Psycho-educational Assessment Practices with Students who have Vision Losses

Frequently Asked Questions

By Laura Stein Douglas, Ph. D. Director of Outreach Services, Colorado School for the Deaf and the Blind with comments and input by members of the Colorado Department of Education’s Vision Coalition Committee

This information is intended for the use of school-based teams who are developing an educational assessment plan for students who have vision losses. For detailed information related to any of these topics and others regarding assessment practices with students who have vision losses, the book Making Evaluation Meaningful: Determining Additional Eligibilities and Appropriate Instructional Strategies for Blind and Visually Impaired Students by Marnee Loftin from the Texas School for the Blind and Visually Impaired is highly recommended.

General Assessment Considerations:

1. What has changed in recent years related to appropriate assessment practices with students who have vision loss?

   The world of assessment over the past 10 years has shifted from a diagnostic focus on eligibility determination for special education services to a standards-based approach that emphasizes data collection related to decision-making regarding whether or not students with disabilities have learned the same content knowledge (standards) as their non-disabled peers. This evolution in expectations can be viewed as a good thing as current laws require general educators to have high standards for learning results for ALL students.

   However, this change has resulted in highly increased expectations regarding the pace of acquisition of information and the retention of information. One “downside” of this change in focus is many students who have multiple disabilities may not be provided the intensity of direct instruction in the Expanded Core Curriculum (ECC) areas that are determined to be best practice by the National Agenda for the Education of Children and Youth with Visual Impairments, including those with multiple disabilities. Daily living skills instruction may go to the bottom of the priority list and instruction in algebraic equations may go to the top of the list of learning priorities regardless of the needs of the child as delineated on the student’s Individual Education Plan (IEP).

   The onset of the Response to Intervention (RTI) approach to identify students and monitor progress has also caused confusion among many educators related to the identification of students who have vision loss and the data collection process. Diagnostic assessment practices have been determined to be a lower priority in using assessment time. The historical practice of repeatedly administrating the same diagnostic assessment tools did not add much, if anything, to the ability of the classroom teacher to design appropriate instruction for a student with a disability.
The task of 21st Century assessment team members is to become proficient in designing assessment plans that are individualized to answer questions unique to a student’s learning needs and to lessen the repetition of administering the same assessments year after year that yield little classroom-based information.

2. How should an assessment plan be developed?

For a student with a vision loss, the eligibility guidelines provided by the Colorado Department of Education’s Exceptional Children’s Education Act (ECEA) should be followed.

Assessments that occur at the triennial timeline should focus on the current needs of the student. For a child with a vision loss, questions should be developed to address 1) continued eligibility, 2) progress toward meeting academic standards, and 3) accommodations and modifications to allow the child to access the general education curriculum. Additionally, if the student is suspected of having a disability other than vision loss, the assessment plan should include assessment strategies that will assist in making a decision about the presence or absence of another disability.

The classroom teacher, the teacher of students with visual-impairments (TVI), the certified orientation and mobility specialist (COMS), the building-based special education teacher and the parents should be the “core” of the team in developing questions to be addressed in the assessment plan. Additional team members such as the audiologist and paraprofessional will need to be added to the “core” assessment team depending on the questions needing to be answered.

A list of questions for developing the assessment plan may include:

1. Is the student making academic gains comparable to those of their sighted peers?
2. If not, what are the barriers to the student making comparable progress? Is the student’s rate of learning slower? Does the student retain information presented in class at the same rate as his/her classmates?
3. What accommodations and modifications are needed in the classroom setting to allow the student to access the curriculum?
4. Is there an additional disability that is hampering progress?
5. What interventions are available to the student that can assist the student in acquiring or retaining information at an increased rate?
6. Are there factors such as attendance or attention that are interfering with learning?
7. How much time does the student require to gain the quantity of information presented to his/her peers?
8. Does the student need training in the use of assistive technology that can assist the student in accessing information?
9. Is the student’s learning media plan being followed? And, is the student being taught in his/her preferred or recommended learning media?

What are some general guiding principles to keep in mind when assessing children with vision impairment or blindness? (By Wendy Stoltman, TVI, Brighton Schools)
• Growth and development of children with VI is more alike than different from that of children without disabilities. Consider the functional implications of the eye condition, age of onset and amount of early intervention.

