Guidelines and Resources

Deaf-Blindness

Tennessee

State Department of Education
Division of Special Education
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This guidebook is a compilation from various sources and is to be considered as "best practices" in the assessment, identification, and instruction of students with Deaf-Blindness. With the exception of the Deaf-Blindness Definition and Evaluation Standards, Procedures and Participants (State Board of Education Rule 0520-1-9-.01), the information in these guidelines is not legally binding on the schools of Tennessee.

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INTRODUCTION

Preface

The reauthorization of IDEA in 1997 introduced Deaf-blindness as a new disability category. Until this recent change, few students were identified as Deaf-blind within the State of Tennessee. Most students with Deaf-blindness were qualified for special education services under other disability categories such as Multiple Disabilities.

People who support individuals who are Deaf-blind understand that a combination of a vision and Hearing Impairment significantly affects the ability of an individual to communicate and to move about in the world. For students with one sensory loss (vision or hearing) the alternate sensory system that is still intact can be utilized to take in information and understand the world around them. For individuals with Deaf-blindness, the loss of these two distance senses limits their world to the tips of their fingers. Such losses make it difficult to function in a seeing and hearing world and result in unique and very specific educational and support needs.

Deaf-blindness is a combination of vision and hearing loss. Students must not necessarily be profoundly deaf and totally blind to qualify as Deaf-blind. In order to meet the standards under this disability category, a child must meet one of three standards in addition to showing that the disability adversely impacts the child's educational performance.

Individuals who experience Deaf-blindness often face challenges in the areas of assessment, exploration, mobility, communication, social skills, independent living, self-determination, functional academics, and transition planning. Without an understanding of the unique challenges and needs of students with Deaf-blindness, the setup and teaching strategies of a classroom may hinder the student's learning potential. A transdisciplinary team approach that utilizes an integrated therapy model and generalization into natural environments is a critical component when working with students who are Deaf-blind. Although children with Deaf-blindness present unique challenges, given the appropriate supports and accommodations, all students can learn and be successful.

Like other disability guidelines, this document includes an overview of the disability, the definition, standards and eligibility guidelines of the disability category, and service delivery considerations. However, this document differs from the other disability guidebooks in that an emphasis is placed on recommended educational practices, rather than on procedures for assessment. Procedures for the assessment of Deafness,

Hearing Impairment and Visual impairment are comprehensively reviewed in each corresponding guidebook. This guidebook is intended to be used as a resource. The incidence of individuals with Deaf-blindness is so low that most people who are working with this population are not trained in Deaf-blindness. The guide aims at giving administrators, educators and professionals a basic understanding of the uniqueness of the disability, as well as information about national and state resources.

OVERVIEW ON DEAF-BLINDNESS

An article by Barbara Miles from "The National Information Clearinghouse on Children Who Are Deaf-Blind"

Barbara Miles is a communication specialist/consultant and teacher, experienced with all ages and levels of persons who are Deaf-blind. She has taught regional, national and international seminars on communication issues for children who are Deaf-blind. Her articles have been published in the Journal of Vision Impairments and Blindness, Deaf-blind Education, and regional newsletters.

WHAT IS DEAF-BLINDNESS?

It may seem that Deaf-blindness refers to a total inability to see or hear. However, in reality Deaf-blindness is a condition in which the combination of hearing and visual losses in children cause "such severe communication and other developmental and educational needs that they cannot be accommodated in special education programs solely for children with Deafness or children with blindness" [34 CFR 300.7 (c) (2), 1999] or Multiple Disabilities. Children who are called Deaf-blind are singled out educationally because impairments of sight and hearing require thoughtful and unique educational approaches in order to ensure that children with this disability have the opportunity to reach their full potential.

A person who is Deaf-blind has a unique experience of the world. For people who can see and hear, the world extends outward as far as his or her eyes and ears can reach. For the young child who is Deaf-blind, the world is initially much narrower. If the child is profoundly deaf and totally blind, his or her experience of the world extends only as far as the fingertips can reach. Such children are effectively alone if no one is touching them. Their concepts of the world depend upon what or whom they have had the opportunity to physically contact.

If a child who is Deaf-blind has some usable vision and/or hearing, as many do, her or his world will be enlarged. Many children called Deaf-blind have enough vision to be able to move about in their environments, recognize familiar people, see sign language at close distances, and perhaps read large print. Others have sufficient hearing to recognize familiar sounds, understand some speech, or develop speech themselves. The range of sensory impairments included in the term "Deaf-blindness" is great.

WHO IS DEAF-BLIND, AND WHAT ARE THE CAUSES OF DEAF-BLINDNESS?

As far as it has been possible to count them, there are over 11,000 children (ages birth to 22 years) in the United States who have been classified as Deaf-blind (Baldwin, 1997). It has been estimated that the adult Deaf-blind population numbers 35-40,000 (Watson, 1993). The causes of Deaf-blindness are many. Below is a list of many of the possible etiologies of Deaf-blindness.

MAJOR CAUSES OF DEAF-BLINDNESS

Syndromes
Down's
Trisomy 13
Usher's

Multiple Congenital Anomalies
CHARGE Association
Fetal alcohol syndrome
Hydrocephaly
Maternal drug abuse
Microcephaly

Prematurity Congenital

Prenatal Dysfunction

AIDS
Herpes
Rubella
Syphilis
Toxoplasmosis

Post-natal Causes

Asphyxia
Encephalitis
Head injury/trauma
Meningitis
Stroke

Adapted from Etiologies and Characteristics of Deaf-Blindness Heller & Kennedy, (1994), p. viii, Table 1.

Some people are Deaf-blind from birth. Others may be born deaf or hard-of-hearing and become blind or visually impaired later in life; or the reverse may be the case. Still others may be adventitiously Deaf-blind—that is, they are born with both sight and hearing but lose some or all of these senses as a result of accident or illness.

Deaf-blindness is often accompanied by additional disabilities. Causes such as maternal rubella can also affect the heart and the brain. Some genetic syndromes or brain injuries that cause Deaf-blindness may also cause cognitive disabilities and/or physical disabilities.

WHAT ARE THE CHALLENGES FACING A PERSON WHO IS DEAF-BLIND?

A person who is Deaf-blind must somehow make sense of the world using the limited information available to him or her. If the person's sensory disabilities are great, and if people in the environment have not made an effort to order the world for him or her in a way that makes it easier to understand, this challenge may be overwhelming. Behavioral and emotional difficulties often accompany Deaf-blindness and are the natural outcomes of the child's or adult's inability to understand and communicate.

People who can see and hear often take for granted the information that those senses provide. Events such as the approach of another person, an upcoming meal, the decision to go out, a change in routine are all signaled by sights and sounds that allow a person to prepare for them. The child or adult who misses these cues because of limited sight and/or hearing may come to experience the world as an unpredictable, and possibly threatening, place. To a great extent, persons who are Deaf-blind must depend upon the good will and sensitivity of those around them to make their world safe and understandable.

The challenge of learning to communicate is perhaps the greatest one that children who are Deaf-blind face. It is also the greatest opportunity, since communication and language hold the power to make their thoughts, needs, and desires known. The ability to use words can also open up worlds beyond the reach of their fingertips through the use of interpreters, books, and an ever-increasing array of electronic communication devices. In order to learn language, children who are deaf- blind must depend upon others to make language accessible to them. Given that accessibility, children who are Deaf-blind face the challenges of engaging in interactions to the best of their abilities and of availing themselves of the language opportunities provided for them.

A person who is Deaf-blind also faces, further, the challenge of learning to move about in the world as freely and independently as possible. Adult individuals also must eventually find adult living and work situations that allow them to use their talents and abilities in the best way possible. Many adults who are Deaf-blind lead independent or semi-independent lives and have productive work and enjoyable social lives. The

achievement of such success depends in large part upon the education they have received since childhood, and particularly upon the communication with others that they have been able to develop.

WHAT ARE THE PARTICULAR CHALLENGES FACING THE FAMILY, TEACHERS AND CAREGIVERS OF A PERSON WHO IS DEAF-BLIND?

COMMUNICATION

The disability of Deaf-blindness presents unique challenges to families, teachers, and caregivers, who must make sure that the person who is Deaf-blind has access to the world beyond the limited reach of his or her eyes, ears, and fingertips. The people in the environment of children or adults who are Deaf-blind must seek to include them—moment-by-moment—in the flow of life and in the physical environments that surround them. If they do not, the child will be isolated and will not have the opportunity to grow and to learn. If they do, the child will be afforded the opportunity to develop to his or her fullest potential.

The most important challenge for parents, caregivers, and teachers is to communicate meaningfully with the child who is Deaf-blind. Continual good communication will help foster his or her healthy development. Communication involves much more than mere language. Good communication can best be thought of as conversation. Conversations employ body language and gestures, as well as both signed and spoken words. A conversation with a child who is Deaf-blind can begin with a partner who simply notices what the child is paying attention to at the moment and finds a way to let the child know that his or her interest is shared.

This shared interest, once established, can become a topic around which a conversation can be built. Mutual conversational topics are typically established between a parent and a sighted or hearing child by making eye contact and by gestures such as pointing or nodding, or by exchanges of sounds and facial expressions. Lacking significant amounts of sight and hearing, children who are Deaf-blind will often need touch in order for them to be sure that their partner shares their focus of attention. The parent or teacher may, for example, touch an interesting object along with the child in a nondirective way. Or, the mother may imitate a child's movements, allowing the child tactual access to that imitation, if necessary. (This is the tactual equivalent of the actions of a mother who instinctively imitates her child's babbling sounds.) Establishing a mutual interest like this will open up the possibility for conversational interaction.

Teachers, parents, siblings, and peers can continue conversations with children who are Deaf-blind by learning to pause after each turn in the interaction to allow time for response. These children frequently have very slow response times. Respecting the child's own timing is crucial to establishing successful interactions. Pausing long enough to allow the child to take another turn in the interaction, then responding to that turn,

pausing again, and so on—this back-and-forth exchange becomes a conversation. Such conversations, repeated consistently, build relationships and become the eventual basis for language learning.

As the child who is Deaf-blind becomes comfortable interacting nonverbally with others, she or he becomes ready to receive some form of symbolic communication as part of those interactions. Often it is helpful to accompany the introduction of words (spoken or signed) with the use of simple gestures and/or objects, which serve as symbols or representations for activities. Doing so may help a child develop the understanding that one thing can stand for another, and will also enable him or her to anticipate events.

Think of the many thousands of words and sentences that most children hear before they speak their own first words. A child who is Deaf-blind needs comparable language stimulation, adjusted to his or her ability to receive and make sense of it. Parents, caregivers, and teachers face the challenge of providing an environment rich in language that is meaningful and accessible to the child who is Deaf-blind. Only with such a rich language environment will the child have the opportunity to acquire language herself or himself. Those around the child can create a rich language environment by continually commenting on the child's own experience using sign language, speech, or whatever symbol system is accessible to the child. These comments are best made during conversational interactions. A teacher or a parent may, for example, use gesture or sign language to name the object that he or she and the child are both touching, or name the movement that they share. This naming of objects and actions, done many, many times, may begin to give the child who is Deaf-blind a similar opportunity afforded to the hearing child—that of making meaningful connections between words and the things for which they stand.

Principal communication systems for persons who are Deaf-blind are these:

- ✓ touch cues
- ✓ gestures
- ✓ object symbols
- ✓ picture symbols
- ✓ sign language
- ✓ fingerspelling
- ✓ Signed English
- ✓ Pidgin Signed English
- ✓ Braille writing and reading
- ✓ Tadoma method of speech reading
- ✓ American Sign Language
- ✓ large print writing and reading
- ✓ lip-reading speech

Along with nonverbal and verbal conversations, a child who is Deaf-blind needs a reliable routine of meaningful activities, and some way or ways that this routine can be

communicated to her or him. Touch cues, gestures, and use of object symbols are some typical ways in which to let a child who is Deaf-blind know what is about to happen to her or him. Each time before the child is picked up, for example, the caregiver may gently lift his or her arms a bit, and then pause, giving the child time to ready herself or himself for being handled. Such consistency will help the child to feel secure and to begin to make the world predictable, thus allowing the child to develop expectations. Children and adults who are Deaf-blind and are able to use symbolic communication may also be more reliant on predictable routine than people who are sighted and hearing. Predictable routine may help to ease the anxiety, which is often caused by the lack of sensory information.

ORIENTATION AND MOBILITY

In addition, the child who is Deaf-blind will need help learning to move about in the world. Without vision, or with reduced vision, he or she will not only have difficulty navigating, but may also lack the motivation to move outward in the first place. Helping a young child who is Deaf-blind learn to move may begin with thoughtful attention to the physical space around him or her (crib or other space) so that whatever movements the child instinctively makes are rewarded with interesting stimulation that motivates further movement. Orientation and mobility specialists can help parents and teachers to construct safe and motivating spaces for the young child who is Deaf-blind. In many instances children who are Deaf-blind may also have additional physical and health problems that limit their ability to move about. Parents and teachers may need to include physical and occupational therapists, vision teachers, health professionals, and orientation and mobility specialists on the team to plan accessible and motivating spaces for these children. Older children or adults who have lost vision can also use help from trained specialists in order to achieve as much confidence and independence as possible in moving about in their world.

INDIVIDUALIZED EDUCATION

Education for a child or youth with Deaf-blindness needs to be highly individualized; the limited channels available for learning necessitate organizing a program for each child that will address the child's unique ways of learning and his or her own interests. Assessment is crucial at every step of the way. Sensory deficits can easily mislead even experienced educators into underestimating (or occasionally overestimating) intelligence and constructing inappropriate programs.

