instruments.

Test items were decided upon in terms of previous assessments and program needs. The items given by Van Dijk were to be given in their entirety, and in accordance with manual procedures. A receptive vocabulary list was found in the student’s file. In order to test his accurate discrimination of these words this sample was chosen: eat, drink, shoe, hat, jacket, popcorn, cookie and milk. His own shoe, hat, and jacket were utilized for the assessment and for the planned training.

In order to be sure that there was familiarity with the environment, the materials, and the examiner, a week of training was scheduled in the same room, same setting, and same time each day. From one to one and 1/2 hours were spent in interaction each day. Primary reinforcers of cheese puffs, coke, popcorn, raisins, cookie, and milk were used. These primary reinforcers were used intermittently for participatory behavior rather than
correct responses. Coactive signing, yes, no, same, you, and brief conversational signs were utilized. The sequence of test categories was essentially the same; each day as many as possible were covered.

The examiners felt that evaluation of behavior through observation over a period of time was essential for an accurate assessment. The examiners did not feel the practice effect would contaminate test results since, in this particular evaluation setting, all measures, except bead stringing were in new contexts, and/or new experiences. The sequence of various requests, or tasks also varied. For example, one day he would be asked to put on his jacket, then take off his shoe; the next day the clothing requests would change. Most practice items were variations of test items. The sequence of categories was in the following order:

1. Ball Toss
2. Body Parts - demonstrated by touching a doll and then touching his own body
3. Hiskey-Nebraska Block Pattern
4. Binet LM Form Board - (Cattell board for training)
5. Hiskey-Nebraska Paper Folding
6. Pegboard Pattern Imitation
7. Vocabulary
8. Rhythmic Patterns
9. Hiskey-Nebraska Bead Patterns
10. Stanford-Binet IV Bead Memory
11. Lappi, Fastener item from Learning Accomplishment Profile

Observations were made in the classroom, in the dorm, and in the lunchroom as a means of determining functioning and assessment procedures. After the training week, the subject was assessed, without clues to his performance, approximately one and 1/2 hours a day over a three day period. Examination procedures were under the same conditions as training procedures.

FORMAL STANDARDIZED TESTS ADMINISTERED:
Vineland Adaptive Behavior Scales
Basic Life Skills Screening Inventory - An Instrument to Assess Vocational Training Readiness in the Deaf-Blind Developmentally Disabled

BEHAVIORAL OBSERVATIONS: In the fall this student had been observed incidental to a classroom observation on another student. At that time he was sitting all hunched over, his legs tightly wrapped around each other under his seat, head almost on his chest, with difficulty in breathing. During the present assessment time his posture and appearance were much improved, and there was no evidence of the breathing difficulty.

The subject is a small, pale complected, blonde crew-cut youngster of very slight build. He wears glasses to prevent him from poking his eyes. (His teacher reports that buying glasses
from the school store is one of his favorite rewards.) During a classroom observation it was noted that there was a tendency to put his fingers under his glasses to reach his eyes.

The classroom task was to prepare a peanut butter and cracker snack. He opened the jar by himself, but he had to be aided in the use of the knife to spread the peanut butter on the crackers. The teacher signed in his hand, and was able to read his movements. She gave him another cracker, signing "more"; He responded with a gentle "more sign". He held onto the teacher for movement to the home skills center, and made angular, small, jumpy steps as he walked in the room by himself. When seated, he had the same posture of legs wrapped tightly around themselves. The teacher said he was in a bad mood that day. When he stood, he rigidly extended his arms, face in a grimace, and made rapid, rigid and tense, back and forth movements with his arms. Another time he touched himself in the penis area, a frequent behavior according to the teacher, and a behavior she felt might be related to tight clothing.

When brought to the training/evaluation room, he was most receptive to the examiner. He quickly investigated her by feeling her rings and her watch; reportedly, this is the way he identifies others. She did wear the same jewelry each day for this identification. He responded with alert posture, and sometimes laughter (the teacher informed the examiners that the particular facial expression and the accompanying sound was laughter). He rarely expresses emotion other than frustration. The enjoyment of the activity, even though there were plenty of corrections and insistence on correct performance, was evidenced in the eagerness to return each day. He would pull the teacher down the hall and into the room. At the same time, one day when the interacting examiner was late because of a conflict, he sat patiently waiting for her for over ten minutes.

If the second examiner passed closely, he seemed to be aware through vibration or scent that she was near. He would sit very tall and still as if trying to ascertain what was happening. Generally he made a real effort to perform, although there were times when he was very slow, and times when he simply stopped performing, almost as if a pause button had been pushed on a video tape. His performance tended to be inconsistent. At times he would learn quickly, as when he learned the sign for "clean", at other times he would not retain into the next day what had been accomplished the previous day.