• The more severe the vision disability, the more concept development is affected. Be sure to use authentic tasks, not just verbal tasks, as some children with visual impairments have memorized answers but cannot actually demonstrate understanding of concepts.

• Ninety percent (90%) of what one learns is through incidental learning – learning by looking and then imitating. The more severe the vision disability, the more directly concepts must be taught.

• As a team, gather information about which senses the child uses to learn about the environment and about new information.

• Consider the psychosocial impact of the child’s vision loss. Does he/she view himself as sighted, blind or neither? Is the vision loss progressive?

• Allow the child to adjust testing materials so the child is using the correct focal distance. Children with low vision will take longer to scan a page because of their close viewing distance. Consult with your TVI to see if the child needs or uses low vision aids, accommodations for glare, extra light, large print or braille for testing.

Cognitive Assessments:
1. What are the major barriers to conducting a valid and reliable cognitive assessment for students who have a vision loss?

   One of the major barriers to a valid and reliable assessment in any area is the continuing lack of diagnostic assessment tools that have included students with vision loss in the standardization sample. This means assessment staff are almost always comparing the student with a vision loss to the performance of his/her sighted peers. For professionals conducting the assessments who are not familiar with the need for extended visual or auditory processing time, the student’s approach to a task may seem like a cognitive delay rather than the result of the vision loss and the time it takes for the brain to attempt to process the information that is being presented.

   Other than the lack of appropriately standardized assessment tools, the lack of awareness of the impact of the vision loss on a student’s processing speed, posture, confidence, and conceptual knowledge may lead the person administering the assessment to believe the student has delayed cognitive skills when that may not, indeed, be the case.

2. What are the best tools to use to conduct a cognitive assessment?

   Until there are tools that have a strong standardization sample of students with vision loss, using the auditory subtests of a cognitive assessment battery instead of those requiring vision may continue to yield the best estimate of cognitive ability with supplemental information provided by the TVI, the parent and others knowledgeable about the abilities of the student. Decisions should not be made with a cognitive/IQ test being the sole data source and certainly not with an IQ score being the sole indicator of verbal or nonverbal reasoning and problem-solving skills.
The Oregon Project for Preschool Children Who are Blind or Visually Impaired, Skills Inventory, Sixth Edition is a good tool to use with children functioning between birth and 4 years of age. This checklist includes skills in cognition, fine motor, vision, compensatory skills and indicates which developmental skills may be delayed for a child who is blind.

3. How should the results of an assessment be interpreted?

Results of a standardized cognitive assessment or IQ test should be interpreted with extreme caution as to the validity of the results. University training programs, however, teach rigid adherence to standardized administration of diagnostic tests. This training with a lack of information about appropriate accommodations for students who have vision loss lends itself to school psychologists tending to administer a whole battery of subtests without a good understanding of the impact of the vision loss on the speed and accuracy of responses. A major component of a cognitive assessment is typically the speed and accuracy with which a student responds to a test item. Not understanding the impact of the vision loss contributes to the school psychologist believing the results have yielded a cognitive delay instead of the delays that result from not being able to see clearly.

4. What knowledge and experience qualifies a professional to conduct a cognitive assessment with a child who has a vision loss?

An individual conducting a cognitive assessment should have a strong university training background in administering standardized and informal cognitive assessments, interpreting assessment results, and should have met professional standards for having been supervised in conducting those assessments. Those individuals are typically trained in psychology and licensed in that field.

In addition to the training in psychological assessment practices, any individual conducting a cognitive assessment on a child who has a vision loss should, at a minimum, have read the current literature about assessment approaches with students who have vision loss and should have talked to the TVI working with the student to understand how the student best “inputs” information. Any typical accommodations the student uses in an assessment situation should be discussed prior to the assessment session. Then, a follow-up conversation with the TVI to discuss the assessment results and any questions that arose from the assessment session is helpful in interpreting the data. University preservice training in administering psychological assessment batteries typically does not address considerations in assessing students with vision loss in any depth, so the discussions with the TVI are critical.

5. What are acceptable accommodations for a student with a vision loss when being assessed cognitively?

Accommodations that a student uses in his or her classes to access print should be allowed in an assessment setting. The use of miniature objects to allow a student to touch something represented in an assessment is not an acceptable accommodation.