Helen Keller said, "Blindness separates a person from things, but Deafness separates him from people." This potential isolation is one important reason why it is necessary to engage the services of persons familiar with the combination of both blindness and Deafness when planning an educational program for a child who is Deaf-blind. Doing so will help a child or youth with these disabilities receive an education that maximizes her or his potential for learning and for meaningful contact with her or his environment. The earlier these services can be obtained the better for the child.

TRANSITION

When a person who is Deaf-blind nears the end of his or her school-based education, transition and rehabilitation help will be required to assist in planning so that as an adult the individual can find suitable work and living situations. Because of the diversity of needs, such services for a person who is Deaf-blind can rarely be provided by a single person or agency; careful and respectful teamwork is required among specialists and agencies concerned with such things as housing, vocational and rehabilitation needs, Deafness, blindness, orientation and mobility, medical needs, and mental health.

The adult who is Deaf-blind must be central to the transition planning. The individual's own goals, directions, interests, and abilities must guide the planning at every step of the way. Skilled interpreters, family members and friends who know the person well can help the adult who is Deaf-blind have the most important voice in planning his or her own future.

INCLUSION IN FAMILY

Clearly, the challenges for parents, teachers and caregivers of children who are Deaf-blind are many. Not least among them is the challenge of including the child in the flow of family and community life. Since such a child does not necessarily respond to care in the ways we might expect, parents will be particularly challenged in their efforts to include her or him. The mother or father of an infant who can see is usually rewarded with smiles and lively eye contact from the child. The parent of a child who is Deaf-blind must look for more subtle rewards: small hand or body movements, for instance, may be the child's way of expressing pleasure or connection. Parents may also need to change their perceptions regarding typical developmental milestones. They can learn, as many have, to rejoice as fully in the ability of their child who is Deaf-blind to sign a new word, or to feed herself, or to return a greeting as they do over another child's college scholarship or success in basketball or election to class office.

Parents, then, may need to shift expectations and perceptions in significant ways. They also need to do the natural grieving that accompanies the birth of a child who is disabled. Teachers and caregivers must also make these perceptual shifts. Parents' groups and resources for teachers can provide much-needed support for those who live and work with children and adults who are Deaf-blind. Such supports will help foster the mutually rewarding inclusion of children who are Deaf-blind into their families and communities. (See section below for resources.)

SUMMARY

Though Deaf-blindness presents many unique challenges to both those who have visual and hearing impairments and to their caregivers and friends, these challenges are by no means insurmountable. Many persons who are Deaf-blind have achieved a quality of life that is excellent. The persons who are Deaf-blind who have high quality lives have several things in common.

First, they have each, in their own way, come to accept themselves as individuals who have unique experiences of the world, and valuable gifts to share. This fundamental acceptance of self can occur regardless of the severity of the particular sensory losses or other challenges that a person has. Second, they have had educational experiences, which have helped them maximize their abilities to communicate and to function productively. Finally, these happy involved persons who are Deaf-blind live in families, communities, or social groups that have an attitude of welcoming acceptance. They have friends, relatives, and co-workers who value their presence as individuals with significant contributions to make to the world around them. For these persons with limited sight and hearing, and for those near them, Deaf-blindness fosters opportunities for learning and mutual enrichment.

DEAF-BLIND DEFINITION/STANDARDS

Deaf-Blindness

1. Definition (State Board of Education Rule 0520-1-9-.01)

   a. "Deaf-blindness" means concomitant hearing and Visual impairments, the combination of which causes such severe communication and other developmental and educational needs that they cannot be accommodated by addressing any one of the impairments.

2. Eligibility Standards

   a. A child shall meet one of the following:

      (1) a child who meets criteria for hearing impairment/Deafness and Visual impairment/blindness; or

      (2) a child who is diagnosed with a degenerative condition or syndrome which will lead to Deaf-blindness, and whose present level of functioning is adversely affected by both hearing and vision deficits; or

      (3) a child with severe Multiple Disabilities due to generalized central nervous system dysfunction, and who exhibits auditory and Visual impairments or deficits which are not perceptual in nature.

   b. The characteristics as defined above are present and cause an adverse affect on educational performance in the general education classroom or learning environment.

3. Evaluation Procedures

   a. A child with Deaf-blindness shall be evaluated by the procedures for hearing impairment/Deafness and Visual impairment/blindness.

   b. Evaluation of a child with a suspected degenerative condition or syndrome which will lead to Deaf-blindness shall include:

      (1) a medical statement confirming the existence of such a condition or syndrome and its prognosis; and

      (2) procedures for hearing impairment/Deafness and Visual impairment/blindness.

   c. Evaluation of Deaf-blindness shall include the following:

      (1) an eye exam completed by an ophthalmologist or optometrist describing etiology, diagnosis, and prognosis;

      (2) a functional vision and media assessment;

      (3) an audiological assessment;

      (4) documented observation of auditory functioning;

  (5) an assessment of speech and language functioning which includes mode of communication;

  (6) an assessment of developmental and academic functioning; and

  (7) documentation of how Deaf-blindness adversely affects educational performance in the general education classroom or learning environment.

4. Evaluation Participants

 a. Information shall be gathered from those persons designated as evaluation participants for both Deafness and Visual impairment in the evaluation of Deaf-blindness including:

  (1) the parent(s) or guardian of the child;

  (2) the child's general education classroom teacher;

  (3) a licensed physician or audiologist;

  (4) a licensed speech/language teacher or specialist;

  (5) an ophthalmologist or optometrist;

  (6) a licensed teacher of students with Visual impairments; and

  (7) other professional personnel, as indicated (e.g., low vision specialist, orientation and mobility instructor, school psychologist).

Visual Impairment

1. Definition (State Board of Education Rule 0520-1-9-.01)

a. "Visual Impairment Including Blindness" means impairment in vision that, even with correction, adversely affects a child's educational performance. The term includes both partial sight and blindness.

2. Eligibility Standards

a. The child shall meet the definition of Visual impairment and at least one of the following:

  (1) visual acuity in the better eye or both eyes with best possible correction:

    (a) Legal Blindness – 20/200 or less at distance and/or near;

    (b) Low Vision – 20/50 or less at distance and/or near;

  (2) visual field restriction with both eyes:

    (a) Legal Blindness – remaining visual field of 20 degrees or less;

    (b) Low Vision – remaining visual field of 60 degrees or less;

  (3) medical and educational documentation of progressive loss of vision, which may in the future, affect the student's ability to learn visually, or

  (4) other Visual impairment, not perceptual in nature, resulting from a medically documented condition.

b. The characteristics as defined above are present and cause an adverse effect on educational performance in the classroom or learning environment.

3. Evaluation Procedures

a. Evaluation shall include the following:

  (1) evaluation by an ophthalmologist or optometrist, which documents the eye condition with the best possible correction;

  (2) a written functional vision and media assessment, completed or compiled by a licensed teacher of students with Visual impairments, which includes:

    (a) observation of visual behaviors at school, home, or other environments;

    (b) educational implications of eye condition based upon information received from eye report;

    (c) assessment and/or screening of expanded core curriculum skills (orientation and mobility, social interaction, visual efficiency, independent living, recreation and leisure, career education, assistive technology, and compensatory skills) as well as an evaluation of the child's reading and writing skills, needs, appropriate reading and writing media, and current and future needs for Braille;

    (d) school history and levels of educational performance; and

(e) documentation and assessment of how Visual impairment adversely affects educational performance in the classroom or learning environment.

4. Evaluation Participants

a. Information shall be gathered from the following persons in the evaluation of Visual impairment:

(1) the parent/guardian of the child;

(2) an ophthalmologist or optometrist;

(3) licensed teacher of students with Visual impairments;

(4) a general education classroom teacher; and

(5) other professional personnel, as needed: (e.g., low vision specialist, orientation and mobility instructor, school psychologist).

Deafness

1. Definition (State Board of Education Rule 0520-1-9-.01)

a. "Deafness" means a hearing impairment that is so severe that the child is impaired in processing linguistic information through hearing, with or without amplification, that adversely affects a child's educational performance.

2. Eligibility Standards

a. A child shall have one or more of the following characteristics:

   (1) inability to communicate effectively due to Deafness;

   (2) inability to perform academically on a level commensurate with the expected level because of Deafness; and

   (3) delayed speech and/or language development due to Deafness.

b. The characteristics as defined above are present and cause an adverse affect on educational performance, including academic performance, speech and/or language development or communication skills in the general education classroom or learning environment.

3. Evaluation Procedures

a. Evaluation shall include the following:

   (1) audiological evaluation;

   (2) evaluation of speech and language performance;

   (3) school history and levels of learning or educational performance; and

   (4) documentation, including an observation of classroom performance, and assessment of how Deafness adversely affects educational performance in the general education classroom or learning environment.

4. Evaluation Participants

a Information shall be gathered from the following persons in the evaluation of Deafness:

   (1) the parent(s) or guardian of the child;

   (2) the child's general education classroom teacher;

   (3) a licensed physician or audiologist;

   (4) a licensed speech/language teacher or specialist; and

   (5) other professional personnel, as indicated.

Hearing Impairment

1. Definition (State Board of Education Rule 0520-1-9-.01)

a   "Hearing Impairment" means an impairment in hearing, whether permanent or fluctuating, that adversely affects a child's educational performance but does not include Deafness.

2. Eligibility Standards

a   A child shall have one or more of the following characteristics:

  (1) inability to communicate effectively due to a hearing impairment; or

  (2) inability to perform academically on a level commensurate with the expected level because of a hearing impairment; or

  (3) delayed speech and/or language development due to a hearing impairment.

b   The characteristics as defined above are present and cause an adverse effect on educational performance in the general education classroom or learning environment, including academic performance, speech and/or language development or communications skills.

3. Evaluation Procedures

a   Evaluation shall include the following:

  (1) audiological evaluation;

  (2) evaluation of speech and language performance;

  (3) school history and levels of learning or educational performance; and

  (4) documentation, including observation of classroom performance and assessment of how a hearing impairment adversely affects educational performance in the general education classroom or learning environment.

4. Evaluation Participants

  a. Information shall be gathered from the following persons in the evaluation of Deafness:

  (1) the parent(s) or guardian of the child;

  (2) the child's general education classroom teacher (with a child of less than school age, an individual qualified to teach a child of his/her age),

  (3) an audiologist or licensed physician;

  (4) a licensed speech/language teacher or specialist; and

  (5) other professional personnel, as indicated.

DETERMINATION OF NEED

Steven Covey in "The Seven Habits of Successful People" uses the analogy that the melding of your thoughts with my thoughts will produce, not two thoughts, but a third and very distinct thought, or stated in mathematical terms, 1 + 1 = 3. That same idea should be applied when determining the needs of children who manifest the concomitant disabilities of blindness and Deafness. While manifesting many of the characteristics of each disability, the melding of the two into a single individual produces a person so unique that educational intervention strategies much different than those employed for either disability are required.

As with all disability classifications, children who are Deaf-blind must not only meet the definition of the disability, they must also demonstrate a need for special education intervention services. For example, a child with both hearing and vision deficits, while meeting the legal definition of Deaf-blindness by manifesting disabilities in both senses, may be able to function appropriately in the general education environment, in which case the child would not need special education intervention services. Rarely, however, do the two disabilities manifest themselves equally, as in an individual who is both profoundly deaf and totally blind. Usually, one of the disabilities will be dominate the other.

While this disability disparity may not affect the determination of eligibility of a child, it certainly can, and in most cases will, impact the type and intensity of educational intervention strategies provided relative to each disability. For example, a child who barely meets the minimum standards for low vision (20/50 with best correction), but who is profoundly deaf, will require more intensive intervention to accommodate the impairment of hearing than of vision. The reverse is true if the child is totally blind and meets the minimum standards for Deafness (30 db. unaided). This does not mean, however, that stratagems designed to ameliorate the affects of the lesser of the two disabilities should be forgone, just that reliance on the stronger of the senses as the primary instructional modality will ensue.

ASSESSMENT FOR THE PURPOSE OF WRITING THE IEP

Evaluating children with any disability is a complex process. Children who are Deaf-blind tend to possess concomitant disabilities, compounding the process of determining educationally relevant goals and objects. Additionally, this low incidence population encompasses a diverse group of children. Within the population, educators encounter a six year old who is visually impaired with profound hearing loss and cognitive functioning

level of an infant, as well as a ten year old who is totally blind with a severe hearing loss whose developmental skills are at or near age/grade level.

Although unique individually, children who are Deaf-blind have several common educational needs:
- individual instruction,
- communication (i.e., Braille, sign language, communication boards, and Tadoma),
- integration of collaborative instruction across natural settings,
- concrete experiences,
- a stimulatory environment
- instruction and activities of daily living

In light of the vast differences seen in students who are Deaf-blind, assessment for the purpose of writing an IEP requires a comprehensive process. This includes assembling existing records, medical reviews, and gathering all pertinent information across developmental areas in a variety of settings, times and situations. A multi-disciplinary approach in gaining a global view of the child is recommended practice and usually includes the following:
- parent involvement and interviews,
- direct observations,
- ecological assessment,
- audiological assessment,
- assessment of cognitive abilities,
- assessment of adaptive behavior and developmental skills,
- assessment of functional communication,
- assessment of functional vision
- assessment of gross and fine motor skills,
- assessment of self-care skills
- assessment of functional orientation and mobility, and
- assessment of prevocational/vocational skills.