The second day of training he was in a crying, fussing mood. That day he had medication on his hands from biting them the previous evening in the dorm. This day he became so upset that the examiner had to hold him from again biting his hands. During this training session, when he wanted to perform, but couldn't ascertain the examiner's directions, he would withdraw, and fold his body up. As the training days continued he became more comfortable with the tasks, and reached for the examiner's hand for the "yes" or "no" which indicated whether he was correct.
When he did very well, she would coactively clap his hands and pat him on the back. She, also, frequently used his name sign on his chest.

Throughout the training sessions motivation continued to escalate. He had a tendency to perseverate, but after training, was better at being able to check a model in order to see if his construction was accurate. The more advanced block design patterns were more difficult to understand, and he would take a little break before continuing. He had trouble generalizing. He was not unfamiliar with copying a pattern, but in a new context he didn’t know what was expected. The inconsistency in performance was illustrated by bead pattern performance. One time he would remember a whole bead sequence with one introduction to the pattern, and then another time he lost memory even though he went back to feel the pattern.

TEST RESULTS: Since no standardized instrument has been established to assess the intellectual level and pattern of learning in the severely handicapped, the assessment process focused upon establishing current level of functioning. Specific assessment goals involved: relative strengths and weaknesses; problem solving strategies; reaction to success and failure; and, underlying skills of each formal test.

Based upon present results, we can only determine definitely what he is not. He definitely is not profoundly mentally deficient, nor is he average. Our assessment indicates he is functioning significantly below average. Best estimates would place him between intellectual classifications of moderately mentally deficient and mildly mentally deficient. This would approximate an IQ score range of 50 - 60. He is capable of learning many tasks, perhaps not academic tasks such as braille or reading, because those tasks are highly abstract. Parts of the educable mentally handicapped program are appropriate for him, but he needs to learn to communicate before focusing on tasks such as letters of the alphabet.

He was able to toss a ball. He knows eyes, nose, ears and hands, but is not definite on mouth when comparing a doll to his body. He did learn the sign for hands in coactive interaction in training with the examiner. He enjoys the challenge of a new task (modified Stanford-Binet IV Bead Memory subtest) although he demonstrates inconsistency in performance and difficulty with generalizing and transferring knowledge.

On the Hiskey-Nebraska he attained a median Learning Age (LA) of 6-0. He attained a LA of 12-6 on Bead Pattern, a LA of 5-6 on Paper Folding, and a LA of 6-0 on Block Pattern. It should be noted that stringing bead patterns has been a constantly utilized activity in his school program. He was able to learn what was expected of him on a pegboard pattern after 4 days of training; however, as when previously tested by Van Dijk, he was unable to show any consistency even with the simplest 2 or 3 note
rhythmic pattern.

He demonstrated that he knew eat and drink, and he appeared to learn the sign for "coke" during training. He was not consistent in knowing shoe, hat, jacket, popcorn, cookie, or milk. On the Stanford-Binet IV Bead Memory (modified to eliminate color, an important additional dimension in the original) he attained a standard score of 25, almost 3 standard deviations below the mean; that is, at the .09 percentile rank. The deficient performance on this test contrasts significantly with his performance on the Bead Pattern from the Hiskey-Nebraska, which further demonstrates his inability to generalize. As long as the task is one that is consistently repeated, rote learning will occur at a reasonably adequate level. However, if the task is varied, but similar, Chris will need many practice experiences before he internalizes the new information.

He cannot tie shoe strings nor can he start a zipper which is not sewn together. He also does not pull the zipper to a close. On the Vineland Adaptive Behavior Scales he attained a standard score below 20 which equates to below 0.1 percentile rank. Utilizing norms developed on younger children, ages 6-0-0 to 12-11-30, in residential settings, he was at the 10 percentile rank in comparison with these younger blind children, and at the 1 percentile rank in comparison with the younger hearing impaired children. Maladaptive behavior was non-significant on this instrument. The socialization domain - interpersonal relationships, play and leisure time and coping skills - was the area of greatest weakness.

According to the assessment with the Basic Life Skills Screening Inventory, the inventory which assesses vocational training readiness in the deaf-blind developmentally disabled, he is ready for and should be receiving vocational and life skills training. This will prepare him for a sheltered workshop setting. He has not attained enough skills to be ready for the sheltered workshop setting at this time, but he has attained the readiness skills. Work habits and physical development are strong areas of attainment, while responsibility and social maturity are extremely limited. Home management and community living are also areas of deficit.