The most appropriate accommodations are leaving out subtests that are visually biased and using those that are less biased to make some qualitative statements. Using a quantitative result or IQ score should be viewed with extreme caution as to whether the information accurately represents a child’s functioning levels. Best practices would dictate using specific descriptive information
about a child’s demonstrated abilities rather than using an IQ score in reporting the results of an assessment. This is especially true for assessments of young children. Additional data obtained through observations, interviews with teachers and parents, a review of records and a review of work samples composes a body of evidence that may much more accurately reflect the functioning of the child with a vision loss than quantitative descriptors.

6. How do you determine if a student who has a vision loss also qualifies as a student who is gifted?

School district eligibility guidelines for students to qualify for enrichment activities typically allow a decision to be made through a review of a body of evidence. This body of evidence may include cognitive test results, academic achievement results, work samples, teacher recommendations and qualitative information about a student’s rate of acquisition and retention of information.

A student who has a vision loss may need the body of evidence to contain more “alternative” data than the traditional cognitive test results. The issue of visual processing speed and the timed nature of IQ tests may significantly hamper a student’s test results simply due to the amount of time the student needs to visually access the test stimuli. A student who demonstrates a rate of acquisition and retention of information that significantly exceeds that of his typical peers certainly indicates a need for enrichment support.

A district’s guidelines for students to qualify as a child who needs enrichment should be flexible as it relates to a standardized IQ measure as a primary data source for a child with a vision loss since the test may have items that are visually biased. The child’s functioning level on standardized IQ measures is most likely an underestimation of his/her true abilities.

7. How do you determine if a student who has a vision loss also qualifies as a student with a learning disability or a cognitive delay?

The same cautions mentioned above apply to these situations. The Response to Intervention (RTI) model used in schools now provides a much stronger body of evidence related to a child with a vision loss also having an additional learning disability than the historical discrepancy model used to make this decision. There will most likely be a discrepancy between the cognitive test results and academic test results particularly with examiners who are not familiar with assessing a child with a vision loss.

With the RTI model, all of the student’s teachers can collect academic data over time to have a more reliable understanding of whether a child’s vision loss is the primary impact on learning or whether there is an additional learning disability compounding the child’s rate of learning and retention. This model of making a determination of the presence of a learning disability allows a team of persons, especially the TVI to review achievement gains over time and eliminates the “one shot” IQ – academic test model of the past. The RTI process should be much more favorable to good decision-making than the old IQ – achievement discrepancy model for a child with a vision loss.

The presence of a cognitive delay can also be determined by the educational team, including the input of the TVI as it relates to how much repetition and review it takes for a child with a vision loss to acquire concepts. The TVI has a background in working with students who have a vision loss impacting their learning when other staff in the child’s educational environment do not have that comparative knowledge. Again, a body of evidence showing a child’s vision loss has been accommodated and the rate of acquisition and retention is significantly below that of “average” peers is a good data source.
The child’s ability to use daily living skills and other adaptive skills must be assessed as well as the child’s developmental history. It is critical that the TVI be part of this discussion as developmental milestones may also be significantly delayed in a young child due to the impact of a significant vision loss.

8. How do you conduct a valid and reliable assessment to determine the cognitive ability of a student with deafblindness?

It is reasonable to say that there are no valid and reliable standardized assessments to be used with students who have a significant vision and significant hearing loss. Therefore, the persons conducting an assessment of a child who has a dual sensory loss must have experience working with this population of students to be credible in making a decision of whether a child with deafblindness also has a cognitive delay. It is also reasonable to say that most students with dual sensory losses will appear to have a cognitive delay when traditional assessment practices are utilized.

The assessment of a child with dual sensory losses should be conducted by a team of individuals who have a strong background in working with either or both of the sensory losses to be able to make this, mostly, subjective judgment. The focus of the decision-making should be on how many repetitions of information it takes for a child with dual sensory losses to acquire that information when both losses have been accommodated. Factors such as when the losses were identified and when intervention was begun as well as how significant are the losses are critical elements that will impact a child’s brain function in becoming aware of, attending to, understanding and remembering information.

9. How do you report the results of an assessment of a student who has a vision loss or deafblindness?

In a school setting, an assessment report is written to assist parents, teachers and other educational support staff in understanding how to best teach a child and how to best intervene with behaviors that might be interfering with learning.