Care must be taken in interpreting the results of different assessments to ensure that information is reliable, valid and sufficient to lead to functional and meaningful goals and objectives. It must be realized that isolated performance by a student who is Deaf-blind on tests normed for children who hear or see may not be valid.

FUNCTIONAL BEHAVIORAL ASSESSMENT

Students who are Deaf-blind may exhibit behavior problems. The frustration caused by the inability to understand and interact with an environment saturated with auditory and visual stimuli may create aggressive or other aberrant behaviors. A functional behavior assessment (FBA) is essential in order to understand the contexts or events that elicit problem behavior and the functions that maintain targeted behaviors.

FBAs help determine the student's purpose of the problem behavior (i.e. attention, escape from task or demand, and/or self-stimulation). By understanding the intent of the behavior, the environment can be modified, and interventions can be designed to make the problem behavior irrelevant, ineffective and inefficient. Determining the antecedents that "set up" and/or "set off" the problem behavior and modifying the environment may decrease the likelihood of a given problem behavior. Creating appropriate interventions that allow the student to get the attention or results that s/he is seeking make the problem behavior inefficient and ineffective. FBAs are conducted in collaboration with a behavior specialist, the classroom teacher, direct care providers and the parents of the child may include interviews and direct observations within the natural context. For students who do not respond to interventions designed within the FBA process, further investigation (e.g., data collection and functional analysis) is warranted.

RECOMMENDED EDUCATIONAL PRACTICES

RECOMMENDED EDUCATIONAL PRACTICES FOR CHILDREN WHO ARE DEAF-BLIND

"Man's need for communication with his fellow man is possibly his greatest need and the fulfillment of his other needs and desires is largely dependent upon, or at the least greatly facilitated by his ability to satisfy this basic skill. The development of language, both spoken and written, as a means of communication is one of mankind's greatest achievements." (Davis Hallwell: 1960)

The magnitude of the problem of communication for those afflicted with a dual sensory-impairment of sight and hearing is beyond comprehension. The loss of both the distant senses leaves a person who is Deaf-blind in total isolation. According to Robert J. Smithdas, who himself is Deaf-blind, "A Deaf-blind person's world is only as large as the distance he can reach with his fingertips." He further states that "loneliness" and "isolation" are two major problems besetting people with dual sensory losses.

Lack of sensory perception not only interferes, but also to some extent retards the normal growth and the development of many of the most essential and fundamental skills in all other areas such as: Exploration, Communication, Socialization, Independent Living Skills, Self-determination, Functional Academics, and Transitional Planning. The following articles provide a fairly broad and general outline as to how these areas can be addressed in order to assist those who are Deaf-blind to reach their optimum potential.

EXPLORATION

ENCOURAGING EXPLORATION
Information for this Fact Sheet supplied by California Deaf-Blind Services (October 1996), and developed by the Colorado Services for Children with Deaf-blindness. Information was adapted from Sternberg-White, S., Chen. D., Watts. J., 1992, Developing Social-Emotional Skills INSITE, Utah State University, Logan, Utah

Children with vision and hearing loss may need to be encouraged to explore their environment using all their senses. This exploration will help the child build skills in all areas of development. *You can encourage the child to explore his surroundings in the following ways:*

1. Remove dangerous and valuable objects from the area, so the child will not fear getting hurt or getting in trouble. If you need to say "No" too many times, the child may not want to explore further.
2. Attach objects to the child's chair, car seat, stroller or wheelchair to allow contact with objects. They can be placed next to the child's body without touching his hands

or face. The child may just allow them to be there at first and later will explore them with his hands.

3. Games with objects can also be played, placing objects inside the child's clothing to encourage the child to search for the object. Be sure to avoid those very sensitive areas of the child's body and begin the games with body parts where he allows touch.

4. Place objects a few inches away from the child's hands to make it easier for him to find the objects. He may accidentally bump into it and explore it further.

5. Combine the use of senses by adding light to noisemakers, vibrations to sound, and interesting textures to brightly colored objects to encourage the child to use his remaining vision or hearing. An example would include feeling the vibration of a piano, placing a musical toy on a lighted surface, etc. These added senses will help to attract the child's attention.

COMMUNICATION

COMMUNICATION—WHAT IS S/HE TRYING TO TELL ME?
The information applies to children and youth, birth through 21 years of age and was supplied by California Deaf-Blind Services (October 1996)

Some students with vision and hearing loss may not be able to express some or all of what they want to say through speech, sign language, fingerspelling, writing, or gestures. When students cannot express themselves in these traditional ways, they often choose other ways of expression. The students choose the way that is easiest to get their message across. This expression is communication. The student may communicate through facial expression, body movement, posture, vocalization, crying, tantrums, etc. These reactions are frequently seen by parents and/or professionals as behaviors that need to be eliminated, when in fact the student is trying to communicate and becomes more and more frustrated when his communication is misunderstood. If, instead, the student's attempt to communicate can be acknowledged and expanded, difficult behaviors may begin to decrease.

Points to Remember
1. Look at all of the student's behavior as an attempt to communicate.
2. Be sure the student has had medical problems eliminated.
3. Attempt to understand the student's communication efforts.
4. Teach the student a more acceptable way to communicate what he has to say, after showing you understand the effort.

CREATING A NEED TO COMMUNICATE
The information applies to children and youth, birth through 21 years of age and was supplied by California Deaf-Blind Services (October 1996)

Individuals with vision and hearing loss may show communication skills in many ways. This communication may take the form of body movement, gestures, facial expressions, vocalizing, use of objects or people, pointing to pictures, or more formal systems. As these skills begin to develop, it may be helpful to create a need for increasing the use of these new communication forms.

1. You may do movements together with the individual that the person really enjoys (e.g., rocking, dancing or swinging). You can stop your movement, pause for a few seconds, and see if the individual indicates he wants to continue. He may indicate he wants to continue by his body movement, facial expression, gestures, vocalizing, etc. This is the beginning of communicating needs and wants.
2. As the individual becomes familiar with various routines, you can watch to see if he anticipates each step of the routine. As you do the familiar routine, pause before moving on to the next step of the activity. During the waiting period of a few

seconds, watch for movement, body posture, facial expression, gestures, vocalizing, etc., which indicates that the individual wants to complete the activity. (For example, you may assist the individual with dressing and may pause after the socks are placed on his toes. He may wiggle his toes to indicate a desire to finish dressing).

3. Many times a person with vision and hearing disabilities learns a variety of tasks well that do not require the need to communicate. You can create a need to communicate within the routine/task by "forgetting" to put out all materials he will need for finishing the task (e.g., putting out a can of soup without the pan, putting out the toothpaste without the toothbrush, or placing a desired objects just out of reach.) The individual will then need to ask for the missing item in whatever way he can. You should <u>not</u> however, interrupt his independence by removing materials he is currently using. It is also <u>not</u> recommended to insist he describe what he is doing in order to continue his task (e.g. the teacher removes the child's cookies for each bite until the child says/signs/gestures, "I want the cookie"). If you interrupt by removing materials he already has, the individual may feel punished and may not wish to communicate. If you block his independence by requesting a description of what he is doing, he may stop functioning independently and may always wait to be prompted to continue actions.

4. After the child expresses his desire to continue these activities, it is very important to let him know that you understood his attempts to communicate. You may say "Oh, you need the toothbrush!" or "You want your socks on?" etc. Your movements as you speak can be an imitation of his movement. Your statements should tell him that you "heard" what he was saying and that you respect his wishes. Be sure that your facial expression, body language, vocalizations, and speech all give a message of positive feelings about his communication.

TEACHING BODY LANGUAGE
Information for this Fact Sheet supplied by California Deaf-Blind Services (October 1996), and developed by the Colorado Services for Children with Deaf-blindness. Information was adapted from Sternberg-White, S., Chen. D., Watts. J., 1992, <u>Developing Social-Emotional Skills</u> INSITE, Utah State University, Logan, Utah

We communicate a lot of information about our feelings through our body language: our facial expressions, the way we position ourselves, distance from others, and gestures. We receive this information primarily through our vision. The child with dual sensory impairments does not get this information from others. He also is not aware of how others see him. These children must have help to learn to express their feelings, through appropriate body language. If their feelings and body language do not match, their communication may be misunderstood and the child may be frustrated. You can help the child in the following ways:

1. Have the child feel your face while you say/sign the name of the feeling expressed. Have him feel the tension in your muscles when you are angry, relaxed muscles when you're happy, and a frown when you're unhappy.

2. Also have him feel your shoulders and hands to learn about body position related to the different feelings. An upright body frequently shows a positive attitude and confidence. A slumped body sometimes signals sadness or fatigue.
3. If you feel comfortable allowing the child to feel your heart rate, this also provides a lot of information. You can have a young child feel your heart. An older child can feel your neck or wrist. Your heart rate will show when you're angry, happy, excited, etc.
4. Have the child feel his own face, posture, and heart rate to become aware of how he appears to others.

TOUCH CLUES
The information applies to children and youth, birth through 21 years of age and was supplied by California Deaf-Blind Services (October 1996)

Individuals who have little functional use of their vision or hearing are often unable to understand what is going to happen to them. Things may seem to appear from and disappear into nowhere. People may touch and move the students without warning and for seemingly no reason. These students often have tantrums or become fearful when they are handled in this way. Touch cues are one way to give the students information about what is going to happen.

The purpose of touch cues is to give the individual with vision and hearing loss a way of understanding about activities, people, and places through the use of touch and/or movement.

Touch cues are signals placed on the person's body to give a specific message (e.g., adult touches shoulder to "sit down"). Parents and teachers use many of these cues with young students with dual sensory impairments. Parents naturally touch their infants in a specific way before picking up or moving the child. These early cues given many times in the same way allow the student to know someone is present and that something is about to happen.

Each person touching or moving the student may handle him slightly differently or may touch him in a specific place on his body to let him know who is there (e.g., Mom touches his chin, Dad touches his forehead, adult assists student to touch his hair, ring, or watch).

Using touch cues consistently in daily routines allows the student to understand his own surroundings and the people he meets in his daily schedule.

Each student needs a set of cues specific for his own situation at home, school, and work. It is very important to encourage everyone working with the student to use the

same cue to help the student understand the meaning of the cue.

TADOMA
The information applies to children and youth, birth through 21 years of age and was supplied by California Deaf-Blind Services (October 1996)

Students with vision and hearing loss frequently use their senses of touch and movement to get information about the activities, people, and places around them. Students may be able to use several senses together (e.g., touch + hearing ± movement) to build skills such as speech, use of remaining vision and/or hearing, and sign language. They may also use their senses of touch and/or movement for the sole purpose of enjoyment.

Objective
Tadoma is a method for teaching the student with dual sensory impairments to speak. The method was developed at Perkins School for the Blind for children who are Deaf-blind. Tadoma also can be used to provide students with very pleasurable sensations of touch and movement which come from others' speech and singing which they cannot see or hear.

Hand placement
The hand of the student is placed on the face of the speaker with the thumb lightly placed on the speaker's lips and the fingers spread on the cheek and upper neck. In this way, the student feels the lip movement, air in the cheeks, and the vibration of the vocal cords as each sound is made. Sounds that look alike on the lips (e.g., "F" and "V") will feel differently on the speaker's face and throat. If the child has some vision, the adult should be positioned so the student can watch the adult's lips and facial expression. If the student wears hearing aids, it would be helpful to wear them at this time.

Procedure
1. Assist student with hand placement. A young child may need to use both hands.
2. Speak clearly and naturally.
3. Assist student to feel his own face and throat to encourage him to repeat the sounds just made by the adult.
4. Repeat steps one through three to encourage the student to imitate.
5. Do not force the student to join in the activity if s/he seems tired or uninterested. This method should be enjoyable for both the student and the adult.

SOCIALIZATION SKILLS

FACILITATING FRIENDSHIPS AND INTERACTIONS

Adapted from Schaffner, C.B., & Buswell, B.E. (1992). Connecting students: A ~guide to thoughtful friendship facilitation for educators and families. Colorado Springs: PEAK Parent Center. The information applies to children and youths, birth through 21 years of age.

Developing relationships with others is important for any individual. Individuals with disabilities, especially severe disabilities, may frequently have fewer friends and fewer interactions with peers than do individuals without disabilities. In order for interactions to occur with peers without disabilities and ultimately to have friendships develop, it may be necessary for parents and teachers to facilitate interactions between students with and without disabilities. It is insufficient simply to have students with disabilities physically placed in classrooms with their nondisabled peers. It is likely that individuals with and without disabilities will need ideas for ways in which to interact with one another . This section provides strategies that parents, teachers, and others can implement to facilitate interactions between individuals with and without disabilities.

Facilitating friendships and interactions between peers can involve several strategies.

1. Provide opportunities that help to bring students together (e.g., class activities). Encourage students to work together on class assignments and in "special classes" such as art, music, library and so forth. Encourage "buddy systems" for school activities as well as activities before and after school.
2. Present the individual with disabilities to others in a positive manner. Have the student with disabilities share, independently or through adaptations, his/her special interests or talents with the class. This will enable students to view the student with disabilities as a competent individual.
3. Make accommodations or adaptations in the environment to help involve the individual with disabilities in meaningful ways. Avoid seating the student with disabilities on the periphery of activities/class. Make adaptations to classroom activities, instructions, and materials as needed.
4. Use the classroom curriculum to teach about diversity, equality, and friendships. Discuss similarities and differences among students in the classroom. The classroom teacher may facilitate discussions regarding concerns, fears, and questions that may arise pertaining to friendships with students with disabilities. Ask peers to assist in planning strategies for facilitating friendships with students with disabilities.
5. Use teaching methodologies that encourage cooperation among students and expect the student with disabilities to participate in class activities with his/her peers. Give the student with disabilities valued roles in cooperative learning groups.
6. Minimize adult presence as much as possible so that the adult does not interfere with interactions between the students.

