

## **MODULE OVERVIEW**

### **Module: Visual Conditions and Functional Vision: Early Intervention Issues**

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#### **Visual Conditions and Functional Vision: Overview**

Families and other members of the early intervention team typically view early childhood vision consultants (ECVCs) and orientation and mobility specialists (OMSs) as experts on issues related to visual conditions that impact development and learning. In addition, team members expect ECVCs and OMSs to be knowledgeable about the implications of visual conditions, including how the visual condition impacts children's functioning in daily routines and activity settings. Consequently, ECVCs and OMSs must continuously seek out accurate and current information about the most prevalent visual conditions in young children with visual impairments. Furthermore, ECVCs must know how to access information and resources about relatively rare visual conditions. ECVCs and OMSs must also be able to work collaboratively with eye care professionals, families, and other early intervention team members to conduct functional vision and developmentally appropriate learning media assessments and to use the results of these assessments to plan and implement intervention that will facilitate the child's optimal use of vision and other senses in the context of natural learning opportunities and daily routines.

Information from the fields of pediatric ophthalmology, visual impairments, early intervention, and developmental psychology has been synthesized in these sessions of this module that are listed below. The objectives for each of the sessions are then provided as a framework for understanding the organization of this entire module, *Visual Conditions and Functional Vision: Early Intervention Issues*.

Before we meet again in August, participants are expected to work through the following three sessions. On August 15 and 16, 2007, we will examine in more depth the process of completing a Functional Sensory Assessment and using assessment results in intervention programming. Before then the three sessions of this distance education module contain:

Session 1: Working With Families and Eye Care Professionals

Session 2: Visual Capacity

Session 3: Visual Conditions in Infants and Toddlers

#### **Session 1 Objectives**

*After the completion of Session 1, participants will*

1. compare and contrast the roles of different eye care professionals.
2. describe the components of an eye care examination and information families should expect to receive following the exam.
3. describe strategies that teachers of young children with visual impairments use to support families who seek to understand their child's visual diagnoses.

4. discuss factors such as learning styles, language, and cultural barriers that affect families' abilities to access and understand information and describe strategies for providing support to overcome these barriers.
5. describe strategies for facilitating interactions and communication between eye care specialists and families.
6. describe the role of early childhood vision consultants (ECVCs) when working with eye care specialists and other professionals using the transdisciplinary model.

### **Session 2 Objectives**

*After the completion of Session 2, participants will*

1. discuss the importance of vision for typical development.
2. describe typical visual development prenatally, at birth, and during the first two years of life.
3. describe how prematurity and atypical development of particular ocular structures may result in particular visual disorders that may limit visual capacity and result in atypical visual development.
4. describe physiological and environmental variables that may affect the child's visual function.

### **Session 3 Objectives**

*After the completion of Session 3, participants will*

1. identify the most prevalent visual conditions found in young children with severe visual impairments in Canada and the United States and how they differ from those found in adults.
2. identify the three most prevalent eye conditions—cortical visual impairment, retinopathy of prematurity, and optic nerve hypoplasia—in young children with visual impairments. Describe the causes and characteristics of each condition as well as the implications for early development and intervention.
3. discuss the causes, characteristics, and implications of the following visual conditions: structural abnormalities—anophthalmia, microphthalmia, coloboma; albinism; retinal disorders such as retinoblastoma and Leber's congenital amaurosis; congenital cataracts; and delayed visual maturation.
4. describe the characteristics of and implications of the following conditions that may occur as primary or secondary diagnoses—strabismus, amblyopia, glaucoma, and nystagmus.

NOTE: The following two session objectives and content from this module will be examined at our training session in August, 2007.

### **Session 4 Objectives**

*After the completion of Session 4, participants will*

1. describe the rationale and purposes for the functional sensory assessments (FSA) for young children with visual impairments.
2. describe the step-by-step process of conducting an FSA with a young child.
3. explain how caregivers and other team members (e.g., physical therapist, nutritionist) contribute valuable information to the FSA process.
4. identify and describe formal tests that can be utilized as part of the FSA process.
5. identify and describe informal tests that can be utilized as part of the FSA process.
6. describe developmental and environmental issues that can impact interpretation of FSA results.
7. recognize that the results of the clinical eye exam, FSA, and developmental assessments are the basis for developing a comprehensive intervention plan.
8. summarize the results of the FSA and developmental assessments in a professional, family-friendly report.

### ***Session 5 Objectives***

After completing this session, participants will

1. recognize that intervention planning for young children with visual impairments should be based upon results from the functional sensory assessment and developmental assessment; family concerns, resources, and priorities; and assessment results from multiple disciplines.
2. identify developmentally appropriate and functional interventions within the child's natural environment that facilitate the development of visual skills.
3. describe the relationship between postural stability and optimal use of vision, and describe the use of positioning to facilitate the use of vision and other senses.
4. identify environmental modifications that promote young children's optimal use of vision and other senses within the context of daily routines and naturally occurring activity settings.
5. describe the use of cues and prompts as an intervention strategy that may promote optimal sensory use for children with visual impairments.
6. describe the ECVC's role in supporting the use of corrective lenses with children with visual impairments.
7. describe the relevance of a patching (penalization) program and strategies to support young children in adapting to penalization.
8. identify strategies that support efficient use of vision in children with cortical visual impairments.