The results of the assessments should be reported with caution as to the reliability of the results unless the data being reported is primarily observational and not standardized test results. Watching a student through their daily routine and in their school and home environments will offer service providers their best understanding of a child’s instructional and behavioral needs. It is recommended that an IQ score is not reported due to the degree of visual bias typically in test items in traditional IQ tests. There is also significant language bias in traditional verbal subtests, so both verbal and nonverbal subtests pose extreme barriers to gaining accurate information about the cognitive functioning of a child with dual sensory losses.

When reporting results, all accommodations or alterations to a standardized or informal assessment session should be reported so those reading and interpreting the results will understand under what conditions the results were obtained. If the standardized tests were not timed when they are typically timed, the reader should know that the student’s performance was obtained under an untimed situation. If the student used a magnifier or a braille transcription to read a vocabulary list, the reader should know that as well.

Social-Emotional Assessments:

1. How do you assess whether a child who is blind/visually impaired also has a psychiatric disorder such as posttraumatic stress disorder or an anxiety disorder?
With typical children, the assessment of these psychiatric disorders is determined through observational rating scales, medical and developmental histories. Children who have a vision loss may demonstrate behaviors that are associated with anxiety such as rocking or shaking their hands. The question becomes a judgment of the intensity, duration and frequency of the behaviors and how much the behaviors interfere with the student’s ability to function in their daily lives.

Whether it is a child who is sighted or a child who has a vision loss, the psychiatrist who will presumably make a decision about the need for medication for these disorders will make that determination on the degree to which the behaviors of concern negatively impact the child’s ability to successfully carry out the activities in their daily routines.

In a school setting, a medical/DSM diagnosis is not required for a student to receive some support related to social-emotional or behavioral concerns. Identifying behaviors that may be interfering with learning to enable the school-based team to develop a behavior intervention plan is the goal of the school-based assessment and not primarily identifying a label that would be the goal of a clinically-based assessment.

The Colorado Department of Education’s Exceptional Children’s Education Act requires the identification of behaviors over a marked period of time that are observable in two or more settings that significantly impact academic or social development as the requirement to identify a student as having a “significant identifiable emotional disability”. The lack of an educational disability eligibility qualification in this social emotional area does not typically prohibit a student from receiving some social emotional support in most school districts in Colorado.

2. How do you develop an appropriate assessment plan for a student who has a vision loss who also demonstrates social or emotional concerns?

Within the school setting, the individuals involved with the development of the assessment plan need to observe the child in their daily environments. Data sources such as medical and developmental histories and observational rating scales are important, but will not provide the wealth of information that watching a child in their home and school environments will offer. Having the observations of several team members who see the context of the behaviors will help the team determine what is “working for” the child as Dr. Phil would put it.

A functional behavioral assessment with data collected by a variety of individuals can be the best approach to assessing a child with social or emotional concerns and determining what interventions are most likely to be effective in addressing the behaviors.

3. How do you determine if a child who has a vision loss also has an autism spectrum disorder?

In the same manner as described above, a determination about whether a child is exhibiting behaviors indicative of an autism spectrum disorder should be made after an autism rating scale is completed as well as a functional behavioral assessment. The triad of behaviors related to an autism spectrum disorder: disturbances of communication, ritualistic behaviors, and difficulty in developing appropriate social interactions may be demonstrated by a child who is not able to effectively visually access his/her environment.

The difference in these behaviors related to vision loss and those related to an autism spectrum disorder will be in the intensity, duration and frequency of the behaviors as well as the child’s reactions to attempts to intervene with the behavior. A child with a vision loss who does not
demonstrate social interaction skills will often quickly learn those skills when taught. A child who might be viewed as having an autism spectrum disorder might be much more resistant to interventions aimed at increasing his/her ability to initiate and respond to social interactions.

4. What information does a report need to include for a student who will need to access the general education curriculum?

A helpful report of cognitive or social, behavioral or emotional functioning will include observable information that will guide a parent, a teacher and others working with the child in recognizing when a behavior is occurring. In addition, practical recommendations for developing an instructional plan or a behavior plan will be welcomed.

A report that is largely “psycho-babble” or jargon may be written in a manner that the university professor required, but will not be useful to a classroom teacher or parent in planning strategies that will help a child be successful in school or at home.

References:

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