7. As the teacher, demonstrate acceptance of and positive interactions with the student. Students typically imitate the behaviors that they see modeled by their teacher. Avoid the use of juvenile language when talking with the student with disabilities.
8. Provide encouragement and praise when students participate in positive interactions with one another.
9. Respond to challenging behaviors in a manner that teaches peers positive social or coping skills.

APPROPRIATE TOUCH
Adapted from Steinberg- White. S.. Chen, D., Watts. J. 1992. Developing Social-Emotional Skills. INSITE, Utah State University, Logan, Utah   The information applies to children and youth, birth through 21 years of age and was supplied by California Deaf-Blind Services (October 1996)

Sometimes the enthusiastic attempts of children with vision and hearing loss to begin introductions to and friendships with other people are seen as frightening if the touch is too rough. The child may also approach people very closely in order to use her senses of touch and smell or limited vision. The child must be taught as young as possible how to touch others properly for her own safety and to develop friendships with others.

1. Teach the child to approach others by gently tapping others on the shoulder. When the person turns towards her/him, s/he can then ask for what she wants or can show someone what s/he wants to do. It is very important to help her/him touch appropriately before s/he has a chance to scare or hurt anyone. You may need to prompt this gentle touch for a while until the child does it independently.
2. Teach the child to remain an acceptable distance from others (e.g., generally the distance of an outstretched area, although this varies in different cultures) until s/he has permission (from family or teachers) to explore people further. S/he can then move in closer to touch the person to identify familiar things about that person (e.g., cologne, ring, watch, hair, beard, etc.). The child should not be allowed to explore strangers.
3. The child should be taught that s/he can decide who s/he allows to touch her/him, including parents, other relatives, close friends, etc. You must also respect that any part of the child's body is private if she so chooses. The child should also be taught to move away or make some noise if s/he feels uncomfortable in a situation.

CIRCLE OF FRIENDS
The information applies to children and youth, birth through 21 years of age and was supplied by California Deaf-Blind Services (October 1996)

Sometimes a more intense strategy for facilitating friendships is necessary. "Circle of Friends" is an activity completed with students without disabilities to discuss the importance of friendships and relationships in their lives and to generate ideas for ways

in which they can be friends with peers who have disabilities. The ensuing steps are followed when implementing the "Circle of Friends" process (adapted from O'Brien, J., & Forest, M. (1989). <u>Action for inclusion: How to improve schools by welcoming children with special needs into regular classrooms</u>. Toronto: Inclusion Press.)

Implementing strategies such as <u>Circle of Friends</u> can encourage students with and without disabilities to interact with one another. Encouraging positive interactions may be the first step to the development of meaningful friendships that are important for everyone.

1. Discuss the importance of friendships and relationships in everyone's lives.
2. Provide students with four concentric circles and ask them to identify the important relationships in their lives. After completing each circle, ask students to share their responses if they are willing.

   (a) In the inner circle, ask them to put the names of those individuals to whom they are closest (e.g., those they love the most, those with whom they share their secrets).
   (b) In the second circle, ask them to list those people they really like, but not quite as much as those in the first circle (i.e., those with whom they do not share their secrets).
   (c) In the third circle, ask them to identify those individuals with whom they like to do things because of the groups to which they belong (e.g., sports teams, clubs, dance groups, scouts).
   (d) In the fourth, or outermost, circle, ask them to list those people who are paid to be in their lives (e.g., doctor, dentist, teachers, and coaches).
   (e) After discussing the circles of several volunteers, show the class the circles of an individual who has very few relationships (e.g., only family members in the inner circle, perhaps no one in circles 2 and 3, and numerous service providers in circle 4).
   (f) Ask the students to discuss (1) how they would feel and (2) how they would act if their circles looked like those of someone with few relationships. List their responses on chart paper.
   (g) Explain to the class that _____'s circles may not look very different from that of the hypothetical individual with few relationships. Ask them what they could do to change that situation. List their responses on chart paper.
   (h) Ask the class if there is anyone who would like to become part of _____'s circles. Be sure that they know that not everyone must do so. List the names of those who are interested.
   (i) Hold regular meetings with _____'s newly developed circle of friends on a weekly basis to help them to brainstorm ways of interacting and being friends.

INDEPENDENT LIVING

DEVELOPING INDEPENDENCE

Adapted from Steinberg - White. S.. Chen, D., Watts. J. 1992. Developing Social-Emotional Skills. INSITE, Utah State University, Logan, Utah   The information applies to children and youth, birth through 21 years of age and was supplied by California Deaf-Blind Services (October 1996)

The child who has vision and hearing loss may need your help to explore the world through touch and movement. You may be afraid he will get hurt, but all children receive a few bumps and bruises as they grow up. He needs to get out and move around to increase development in all skill areas. You can encourage independence in the child in the following ways:

1. Child-proof the home or classroom to allow the child to learn to avoid obstacles in a safe way. Remove dangerous or valuable objects, which may be of concern. This strategy is no different than you would use with any other young child.
2. Teach the child new skills by doing activities together, with your hands on top of his. As he becomes more familiar with the activity, make your touch lighter and lighter until the child does it for himself.
3. It is important that you point out to the child the natural cues that are available in the environment which tell him what to do. For example, the child can be taught to feel his hands for stickiness or to smell his hands to determine if hand washing is needed. In this way, he will do it for himself when necessary, rather than waiting for someone to tell him to wash his hands.
4. The child should be encouraged to use his sense of touch in all activities to provide for greater independent movement and safety in exploration. The child should be taught to feel for the seat of his chair before sitting. He should search for dropped objects by touch. He should be allowed to touch his food and drink to locate them on the table and to determine when he is finished.

DRESSING AND UNDRESSING

This article is from How to Thrive, Not Just Survive, A Guide to Developing Independent Life Skills for Blind and Visually Impaired Children and Youths, by Rose-Marie Swallow and Kathleen Mary Huebner, pages 10-12.

Independent dressing and undressing skills can considerably shorten the time that parents must spend helping their children. Again, it is important to resist the temptation to dress and undress a child because it is faster to do so rather than to teach the child how to perform these tasks. If parents begin when the child is very young, by talking about what they are doing (for example, "Give your hand; now put your arm in the sleeve and push it all the way through"), the child will begin to learn the concepts of clothing and body parts, as well as understand the actions and movements that are involved in dressing. When the child indicates an interest in being independent, begin by teaching the child how to undress, since it is easier to remove clothing than to put it on. The child

is likely to become less frustrated if she learns to undress before dressing, unbutton before buttoning, and unzip before zipping.

Develop routines for taking off shoes or socks or a sweater or a coat at appropriate times.   Encourage the child to help pull down and pull up pants during toilet training. Begin by using loose-fitting clothes that are the easiest to put on, such as pants with elastic waistbands rather than zippers. The child also needs to learn how to organize clothing. Set an example by keeping clothes organized in wardrobes, drawers, and closets. Have the child identify which garments are needed, locate where they are stored, and place them on the bed or another flat surface. Lay out garments, tee shirts, pants, and so forth in the order which they will be put on. Teach the child how to locate the right garments, check that they are right side out, put them on, and smooth them, so they are not twisted on the body.   Eventually, you may discuss color coordination and the general principles of style.

Children can become familiar with the concepts of laterality (right and left) before or while they learn to put on their shoes and can be taught to insert the correct foot into the correct shoe and pull up the tongue, if necessary. Different tactile markings on the soles of shoes help to identify right and left. Shoes with Velcro fasteners or slip-on shoes, such as loafers, are much easier. However, if the child is physically able, shoe-tying skills should be taught as well. Shoe-tying skills require fine motor development and thus generally are learned after the child enters elementary school. Shoe models or adult shoes are helpful while teaching lacing and knot tying. They should be placed in front of the child with the heel closest to him so the shoe is in the position it would be if it were on the child. Work on the lace first. Make one shoelace by tying together two laces in contrasting colors and/or with two textures and center the laces between the bottom eyelets. In teaching the child how to tie laces, place the shoe on a table or wrap the laces around the child's thigh with the ends on top, so they can be tied on top of the thigh.

Buttoning and zipping also help to develop motor control. Begin by using large buttons on loose-fitting garments and zippers on pants or skirts that do not need to be threaded. By the time the child enters elementary school, s/he should be able to put on, fasten, and remove pants, shirts, coats, and sweaters with little help. During the preschool years, emphasize dressing skills using self-help teaching materials equipment. Unless you begin to teach these techniques early, you will find the child may be old enough for school but cannot put on her/his clothing.

SUGGESTIONS FOR RECREATION/LEISURE ACTIVITIES

The information applies to children and youth, birth through 21 years of age and was supplied by California Deaf-Blind Services (October 1996)

Age of Child	Activities of Nondisabled Peers	Modifications for Individuals who are Deaf-blind	Where to find Age-appropriate Materials
0-3 Years	Toys	Toys with bright colors, motion lights, and/or sound	Gymboree, Toys R Us
	Textured objects	None needed; Multiple textures best	Target; Educational supply stores
	Mobiles	Black and white or bright colors; Musical	Same as above
	Swimming and/or water play	Sunscreen and visors; Gradual desensitization	Backyard; Mommy & Me; Kitchen sink/tub
	Playground equipment	Gradual desensitization; Resonance or co-active movement	Educational supply stores; Playground equipment stores
4-6 Years	Toys which imitate parent's routines and materials	Adaptations to assist with grasp, reach, size, or to accentuate relevant cues	Hardware stores; Target; Domestic aid catalogs
	Dolls	Clothing with Velcro and elastic	Yardage stores
	Building materials	Bright colors: Textures; Shapes; Light box; Trays	American Printing House for the Blind*
	Balls	Bright colors; Textures; Sounds	American Printing House for the Blind*; Make your own
	Musical instruments; Tape players/stereos; Radios	Adaptations to assist with grasp, reach, size, or to accentuate relevant cues	Hardware stores; Target; Domestic aid catalogs
7-10 Years	Creative materials	Bright colors; Textures; Shapes; Lighting; Contrasting background; Light box; Trays; Visual aids	Arts/crafts store; Stationary stores; American Printing House for the Blind: Optometrists
	Sports	Bright colors; Adaptations to accentuate relevant cues; Sounds; Rule modifications; Textures; Peers	American Printing House for the Blind*,; Sporting goods stores; Make your own
	Clubs	Peers; Lighting; Enlarged printed materials; Communication systems	Make your own
	Collecting/exploring	Visual aids; Adaptations to assist with grasp, reach, size, or to accentuate relevant cues	Hardware stores; Stationery stores; Domestic aid catalogs

Age of Child	Activities of Nondisabled Peers	Modifications for Individuals who are Deaf-blind	Where to find Age-appropriate Materials
11-14 Years	Creative materials	Bright colors; Textures; Shapes; Lighting; Contrasting background; Light box; Trays; Visual Aids	Arts/crafts store; Stationery stores; American Printing House for the Blind*; Optometrists
	Sports	Bright colors; Adaptations to accentuate relevant cues; Sounds; Rule modifications; Textures; Peers	American Printing House for the Blind*; Sporting goods stores; Make your own
	Clubs	Peers; Lighting; Enlarged printed materials; Communication systems	Make your own
	"Hanging out"	Communication systems; Mobility aids' Domestic aids; Sunglasses	Educational services; Regional Center; Domestic aid catalogs
	Music	Adaptations to assist with grasp, reach, or to accentuate relevant cues; Wooden floor; Close proximity to speakers	Hardware stores; Domestic aid catalog; Radio Shack
	Makeup (girls)	Magnifying mirror with lights; Peer; Lighting	Cosmetic department
15-17 Years	Sports	Bright colors; Textures; Shapes; Lighting; Contrasting background; Light box; Trays; Visual aids	American Printing House for the Blind*; Sporting goods stores; Make your own
	"Hanging out"	Communication systems; Mobility aids; Domestic aids; Sunglasses	Domestic aid catalogs
	Music/dancing	Adaptations to assist with grasp, reach, or to accentuate relevant cues; Wood floor; Close proximity to speakers; Peers; Resonance and co-active movement	Hardware stores; Domestic aid catalog; Radio Shack
	Cruising	Communication system; Cues from peers regarding appropriate body language	
	Shopping	Communication system; Peers; Lots of money; Mobility aids; Braille	Community, educational services
	Movies	Seating; Visual aid; Mobility aid: Unlock accessible restrooms; Communication system; Peer(s)	Educational services
18 + Years	Music/Dancing	See 11-14 and 15-17 charts	
	Sports	See 7-10 chart	
	Shopping	See 15-17 chart	
	Nature	Communication system; Mobility aids; Peers: Visual aids; Braille; Use of senses of touch an smell to accentuate relevant cues	Educational services; Optometrist; Camping stores

American Printing House for the Blind Catalog of Instructional Aids, Tools and Supplies (no charge for the catalog) P.O. Box 6085, Louisville, KY 40206-0085

SELF-DETERMINATION

RELAXATION STRATEGIES

Adapted from Steinberg - White. S. Chen, D., Watts. J. 1992. Developing Social-Emotional Skills. INSITE, Utah State University, Logan, Utah The information applies to children and youth, birth through 21 years of age and was supplied by California Deaf-Blind Services (October 1996)

An individual with vision and hearing loss can become tense, frightened, or angry due to confusion, medical conditions, and unexpected change. Various strategies have been developed which can help an individual learn to relax his body. When relaxed, he is better able to position his body, to use his senses, and generally feel better.