SUMMARY: This is a 15-11 year old totally deaf-blind youngster who is functioning significantly below average, approximately the 50 - 60 IQ range. According to the Basic Life Skill Screening Inventory, he is ready to receive vocational and life skills training leading to the attainment of the skills necessary for sheltered workshop functioning.

RECOMMENDATIONS:
1. Establish a list of practical vocabulary words which are consistently conveyed through tactile signs. At first, only a few words should be taught, and staff should require the same signs to be utilized before acquisition of any reward (primary or social). Gradually increase the number of words while still
expecting him to sign previously learned words.

2. In order to develop communication, the sign needs to be repeatedly given co-actively; that is, both instructor and student in interaction, so that real knowledge of sign (his language) is distinguished in action. The teaching goal is to use the correct sign before object, food, or activity is given to him.

3. Coordinate all training with the dorm setting and the home setting. Assign a case manager to oversee the overall interdisciplinary effort.

4. Hold monthly meetings to review progress and adjust training objectives and strategies.

5. This student needs to get a sense of self by repeated use of his name sign, and also the signing of you and yourself.

6. He needs to be forced to do more on his own; for example, to pour liquids, use his napkins appropriately, and hang and fold his own clothes.

7. Should encropecsis and self abusive behaviors continue, behavioral plans should be devised to address these problems.

8. Strategies need to be developed to help the student to go back and check his work for correction.

9. Capitalize on his desire for approval by signaling him when his performance is satisfactory and when it needs correction. Simple "yes" and "no" can be utilized, and coactively clapping his hands, and patting him on the back when he accomplishes a big task, can again give him a sense of self.

10. Incorporate some rhythmic pattern learning in his program in order to help develop memory, repetition of patterns, and sequencing ability.

11. He needs to learn to tie shoes, and be more skilled with fasteners.

12. In the area of clothing care, he needs to be able to hang clothes on hooks and hangers, fold clothes, store clothes in drawers and closets, sort clothes for washing, and perhaps learn to use a washing machine and dryer.

13. In the area of home management, he needs to help with minor house/dormitory tasks (picking up personal belongings, throwing away debris, etc.), keep his personal living area tidy, change bed linens, dust, sweep, empty wastebaskets, and possibly clean bathroom fixtures.

14. In the area of community living, he needs to develop communication; work with numbers, starting with constructing matching sets of 1-10 objects; and become more knowledgeable with money. More independence in the discrimination and use of time is also needed.

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Joann Gates, Sp. A.
School Psychologists
A Multidisciplinary Team Assessment Approach

Sensory Impairment and Special Needs

Eligibility for enrollment at the Florida School for the Deaf and Blind is determined by intake staffing after review of previous files, and assessment, if necessary, for determination of eligibility for enrollment and suitable departmental placement. Some students are placed on 30 day evaluation status since eligibility for enrollment cannot be determined on the day of intake. Most of these students are staffed into the Special Needs Department for the 30 day evaluations which may be extended for a total of 90 days.

The interdisciplinary team of the Special Needs Department meets weekly to review the on-going assessment of these students. The team also addresses the assessment of other student problem areas.

The team is headed by the Supervising Teacher of the Special Needs Department. Permanent members of this team are the Psychologist, Social Worker, Curriculum Coordinator, Career Guidance Counselor, Behavioral Specialist, Dorm Supervisor, Director of Student Life, and Special Needs Nurse. Teachers become part of the team when students with whom they are involved are assessed, and sometimes the Dietician helps with the decisions. A decision may be made to obtain more data in a certain area or to try an intervention. A team member is given responsibility for the action, and follow-up occurs the following week.

All students in the Special Needs Department are involved in the Student Tracking and Reinforcement (STAR) Program. Each
student has a card which is utilized by staff both at the classroom level and during dorm time. The students are given marks each hour for 1) following directions  2) staying on task and 3) positive attitude. Each staff member has a manual with suggested consequences, reinforcements and retraining activities. As a class, the students record individual progress with the behavioral specialist each week. Students with special behavioral needs have individual behavioral plans in addition to the departmental program. Tracking these behavioral programs and designing them, while primarily the responsibility of the behavioral specialist, is a means to assessment and remediation which is undertaken by the interdisciplinary team.
SUMMARY

In summary, assessment and intervention at the Florida School for the Deaf and the Blind is a multifaceted, multidisciplinary effort involving input from all service areas of the campus. Assessment starts at birth through the Parent Infant Program. Throughout the involvement with F. S. D. B. there is an innovative, creative approach to assessment particularly with Special Needs Students. This very low incident population, sensory impaired with another disability, does not have a strong normed base for standardized assessment. Assessment, therefore, needs to be long term and individualized, always with the goal of developmental growth and situational problem solving. Prevention and best development of the individual, rather than remediation, is the goal.