It is important to teach ways of relaxing on a regular basis, just as you would any other motor skills. You should not wait until the person is rigid or in a tantrum to work on relaxing.

Some of the following techniques may be helpful:

1. The individual can relax his body through deep breathing. (For infants and small children, this can be done by holding the child in your lap with his face against your chest. For older individuals, you sit face to face.) Breathe deeply in and out of your mouth, exhaling so the individual can feel the force of the air. Do this as slowly as possible. It may also help to have the child feel your chest as you breathe, to feel how the lungs expand. (An older individual can feel your pulse to achieve the same results.) After the demonstration, have the individual imitate the breathing and feel his own chest to match your breathing.
2. The individual can also relax his body by working on each body part separately until the whole body relaxes. You can start with arms and legs by gently shaking the limb until it relaxes. When the lower arm relaxes, move to the upper arm, then to the shoulder, etc. Be very careful to avoid injury of the joints. For individuals with physical disabilities, consult the physician or therapist providing services before trying these suggestions to make sure you are moving the limbs properly.
3. The individual can also relax through massage. Deep, firm touch, moving from the head <u>down</u> the spine will help students with sleep difficulties. Individuals who become over-stimulated easily may benefit from massage throughout the day to help them calm down and relax.

Note: A tickling type of touch will cause the child to become very excited and may cause inappropriate reflex movements in individuals with physical impairments.

Once the individual becomes familiar with these strategies, you will then be able to demonstrate them for the purpose of imitation during these times of stress. The individual will know what to do and can adjust his body to match your breathing, muscle tone, or body posture.

FUNCTIONAL ACADEMICS

These components refer to the practices that have been shown by recent research to improve an individual's ability to become an active and accepted member of society.

1. **Functional, Age-Appropriate Curricula.** The curriculum for students with Deaf-blindness should stress skills that are <u>chronologically age-appropriate</u>, <u>functional</u> for the learner, and taught in a <u>natural context</u>.
2. **Integration with Nondisabled Peers.** Learners with significant support needs benefit from daily social interactions with their nondisabled peers to develop positive social skills necessary for acceptance into the community. The benefits of social integration, both for learners with severe disabilities and for nondisabled students, are well documented.
3. **Community-Based Instruction.** It has become increasingly apparent that learners with significant support needs best acquire and maintain skills in the natural community environments where the skills are needed to avoid the difficulty of generalizing from an artificial setting to a more natural one.
4. **Non-aversive Behavior Management.** Best instructional practices for students with severe disabilities emphasize a non-aversive educational approach to help individuals reduce their socially unacceptable behaviors, while they acquire more appropriate and functional behaviors. This type of positive instruction complements a functional, age-appropriate curriculum and community-based instruction, while it respects the rights of the learner to a humane and positive education.
5. **Transition Planning.** Learners with severe and Multiple Disabilities (like nondisabled students) need to receive training that will enhance their opportunities to successfully make the transition from an elementary school program to a secondary program, and from school to working and living in their community. Since these students may have difficulty acquiring new skills quickly and adjusting to new environments, consideration must be given to developing comprehensive, longitudinal educational plans for each individual student. Transition planning should begin as early as in the elementary grades.
6. **Parent Involvement.** Parents are critical to the educational process. Parents have valuable information and expertise to share with professionals. Increasing emphasis on parent and family involvement in educational planning creates a need to train educational staff to recognize factors affecting the family structure, needs of the family, and methods for working effectively with each unique family system.

7. **Integrative Service Delivery Approach.** When support staff and educators combine forces to provide an integrative approach to service delivery, the learner benefits from a holistic type of intervention that does not segment him or her into isolated strengths and weaknesses. It is recommended that all staff responsible for a learner's education to work cooperatively to achieve common goals and use of support staff primarily as consultants to the primary teachers, but also incorporates the expertise of these individuals into the functional and daily scheduled activities for the learners.

SYSTEMATIC PLANNING FOR INCLUSION
The information applies to students birth through 21 years of age. Information far the Fact Sheet supplied by California Deaf-Blind Services. - October 1996

In order for successful inclusion to occur, systematic planning must occur at the beginning of the student's placement in the general education class. The following steps can provide structure to that planning process.

1. Identify student's learning needs/objectives from his/her IEP
2. Review classroom strengths/limitations (e.g., physical layout, teacher style, etc.)
3. Identify classroom schedule/activities
4. Develop matrix meshing student needs with classroom activities. That is, a matrix is developed with students IEP objectives listed vertically on the left side and the general education classroom schedule listed horizontally across the top of the matrix. The team then reviews the objectives and schedule to determine when within the LEP objectives can be addressed.
5. Identify supports needed so that the objectives can be addressed. For example, the team may review the schedule and activities to determine if adaptations are needed to the materials, environment, or instruction. The student should be encouraged to participate partially or to participate in parallel activities if not able to complete the task to the full degree or if unable to meet the requirements of the task. Personal assistance in the form of peer support, teacher assistant, assistance from older students in the school, or aid from related services personnel may serve as support to facilitate the successful inclusion.
6. Develop communication system between special education teacher and general education teacher. The general education teacher will have questions and should be encouraged to voice them. The special education teacher should encourage open communication lines with the general education teacher by establishing some type of a mail system for questions and answers when the special education teacher is not available/accessible to the general education teacher.
7. The special education teacher should provide ongoing support to the general education teacher. The special education teacher must continue to collaborate with the general education teacher and continue to be directly involved with the student.

8. Implement ongoing monitoring to identify modifications that may be needed. As part of ongoing support, the team may reconvene to identify further modifications or assistance that may be needed to continue to ensure that the student with disabilities is successful in the general education classroom.

TRANSITION PLANNING

BENEFITS OF COMMUNITY-BASED INSTRUCTION

The information applies to students birth through 21 years of age. Information far the Fact Sheet supplied by California Deaf-Blind Services. - October 1996

Current research and results from current program implementation suggest the following outcomes may be obtained from involvement in community-based education programs and concurrent on-going classroom instruction.

Benefits to Students:

- Increase appropriate social and community behaviors, in addition to appropriate work habits (decrease of self-stimulatory, ritualistic, anti-social behaviors).
- Development of specific skills critical to the individual's independent functioning within the community.
- General increase of independence in community mobility.
- Development of age appropriate social skills necessary to complete community transactions.
- Development of skills and work habits appropriate to sheltered and/or unsheltered employment settings.

Benefits to Parents/Caregivers:

- Increased parental and caregiver commitment and involvement in program planning.
- Increased parent and caregiver responsibility in the identification of skills which a student needs to function within the home and/or community.
- General increase in parent-caregiver/school communication, cooperation and participation.

Benefits to Educational Staff:

- Increased creativity and commitment to the instructional program as a result of development of a more functionally based curriculum.
- Increased staff communications as a result of program development, coordination, and implementation.
- Projected increase in teacher motivation due to implementation of programs in a

variety of environments others than the classroom.

Benefits to the Community:

- Increased positive community awareness of realistic potential of individuals with disabilities.
- Increased partnership of the private sector by cooperatively providing instructional settings appropriate to individuals with disabilities.

QUESTIONS FOR PARENTS OF SCHOOL AGE CHILDREN IN PLANNING TRANSITIONS TO NEW TEACHERS

The information applies to students birth through 21 years of age. Information far the Fact Sheet supplied by California Deaf-Blind Services. - October 1996

1. Does the teacher have information about my child's medication needs?
2. Does the *staff* know how to recognize what is, and what is not, a medical emergency for my son or daughter?
3. Does the school have a medical release and insurance information on file?
4. Is all the staff familiar with support staff terminology (e.g., abduction, supine, etc.) that is used when discussing my child?
5. Is the school staff familiar with my child's particular positioning requirements with regards to the purpose of particular positions, equipment, proper use of and precautions, amount of time in certain positions and equipment, and what kind of activities my child can be participating during those times.
6. Is the staff familiar with how my child communicates through his/her body language? Have they created a body language dictionary for staff members and other children?
7. Is the staff aware of the signs and communication systems that my child uses at home? Are they the same signs and systems used at school?
8. Has the staff conducted any form of person centered planning (e.g., MAPS) for my child? Is that information included in my child's file?
9. How will the general education teacher receive information about my child?
10. Has the general education teacher observed by child in his or her current classroom?
11. Is the general education teacher familiar with my child's IEP goals and objectives?
12. Has the general education teacher been included in transition meetings?
13. Does the special education staff have a copy of the general education classroom schedule?
14. Has an instructional schedule matrix been developed that demonstrates where my child has an opportunity to practice his or her goals and objectives?
15. Do we, as a family, have priority goals and objectives (e.g., adaptations, modifications, etc.)? Have we discussed our priorities with the school staff?
16. Have classroom participation plans been developed for my son or daughter (e.g., adaptations, modifications, etc.)?

17. How does the staff know that my child is meeting his or her goals and objectives?
18. How, when and why do they make changes in my child's program?
19. How often does the staff communicate with me? How do they do it (e.g., daily notebook, telephone, team meeting)?
20. Does my child's team meet on a regular basis? (Note: <u>Regular</u> is a relative term and may mean once a week for some students and quarterly for other students.)
21. Does the team keep meeting minutes?
22. Does the team always leave with an <u>action plan</u>?
23. Are we always included in the team meetings?
24. Has the team developed a portfolio of information that describes my son or daughter's program (e.g., video tapes, signs used at home and school, classroom participation plan examples, meeting minutes, etc.) that can be given to new teachers and staff?

SERVICE DELIVERY CONSIDERATIONS

In May of 2000, the National Council for Accreditation of Teacher Education (BCATE) published some important goals to help revolutionize the teacher training standards within all university and college programs for prospective teachers. The special education category labeled "Deaf-blindness" is a relatively low incidence population, with students who have dual sensory (Deaf-blind) disabilities being relatively rare. Although Tennessee does not provide an endorsement in the area of Deaf-blindness, teachers of students with dual sensory impairments must be knowledgeable of the critical and multi-faceted aspects of instructing these students. Aspects to be considered include the age of onset or discovery of each disability, the degree or range of loss within each disability and the etiology of each disability. For students who have significant loss in both vision and hearing, the role of an intervener is a critical component of the child's educational program.

THE ROLE OF THE INTERVENER WITH CHILDREN WHO ARE DEAF-BLIND
The information applies to students birth through 21 years of age. Information far the Fact Sheet supplied by California Deaf-Blind Services. - October 1996

To children with a dual sensory impairment, or Deaf-blindness, the world may not exist beyond their fingertips. Although a child may have some hearing or vision, neither sense may be strong enough to compensate for the lack of the other. Without this sensory information, the child may become isolated and unable to make a connection with the world. In order to be able to understand the world that is out there, the world must be brought to them. The child with Deaf-blindness needs to be provided with strategies to interpret, understand, explore, and communicate with the world around them. All of these things will allow the child to have access to the world and eventually become more independent.

An intervener is a paraeducator who has been specifically assigned to the person with Deaf-blindness in the home, school, or community environment. The intervener should be able to facilitate the process that creates access to visual and auditory information. The intervener should have specific and intense training in Deaf-blindness, acquire a variety of specialized techniques for communication and intervention and promote independence of Deaf-blind individuals. The intervener should also be exempt from other duties of the school such as cafeteria duty and bus duty.

The intervener has a specific role as the 'eyes' and 'ears' of the child who is Deaf-blind. A key role is to provide support and to enable effective communication and the receipt of clear information for the child with Deaf-blindness. The role of the intervener is also to

help the child be as independent as possible. Interveners make it easier for individuals who have combined vision and hearing loss to get information and to interact within the environment.

In addition, there is a social and emotional component to the intervener's role. The intervener works to develop and maintain a trusting, interactive relationship that promotes social and emotional well-being.

The intervener:
1. Provides a bridge between the child and the world.
2. Interprets the world for the child in a form he can understand.
3. Provides constant non-distorted information to the child.
4. Provides information so that the child can know what is going to happen before it happens, what is happening, when it is over and what is going to happen next.
5. Provides motivation so that the child can reach out beyond himself and explore.
6. Provides enough support to the child that can be successful in a reasonable length of time. S/he also provides appropriate pacing to the activity.
7. Facilitates communication between the child and others.
8. Facilitates the child's participation in all of the routines of the class and/or home - environment.
9. Helps the child see the results of his actions.
10. Provides emotional bonding that can expand to other people.

When planning a program for a child with Deaf-blindness who will be using the services of an intervener, there are some things to consider.
1. Does the child have access to ongoing sensory information, which is needed for teaming and interaction with the environment and which is equal to that of the other learners?
2. Does the child have access to natural and least restrictive environments, the general curriculum and appropriate activities?
3. Does the current IFSP or IEP programming include the accommodations and modifications that are necessary for concept and skill development, individualized learning, appropriate activity pacing, and positive reinforcement?
4. Does the child have a communication system that allows for interaction—receptive and expressive— with parents, siblings, peers, teachers, service providers, and others? Do the people know how to interact with the individual?
5. Does the child use assistive listening devices and vision aides? Do environmental and instructional accommodations need to be made to maximize the use of residual vision and/or hearing?
6. Does the programming include strategies to support social and emotional well-being, and does the child have trusting relationships with others?
7. Does the programming ensure that the process of intervention will be in place for the child?

The definition of the intervener fully supports the definition of inclusion. The intervener provides the information needed so that the individual with Deaf-blindness has full access to the general education curriculum, as well as to his non-disabled peers.

Appendix A

Deaf-Blindness Assessment Documentation

DEAF-BLINDNESS
Assessment Documentation

School System_____   School_____   Grade_____

Student_____   Date of Birth____/_____/_____   Age____

1. One of the following has bee met:		
• Assessment documents the criteria for Deafness/Hearing Impairment and Visual Impairment have been met.	❑ Yes	❑ No
• Student has diagnosis of degenerative condition or syndrome leading to Deaf-blindness	❑ Yes	❑ No
o Student's present level of functioning is adversely affected by both hearing and vision deficits	❑ Yes	❑ No
• Student with Multiple Disabilities due to generalized central nervous system dysfunction	❑ Yes	❑ No
o Student exhibits auditory and visual impairments or deficits which are not perceptual in nature	❑ Yes	❑ No
2. Characteristics of Deaf-blindness are present and cause an adverse effect on the student's educational performance in the general education classroom or learning environment.	❑ Yes	❑ No
3. Evaluation procedures included		
▪ Procedures and eligibility standards met for Hearing Impairment/Deafness AND ▪ Procedures and eligibility standards met for Visual Impairment	❑ Yes ❑ Yes	❑ No ❑ No

When child with degenerative condition or syndrome which will lead to Deaf-blindness:
▪ Medical statement confirming existence of such a condition or syndrome:
  o Condition_____
  o Prognosis_____
  o Name of Physician_____
  o Date of report_____
	❑ Yes	❑ No

▪ Eye exam by ophthalmologist or optometrist
Report includes:
  o Etiology_____
  o Diagnosis_____
  o Prognosis_____
  o Name of physician: _____
  o Date of report: _____
	❑ Yes	❑ No

• Functional vision and media assessment	❑ Yes	❑ No
• Audiological assessment	❑ Yes	❑ No
• Documented observation of auditory functioning	❑ Yes	❑ No
• Assessment of speech and language functioning which includes mode of communication	❑ Yes	❑ No
• Assessment of developmental and academic functioning	❑ Yes	❑ No
4. There is documentation of how Deaf-blindness adversely affects the student's educational performance in the classroom or learning environment.	❑ Yes	❑ No

_____   _____/_____/_____
Signature of Other Assessment Team Member   **Date**

Deaf-Blindness Assessment Documentation

Appendix B

RELATED ARTICLES

Educational/Environmental: Modifications to Accommodate for Deaf-blindness

Medical Issues

Behavior Management Guidelines

Related Communication Articles

EDUCATIONAL/ENVIRONMENTAL:

MODIFICATIONS TO ACCOMMODATE FOR DEAF-BLINDNESS

EDUCATIONAL/ENVIRONMENTAL: MODIFICATIONS TO ACCOMMODATE FOR DEAF-BLINDNESS

Updated by TREDS (October 2001). The information included on this handout was adapted from Instructional Modifications/Supports for Deaf-Blindness developed by the Texas Education Agency.

Instruction and Assignments:

- Decrease length, reduce amount, or complete a task analysis of assignments.
- Use alternative format for assignments (tape recorder, typewriter, computer, etc.).
- Emphasize major points and provide frequent comprehension checks.
- Allow for oral response.
- Present new information in a consistent fashion.
- Provide experience-based instruction.
- Provide hands-on experiences and use manipulatives.
- Provide extra time for completing activities and assignments.
- Provide additional time to locate and attend to referent.
- Provide one-on-one instructional support when needed.
- Provide intervenor, interpreter, interpreter-tutor if necessary.
- Develop a communication foundation and adapt communication form (finger spelling, alternative signs, tactual signs, reduced sign area, coactive signing).
- Present communication form in appropriate field of vision & at appropriate distance.
- Provide specific visual adaptations to instructional environment.
- Provide specific auditory adaptations to instructional environment..
- Follow the child's lead.
- Establish balanced interactions (turn taking).
- Use age appropriate materials and activities.

Assistive Technology:

- Hearing aids / FM Systems (Auditory Trainers)
- Glasses / Low vision devices (magnifiers, monoculars, CCTV, etc.)
- Alerting devices (vibrating alarms, watches, etc.)
- Captioning (TV and Video)
- TDD, telebraille or relay services for making phone calls

- Calendar system (boxes, boards and posters - using objects, pictures or symbols)
- Easel, book stands
- Calculators
- Light box
- Augmentative Communication devices
- Computer aided real time (CART)
- Lamps or spotlights on interpreter or materials
- Intervenor, interpreter or interpreter-tutor

Materials and Environment

- Print and material size (large for poor acuity/ normal for field loss)
- Braille
- High contrast between object and it's background
- Use concrete objects
- Appropriate lighting
- Keep hallways and travel routes clear of obstacles
- Clearly define expectations and limitations
- Provide frequent breaks
- Seat student near teacher and/or activity
- Environment needs to be motivating as well as safe

Manage Behavior

- Provide supervision regarding use/maintenance of assistive listening devices and optical aids
- Prepare child prior to transition to new activity (give clear ending to the current activity, giving a symbol/cue representing the upcoming event).
- Reduce the effects of anxiety related to Deaf-blindness by: limiting the number of people, providing a predictable environment, reducing performance demands, developing instruction around preferred activities, and providing choices in activities.

EDUCATIONAL/ENVIRONMENTAL MODIFICATIONS TO ACCOMMODATE FOR VISUAL LIMITATIONS
Modified by TREDS (October 2001) and Adapted from: the INSITE Model: A Model of Home Intervention for Infant, Toddler, and Preschool Aged Multihandicapped Sensory Impaired Children, SKI*Hi Institute, 1989 and Perkins Activity and Resource Guide: A Handbook for Teachers and parents of Students with Visual and Multiple Disabilities, Perkins School for the Blind, 1992.

Materials and Environment:

- Keep hallways & travel routes clear of obstacles.

- Leave room arrangement stable so the child will know where things are, or tell/show them when things change.

- Leave doors either open or closed, not partially opened.

- Follow basic travel patterns by walking on right side of the hallway/path.

- Use a sound source as a cue for locating an important destination (wind chimes at exit of building to the playground).

- Maintain uncluttered work areas and worksheets.

- Always explain usual noises to the student who is visually impaired.

- Position student away from direct light sources (windows). Having child's back to window or direct light source may reduce glare.

- Position student close enough to visual source - alter the position of the materials to fit the individual's vision loss.

- Use correct lighting level. Some children are very sensitive to light while others require additional light to see.

- Use labels to indicate landmarks (e.g. cup attached to door leading to the cafeteria).

- Use concrete objects to illustrate activities.

- Carefully choose size of materials/print to use depending on the particular type of vision loss.

- Provide high contrast between the objects and its background.

- Use contrasting or bold black tape/markers to outline objects making them more visible to the student.

- Use raised material (e.g. puff paint, glue) to outline materials so students can feel the outline.

- Use noisy toys that can be activated by the child.

- Use a variety of textured materials to attempt to decrease tactile defensiveness.

Instruction and Assignments:

- Provide a great deal of auditory input (explanations, descriptions, directions, etc.).

- Make sure student looks at an object before receiving it if this is possible.

- Require that children utilize the vision they have.

- Children should always face the person with whom they are speaking.

- Let the child know who you are when approaching them or entering the room.

- Always inform the child when you are leaving their environment.

- Demonstrate new tasks by using hand-under-hand technique at appropriate range.

- Consider spacing (bold, well spaced letters may be easier to see than larger letters).

- Combine use of vision with other senses to provide additional cues (Guide child's fingers to feel cool liquid as the cup fills and to listen as the liquid rises).

- Offer frequent change of focus or activities so they will stay interested.

- Decrease length, reduce amount, or complete a task analysis of assignments.

- Provide extra time for completing activities and assignments.

- Use alternative format for assignments (tape recorder, typewriter, computer, etc.).

- Emphasize major points.

- Present new information in a consistent fashion.

- Provide hands-on experiences and use manipulatives.

- Provide one-on-one instruction when needed.

- Present materials in the appropriate field of vision & at appropriate distance.

- Use low vision devices that have been recommended.

- Consult with vision teacher.

- Keep interactions with the student positive. Remember, other students are watching!

Assistive Technology:
- Glasses/Low vision devices (magnifiers, monoculars, CCTV, etc)

- Lamps, spotlights, light boxes

- Calendar system (boxes, boards and posters - using objects, pictures or symbols)

EDUCATIONAL/ENVIRONMENTAL MODIFICATIONS TO ACCOMMODATE FOR HEARING LOSS

Compiled by TREDS (October, 2001) Adapted from <u>Access for All: Integrating Deaf, Hard of Hearing, and Hearing</u>
<u>Preschoolers</u>, Gallaudet University, 1992

Materials and Environment

- Seat children with hearing aids away from sources of environmental noises such as movie projectors, air conditioners, computers).
- Seat children with a hearing loss near the activity.
- Determine how close and on which side you need to be for the child to hear best.

Instruction and Assignments

- Decrease length, reduce amount or complete a task analysis of assignments.
- Provide additional time for completing activities and assignments.
- Use as many visual aids as possible.
- Have a daily routine clearly stated and followed (can use a picture chart).
- Use appropriate attention getting techniques to involve all the children such as touching children lightly on the shoulder, tapping the table or waving hands.
- Use signs and gestures to relate words to meaning.
- Have everyone's attention before making group announcements.
- Use sign language games, songs, and stories as part of the daily routine.
- Have silent time when only sign language, gestures or mime can be used.
- Use normal voice loudness when speaking (talking too loudly may hinder communication).
- Use normal rate of speech when speaking (talking too slowly may hinder communication).
- Use normal vocabulary & sentence structure when talking to child.
- Get as much information as possible from family members and previous service providers as to what the child likes and what works best with him.
- Utilize small group of individual instruction.
- Establish a mode of communication that works for that child.
- When in a group situation (greetings, calendar, music, movement, etc):
  - ✓ a circle is advantageous to good group communication;
  - ✓ make sure the child has a clear view of the speaker's face;
  - ✓ when possible, have the children raise their hands before speaking & then point to that child as a visual cue;
  - ✓ be sensitive to sudden changes in topics of conversation - you might need to cue the child who is deaf or has a hearing loss;
  - ✓ be sure to give the child enough time to answer questions since it may take a little longer to process what was heard;
  - ✓ be sure to face the child, don't talk with your face hidden by a book, with your back to the group, or with anything in your mouth;

- ✓ seat child so light is not directed in their face so they can see your face, the board, etc. (not facing a window or other bright lights (glare); and
- ✓ discuss speech concerns with the child in private, not in front of others;
- Increase the bass when listening to music to feel the beat better.
- Sign along and show pictures again after having read a page.
- Use flannel boards or puppets as visual aids to stories.
- Have small group discussions about the stories or dramatize the stories that were read to increase communication.
- Establish partners with peers when they need to work together or share materials so they become comfortable with each other.
- Respond consistently to children's questions and concerns about deaf culture and issues related to the child with a Hearing Impairment.
- Be positive toward the child, all the other children are watching your actions.

Assistive Technology
- Hearing Aids / FM System / Auditory Trainers
- Captioning (TV & Video)
- Alerting Devices
- TDD, Relay Services

MEDICAL ISSUES

AWARENESS OF MEDICAL ISSUES IN RELATION TO CHANGES IN BEHAVIOR

The information applies to students, birth through 21 years of age. Information was supplied by California Deaf-Blind Services (October 1996)

Individuals with dual sensory impairments may demonstrate behaviors that are frequently viewed as inappropriate. These behaviors can be interpreted as strange head movements, odd body postures, unexplained emotional reactions, self-stimulatory movements, noncompliance, tantrums, etc. Individuals with dual sensory impairments may be attempting to compensate for the loss of vision, hearing and/or the physical impairments which may be related to their specific disability. Many of these behaviors are caused by reactions to medical issues and/or the effects of medications needed to manage the medical issues.

These behaviors are more important if there is a change from the individual's usual behavior. The change in behavior may indicate a change in the medical condition of the individual with dual sensory impairments. Prompt medical attention should be considered to rule out medical issues as a cause in behavior.

The following charts give an overview of some medical conditions frequently associated with Deaf-blindness. The behavior should be thoroughly discussed with the personal physician to determine diagnosis and resulting medical treatment.

Topic	Components	Behavioral Signs	Questions for Physician	Evaluation	Home/Classroom Management	Emotional Reactions
VISION ISSUES	• Near and distance vision	• Holding close to face • Inattention • Squinting • Responding to near or far objects, not both	• Cause • Need for glasses	• Exam by eye specialist	• Glasses • Seating • Positioning of objects and people	• Withdrawal • Social isolation • Fear
	• Field loss	• Head turning/tilting • Task avoidance • Clumsiness • Impaired mobility	• Areas of field loss	• Exam by eye specialist	• Positioning of people and objects	• Fear • Frustration • Withdrawal • Refusal of specific activities requiring use of impaired field
	• Glaucoma	• Tantrums • Eye-poking • Head-hitting • Pain	• What is the ocular pressure	• Exam by ophthalmologist	• Eye drops • Surgery	• Anger • Confusion
	• Cataracts	• Cloudy lens • Eye-poking • Lack of visual focus • Seeking light	• Treatment	• Exam by ophthalmologist	• Surgery	• Adjustment to blindness
	• Nystagmus	• Small, rapid eye movements (horizontal or vertical)	• Cause • Treatment • Effect on visual field and focus	• Exam by ophthalmologist	• Positioning of people and objects • Allow time for processing visual information	• Frustration • Fatigue
	• Light sensitivity	• Avoiding light • Head down • Eyes closed • Crying • Pain	• Cause	• Exam by ophthalmologist	• Visor, hat • Sunglasses • Classroom lighting • Support for student as light changes when moving from one setting to another	• Fear • Discomfort • Anger

Topic	Components	Behavioral Signs	Questions for Physician	Evaluation	Home/Classroom Management	Emotional Reactions
HEARING ISSUES	• Conductive loss	• Congestion • Fingers in ears • "Not listening" • Pulling on ears • Talking too loud	• Infection • Allergies • Treatment	• Exam by physician	• Medication • Tubes • Surgery • Hearing aids	• Frustration • Paranoia • Withdrawal
	• Sensorineural loss	• "Not listening" • Not responding to particular/all sounds	• Cause • Treatment	• Exam by ear-nose-throat specialist and audiologist	• Hearing aids • Auditory training • Surgery • Augmentative communication systems	• Frustration • Confusion • Social isolation • Difficulty with self-concept
	• Allergies	• Fluctuating inattention • Congestion • Pain • Respiratory difficulties • Rashes • Sleepiness	• Sensitivities	• Exam by allergist or ear-nose-throat specialist	• Medication • Allergy shots • Environmental modifications	• Frustration • Confusion

Topic	Components	Behavioral Signs	Questions for Physician	Evaluation	Home/Classroom Management	Emotional Reactions
PHYSICAL ISSUES	• Heart/endurance	• Fatigue • Shortness of breath • Change in skin color/temperature	• Limitations	• Exam by physician	• Medications • Surgery	• Frustration • Fear
	• Asthma	• Wheezing • Tightness in chest • Fatigue • Pain	• Limitations • Cause	• Exam by physician	• Medication • Relaxation training • Environmental modification • Positioning	• Fear • Frustration • Embarrassment
	• Diabetes	• Frequent urination • Volume of urination	• Limitations	• Exam by physician and ophthalmologist	• Medication • Diet	• Frustration • Embarrassment • Full range
	• Premenstrual Syndrome	• Emotional liability • Irritability • Food cravings • Monthly behavior changes	• Diet • Vitamins • Exercise • Medication	• Exam by physician and dietician	• Diet • Vitamins • Exercise • Medications	
	• Nutrition	• Fatigue • Difficulty attending • Crying	• Diet • Vitamins • Food allergies	• Exam by physician	• Diet • Vitamins • Gastrointestinal tube	• Withdrawal • Depression
	• Psychomotor seizures	• Pattern of "tantrum" • Sleeping after "tantrum" • Lack of responsiveness during "tantrum:"	• Exam		• Medication	• Confusion • Anger

	• Medications
	  o Behavior
	  o Seizure
		• Small tremor-like movements
		• Sleepiness
			• Weighing side effects vs. benefits	• Exam by neurologist	• Close communication with physician	• Confusion
						• Frustration

	• Puberty	• Change in behavior • Change in vision • Clumsiness • Weight change • Growth pain • Odd sensations • Skin and body sensitivity	• Normal development and effects on medications	• Exam by physician; reevaluate during puberty • Exam by physician	• Laugh a lot • Counseling • Education • Peer support groups	• Confusion • Embarrassment • Anxiety • Egocentrism

Topic	Components	Behavioral Signs	Questions for Physician	Evaluation	Home/Classroom Management	Emotional Reactions
POSITIONING ISSUES	• Cerebral Palsy	• Poor regulation of movement	• Ways to inhibit reflexes	• Exam by therapist	• Positioning • Therapy	• Excitement • Fear
	• Hypotonia	• Fatigue	• Limitations	• Exam by therapist	• Positioning	
	• Dislocated hips	• Pain • Crying • Resisting movement	• Treatment • Handling • Limitations	• Exam by physicians	• Braces • Surgery • Positioning	• Fear • Discomfort
	• Scoliosis	• Curvature of spine • Pain • Crying	• Treatment and therapy advisement	• Exam by physician	• Braces • Surgery • Positioning	• Discomfort

Neurologist: evaluate cause of physical impairment, need for medical treatment or therapy

Physical/Occupational therapist: provide specific therapy *as prescribed by a physician* to increase movement (e.g., range of motion, mobility, ambulation, or specific movements/adaptive *devices* needed for vocational or independent living skills, etc.)

The information applies to students, birth through 21 years of age. Information was supplied by California Deaf-Blind Services (October 1996)

Individuals with Deaf-blindness have various medical needs that may require frequent medical appointments. These visits can be very frightening for the person receiving the medical treatment if the procedures are not expected or understood. As the individual with dual sensory impairments becomes frightened, he/she may express fear through tantrums, assaultive behavior, and/or rigid body postures that make the examination difficult. The visits can also be very frustrating for the families and care providers assisting these individuals during the examinations as they try to explain and manage the behavior expressed.

The following points are some general guidelines to promote a successful and positive experience during medical appointments. It is suggested that parents and care providers review these guidelines with the medical professionals when the appointment is made or upon arrival at the office. A copy of this fact sheet can be left with the medical staff to inform them of the needs of their patients with dual sensory impairments.

1. Call the medical office staff in advance of your visit to let them know what to expect (i.e., difficulty waiting, vocalizations, behavior challenges, etc.)
2. Bring something for the person to do during the periods of waiting at the office.
3. Bring the person's medical records to decrease the repetition of developmental history, waiting for records to be sent, and duplication of unnecessary exams. Include addresses and phone numbers of all service providers.
4. Bring information on the person's specific medical issues if the medical professionals are new or unfamiliar with the particular syndrome or condition, etc. (i.e., Congenital Rubella Syndrome, CHARGE Association, etc.)
5. Introduce each of the medical professionals to the person with Deaf-blindness before the professional touches the person. This can be done with a name sign, an object, or a distinctive scent.
6. Warm hands or instruments before touching the person with dual sensory impairments.
7. Tell the person what each procedure will be before beginning the procedure. This can be done by allowing the person to examine the equipment by touch. You can then touch the body part that will be examined by that piece of equipment. Pause for a few seconds to allow the person to prepare for the exam before it begins. You can also have the medical professional demonstrate the procedure on the family member/care provider to model appropriate responding.
8. Let the person know how the exam is proceeding. Tell the person what will happen next and what the reasons are for the particular examination.

9. Model and reward cooperative behavior, appropriate waiting, confidence, acceptance and relaxed body posture.
10. Give feedback to the medical professionals (i.e., physicians, nurses, receptionists, hygienist, etc.) regarding their interactions with the person with dual sensory impairments and the family/care provider (i.e., terminology used, bedside manner, emotional tone, willingness to work with you, etc.) This information will be very valuable for the professionals to make future interactions positive with person with Deaf-blindness.

BEHAVIOR MANAGEMENT

APPLICATION OF POSITIVE AND NEGATIVE REINFORCEMENTS
AND PUNISHMENT AND CONSEQUENCES

	(+)	**(−)**
	• Pleasant • Pleasing • Positive • Reinforcing **FEEDBACK & CONSEQUENCES**	• Unpleasant • Unhappy • Aversive • Negative • Punishing **FEEDBACK & CONSEQUENCES**

GIVE	**Positive Reinforcement**
	• Item
	• Event or
	• Activity that
	   follows the behavior
	   increases probability of behavior
	   repeating
		Type I:
		
		Punishment
		("Aversive Consequence")

TAKE AWAY	**Type II:** **Punishment** 1. Response Cost 2. Time Out ("Removal or withdrawal of reinforcement	**Negative Reinforcement** 1. Avoid—Terminate 2. Delay—Postpone

MAKING CHANGES IN ROUTINES

Adapted from Stern berg-White, S., Chen. D., Watts, J., 1992, <u>Developing Social-Emotional Skills.</u> INSITE, Utah State University, Logan, Utah The information applies to students, birth through 21 years of age. Information was supplied by California Deaf-Blind Services (October 1996)

Children with vision and hearing loss, like others, frequently resist changes in their routines. They may be frightened, angry, or refuse to participate in the new activity. To assist the child in accepting and understanding what will happen next, you can tell the child about the changes in a number of ways.

1. You can develop signals that let her know what to expect. For example, you can have the child smell food being prepared and can touch the child's hand or mouth with a spoon to let her know mealtime is coming. Be sure to do this <u>before</u> moving her to the table, so she will know why and where she is going.
2. You can have the child carry an object with her as she move to the next activity. The object should represent that new activity. S/he will then have time to think about what s/he will be doing. (See Object Communication for further strategies.)
3. Be sure to introduce new care providers or teachers to the child, so s/he knows who s/he is working or playing with at all times.
4. Be sure to let the child know when s/he going to receive medical treatment. For example, say, "The nurse will need to take some blood" while allowing the child to feel the band to be placed on her arm and a gentle poking on her arm or finger.

You cannot prepare the child for every change that might occur. Whenever possible give the child time to prepare for changes to help her feel comfortable and to develop trust.

RELATED COMMUNICATION ARTICLES

OBJECT CALENDAR
The information applies to students, birth through 21 years of age. Information was supplied by California Deaf-Blind Services (October 1996)

A sequence box can help a student who is blind or Deaf-blind learn to anticipate events and mentally sequence the day's activities. It helps the student understand such concepts as "work", "finished", "next", "more work", and move sequentially, left to right. Dr. Jan Van Dijk developed this strategy.

A sequence box can be made of wood to be more permanent; by securing small plastic tubs together side-by-side; and by attaching shoe boxes the same way. It should have at least three compartments or as many as eight. Each compartment should be 3" x 6" wide since each one will contain a representational object of each activity.

To use correctly:

1. Make a list of objects/activities and <u>always</u> use the same object for a given activity. Use something small enough for the spaces and that represents the activity or is an actual PART of the activity.
2. Before each day begins, place the objects left-to-right in the box and honor this sequence as the day progresses.
3. Ideally, have the• box on or close to the student's desk/work table in the same place or keep it by the desk and place and remove as each activity occurs.
4. At the beginning of the day, have the student feel <u>each</u> box and object left-to-right and give each a name sign. Go through <u>ALL</u> the boxes at the beginning.
5. Then go back to the first object, have the student remove it, do the activity and when finished, throw the object in a "finish box" (a carton or tub is fine) to the right of the whole sequence box. Help the student return the box, feel the empty space and move onto the next compartment with an object in it, always moving left to right.
6. If you run out of compartments for the activities you have planned daily, fill the box twice: once for the morning activities and once for the afternoon activities.
7. Try to avoid "surprise activities" or, if you know there's going to be a birthday party or a treat, have an object that represents "surprise" and put it in one of the compartments.

The sequence box and its consistent use will help you plan your teaching more effectively and enable the students to better comprehend their day-to-day world in the classroom and the school. Whenever possible, have certain events occur at the same time daily, such as lunch, gym and grooming.

You can extend this strategy to teach the concept of different days of the week by having a five compartment box eventually (and in addition to the one used to represent the whole day). In each of these compartments (which stand for Monday - Friday) place an

object that represents an activity you do every Monday (i.e., the library), every Tuesday (i.e., cooking class), every Wednesday (i.e., swimming), etc., and pair the object with the day. You could use a Braille library card, and apron and a hand towel to represent the examples given. On Monday, at the beginning of the week, again have the student feel each compartment and sign the day and the activity sign as the student touches the object. Then, have the student remove the first object and you then place it in the compartment of the daily activities box. It will then get thrown in the "finish box" when finished. On Tuesday, have the student first <u>use</u> the M-F box, feel the first empty space and, moving left to right, find the "Tuesday" compartment and remove and use the object as described for Tuesday. You can even select an object that represents no school or vacation days: be creative and consistent.

The information applies to students, birth through 21 years of age. Information was supplied by California Deaf-Blind Services (October 1996)

Many students with vision and hearing loss need a variety of communication systems for their different needs and settings. Using objects for communication is a form which is easily understood by most listeners in both new and familiar situations. This system may also be used with sign language and/or speech to make sure the listener clearly understands their message.

The purpose for using object communication is to provide students with dual sensory impairments with an alternative form of communication. Objects are used to represent activities, places, and people. Examples of these objects include: textures (e.g., piece of carpet, blanket, wood, and plastic), miniatures, pieces of the real object, and objects that are exactly the same as those being used. The student uses these objects for getting information about the activities, people, and places around him, making choices, and/or telling others his message.

Points to Remember

1. Students, families, and professionals need to work together to choose the objects which will have the most meaning for the student's needs.
2. The number of objects used to represent the student's daily activities can be increased over time. When the student understands that the objects represent something that is about to happen, additional objects can be added.
3. The use of objects can begin with the purpose of giving the student information about activities, people, and places. Later a few objects can be shown to the student to see which activity, person and place the student prefers. The choice can be made by a hand movement, or facial expression (i.e., if the student throws one object on the floor and allows one to stay in front of him, he may be telling you he is choosing the object on the table).
4. Students should be encouraged to speak and/or sign in addition to using the objects if they have those skills.
5. Objects can be used with students in a number of different ways. Daily calendar boxes, portable systems, or both.

Procedure for Calendar Boxes

1. Objects are put into the boxes before the student comes to school, in order of the day's activities.
2. The student is taken to the boxes and looks at or feels all the objects in the boxes. The adult labels each object or activity with speech or sign as the student examines it. If the student does not like objects to touch his hands, then the object can be

placed on another part of the student's body (e.g., elbow or shoulder) that may not be as sensitive to touch.

3. After examining each object in sequence, the student returns to take the object out of the first box and goes to that activity with the object.
4. At the place of the activity, the student matches the object to the activity. S/he will see or feel how that object always is a part of that activity (e.g., spoon during lunch, blanket during nap time, ball during P. E., etc.). As the object and activity always happen together, the student will begin to expect the activity when the object is in his hand.
5. As the activity ends, the student returns to the calendar box and puts the object in a separate "finished" box or puts the object back into the original box and covers it. The adult labels this box, object or activity verbally or by sign as "finished".
6. Move to the next box and repeat the same procedure.

Portable Object Systems For Use In The Community

Objects can be used in the same way described when the student is going out into the community. The student can easily use a purse, hip pack, or backpack in place of the boxes when a portable system is needed.

Appendix C

RESOURCES AND REFERENCES

RESOURCES

American Association of the Deaf-Blind (AADB)
814 Thayer Ave, Ste 302
Silver Spring, MD 20910
TTY: (301) 588-6545
Fax: (301) 588-8705
http://www.tr.wou.edu/dblink/aadb.htm
aadb@erols.com

AADB is a national consumer advocacy organization that promotes better opportunities and services for Deaf-blind people.

DB-LINK: National Information Clearinghouse on Children Who Are Deaf-Blind
Teaching Research
Western Oregon University
345 N. Monmouth Ave.
Monmouth, OR 97361
(800) 438-9376
TTY: (800) 854-7013
Fax: (503) 838-8150
http://www.tr.wou.edu/dblink
dblink@tr.wou.edu

DB-LINK is a federally funded information and referral service that collects, develops, and distributes information to help improve the education and lives of children and youth who are Deaf-blind.

Helen Keller National Center For Deaf-Blind Youths And Adults (HKNC)
111 Middle Neck Road
Sands Point, NY 11050-1299
(516)944-8900
Fax: 516-944-7302,
TTY: 516/944-8637
http://www.helenkeller.org/national

HKNC is a national program that provides evaluation, short-term comprehensive vocational rehabilitation training, work experience training and assistance to Deaf-blind clients for job and residential placements.

Hilton/Perkins Program - Perkins School for the Blind
175 N. Beacon Street
Watertown, MA 02172
(617) 972-7220
Fax: (617) 923-8076
http://www.perkins.pvt.k12.ma.us
collinsm@perkins.pvt.k12.ma.us

Hilton/Perkins program provides consultation, training and technical assistance to programs throughout the nation and in developing countries. Emphasis is on program development for multi-handicapped blind and Deaf-blind infants, toddlers and school-aged children.

National Family Association for Deaf-Blind (NFADB)
111 Middle Neck Road
Sands Point, NY 11050
(800) 255-0411 x275
http://www.cpd.usu.edu/nfadb
nfadb@aol.com

NFADB is a national network of families who focus on issues surrounding Deaf-blindness. NFADB advocates for all persons who are Deaf-blind, supports national policy to benefit people who are Deaf-blind, and encourages the founding and strengthening of family organizations in each state.

National Technical Assistance Consortium For Children And Young Adults Who Are Deaf-Blind [NTAC]
Teaching Research
Western Oregon University
345 N. Monmouth Ave
Monmouth, OR 97361
(503) 838-8096
Fax: (503) 838-8150
TTY: (503) 838-9623
http://www.tr.wou.edu/ntac
ntac@wou.edu

NTAC is a consortium for the provision of technical assistance to families and agencies serving children and young adults who are Deaf-blind. The primary mission of NTAC is to assist states in improving the quality of services for individuals (birth to age 28) who are Deaf-blind.

Tennessee School for the Blind
115 Stewarts Ferry Pike
Nashville, TN 37214
Voice (615) 231-7300
Fax (615) 871-9312
Contact information: http://www.state.tn.us/education/speced/

Tennessee School for the Deaf
725 Island Home Blvd.
Knoxville, TN 37920
Voice (865) 594-6022
Fax (865) 579-2484
Contact information: http://www.state.tn.us/education/speced/

Tennessee Technical Assistance and Resources for Enhancing Deaf-blind
Supports
(Project TREDS)
Box 328, Peabody College at Vanderbilt University
Nashville, TN 37203-5701
Voice (615) 322-8279 or (800) 288-2266
TTY/Voice: (615) 322-8280
Fax: (615) 343-1570
http://www.vanderbilt.edu/kennedy/treds/

A federally funded program that provides technical assistance for individuals, from birth through age twenty-one, who have both vision and Hearing Impairments. This program is designed to improve the quality of supports to infants, toddlers, children, and young adults who are Deaf-blind.

U.S. Department Of Education Office Of Special Education Programs Division Of
Research To Practice Projects For Children Who Are Deaf-Blind
Charles Freeman
Switzer Bldg., Rm. 4613
330 C Street SW
Washington, DC 20202-2734
(202) 205-8165
Fax: (202) 205-8971
TTY: (202) 205-9172 -D8170
http://www.ed.gov/offices/OSERS/OSEP

The Office of Special Education Programs supports projects to improve and enhance services that are provided by state and local education agencies to children and youth who are Deaf-blind. This is done through a program of grant awards that address technical assistance, research, development, pre-service and in-service training, and parental involvement activities

West Tennessee School for the Deaf
100 Berry Hill Drive,
Jackson, TN 38301
Voice (731) 423-5705
Fax (731) 423-6470
Contact information: http://www.state.tn.us/education/speced/

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Baldwin, V. (1994). Annual Deaf-Blind Census. Monmouth: Teaching Research Division.

Robbins, N. (1963). Educational beginnings with Deaf-blind children. (Perkins Publication #21). (Available from Perkins School for the Blind, Watertown, MA 02172).

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Watson, D., & Taff-Watson, M. (Eds.), (1993). Second edition. A Model Service Delivery System for Persons who are Deaf-Blind. Arkansas: University of Arkansas

Wolff Heller, K. & Kennedy, C. (1994). Etiologies and Characteristics of Deaf-Blindness. Monmouth: Teaching Research Publications.

Yarnall, G. D. Teaching Deaf-blind children over 30 years ago. (Manuscript to be submitted for publication consideration.) Spring, 2002.

Appendix D

TENNESSEE TECHNICAL ASSISTANCE AND RESOURCES FOR ENHANCING DEAF-BLIND SUPPORTS

(PROJECT TREDS)

REPORTING INFORMATION

What is Project TREDS?

TREDS, Tennessee **T**echnical Assistance and **R**esources for **E**nhancing **D**eaf-blind **S**upports, is a federally funded program that provides technical assistance for individuals, from birth through age twenty-one, who have both vision and Hearing Impairments. This program is designed to improve the quality of supports to infants, toddlers, children, and young adults who are Deaf-blind. Project TREDS equips families, educators and other professionals with the knowledge and skills needed to improve individual outcomes. The goals for the project focus on:

- promoting positive systems change for the provision of appropriate services at the state and regional levels
- building local capacity to provide or expand appropriate services for children and young adults who are Deaf-blind
- providing technical assistance to families, caregivers, teachers and other related support providers who impact the lives of children and young adults who are Deaf-blind

This project supports the philosophy of inclusion of the individual in educational, work and community environments.

What is Deaf-blindness?

Deaf-blindness consists of a loss in the areas of both vision and hearing. Losses in these areas may range from mild limitations to total blindness and profound Deafness. The combination of these two sensory losses, whether mild or severe, may qualify the individual as Deaf-blind.

Who is Eligible?

Individuals who have been diagnosed as deaf and blind
Individuals who have mild to severe vision and Hearing Impairments which require adaptations or modifications
Individuals who have a diagnosis that places them at risk for developing vision and Hearing Impairments
Individuals with Multiple Disabilities who may demonstrate inconclusive responses during evaluations or in the natural environment

Who Benefits from
Project TREDS Services?

Individuals who have a vision and Hearing Impairment
Parents and family members
Educational personnel
Personnel from state and community agencies
Healthcare professionals
Other care providers

What Ages are Served?

Birth through age 21

What are Project TREDS Activities?

Individual, onsite observations and technical assistance
Family support activities
Consultation
Workshops / conferences
In-service training
Assistance in identification
Resource library
Maintenance of Deaf-blind Census

Need additional information? call or write:

STAFF

TREDS
Box 328, Peabody College
Vanderbilt University
Nashville, TN 37203-5701
Voice (615) 322-8279 or (800) 288-2266
TTY/Voice: (615) 322-8280
Fax: (615) 343-1570
Web: www.vanderbilt.edu/kennedy/treds

Learning Opportunities
(Project TREDS)

Our "in-service" training opportunities exist in a variety of formats though most all include attendee participation to some level whether it be discussion or actual participation in activities. Please review the following descriptions and see if any of the information might be useful to your team.

General Topics:

Deaf-blind Overview
Deaf-blind Simulations & Environmental Modifications
Development of Vision
Development of Hearing
Incorporating Functional IEP Goals into Daily Activities
Communication
Calendar Systems
Assistive Technology
Personal Futures Planning
Transition

Deaf-blind Overview: (3 hours)

Working with students who have the combination of vision AND hearing loss, are diagnosed as "multi-disabled" or have significant impairments and don't appear to use their vision and hearing functionally takes specialized skills in areas where most families and professionals don't receive information. This training familiarizes participants with what "Deaf-blindness" really means and provides specific information on Deaf-blindness as well as how to work with students who have Deaf-blindness or Multiple Disabilities. Participants have an opportunity to engage in activities depicting everyday events while having a simulated vision and hearing loss. The session concludes with a discussion around the challenges faced during the simulated activities and modifications that can be made to the child's educational program and environments in order to increase independence.

Deaf-blind Simulations & Environmental Modifications (2 hours)

This training consists of participants engaging in activities depicting everyday events while having a simulated vision and hearing loss. The discussion following focuses on challenges faced during the simulations and addresses modifications that can be made to the child's educational program and environments in order to increase independence.

Typical Development of Vision (2 hours)
If children are to get the maximum benefit out of time spent in their environment, family members and professionals who interact with them should have a basic understanding of vision development and issues around vision loss. This training provides information on the typical development of vision, signs to look for that might indicate a problem, anatomy of the eye and common types of vision loss. Participants have the opportunity to engage in an activity using simulation goggles that can depict a variety of different types of vision losses. A discussion follows focusing on the challenges faced during the activity and modifications that can be made to the child's educational program and environments

Typical Development of Hearing (2 hours)
If children are to get the maximum benefit out of time spent in their environment, family members and professionals who interact with them should have a basic understanding of hearing development and issues around hearing loss. This training uses an "Unfair Hearing Test" for participants to experience different levels of hearing losses. The training provides information on the differences between the different labels of hearing loss (e.g. hard of hearing, Hearing Impaired, and Deafness), typical development of hearing, signs to look for which might indicate a problem, anatomy of the ear, types and degrees of loss, hearing aids/FM systems and cochlear implants. Participants discuss the possible challenges faced by individuals who have a hearing loss as well as modifications that can be made to the child's educational program and environment.

Incorporating Quality IEP Goals into Daily Activities (2 hours)
Writing quality IEP goals is only the beginning! In order for us to expect children to make gains in the areas we have targeted, the skills must be imbedding into everyday activities so they make sense to the child and have meaning. This training will target what it takes to make a quality IEP and how to then incorporate those goals and objectives into the everyday activities that occur throughout the child's day.

Communication (2 hours)
Regardless of a child's cognitive, visual, auditory and/or physical limitations, all children communicate! We as adults must to learn how to interpret these particular forms of communication and help the children expand their communicative audience. This training provides information on a variety of different communication modes that may be used with students who have multiple impairments and/or Deaf-blindness. Participants will be introduced to a sampling of these alternative forms which include, but aren't limited to object cues, touch cues, gestures, sign language, cued speech, tactual signing, calendar systems, and low tech devices. Isn't it time we all learned to communicate with one another?

Calendar Systems (2 hours)

Students with Deaf-blindness often rely on various forms of communication. Vocalizations, gestures, pictures and objects are only a few forms that can be combined to make up their communication system. Calendar systems are used to give order and representation to activities, places and people with whom the student interacts. This training provides an understanding of what a calendar system is, who can benefit from using one, and how it can be designed and implemented in your home or classroom.

Assistive Technology (2 hours)

All students should have the opportunity to play and work together. Assistive technology may be the key you've been looking for to open the gate to more meaningful relationships. This training explores a variety of devices that are available for individuals with various limitations. Devices range from simple touch activated switches to more complex communication devices. The training also provides information on ways in which the devices can be incorporated into daily life. Research tells us that students need not demonstrate skills even as basic as cause and effect in order to access these devices. So what are we waiting for?

Person Futures Planning (3 hours)

In accordance with IDEA, IEP goals and objectives must incorporate a student's preferences and interests as well as his/her needs. Person centered planning (PCP) is a valuable tool for helping individuals set goals based on their dreams, strengths, interests and support needs and to develop strategies to achieve these goals. Person centered planning is also an important vehicle for teachers when creating goals and objectives that are meaningful, functional and educationally relevant to the individual with disabilities and his/her family. This presentation briefly describes the person-centered process and leads a team through the PCP process for an individual with Deaf-blindness.

Transition (3 hours)

Transition from school to post-school is a very traumatic time for students with Deaf-blindness and their families. This presentation is directed at providing professionals and families with a basic understanding of transition. Topics that are addressed include: developing transition plans that are legal, functional and meaningful, establishing effective transition teams, and providing relevant contact and resource information. An emphasis is placed on inclusion into the community and utilizes basic principles of self-determination, normalization, and interdependence.