Chapter 11 Learners with Blindness or Low Vision

Educ 206
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Anatomy of the Eye
Definition and Classification

• Legally blind – Visual acuity 20/200 or less or vision less than 20 degrees

• Low Vision – visual acuity between 20/70 and 20/200 with correction

• Educational definition – can not function regularly in the classroom.
Adaptations to Educating the blind or visually impaired

- Braille – a system of raised dots that people who are blind read with their fingertips.

- Aural methods – audiotapes and records

- Large print books
Prevalence

• Primarily an adult disability

• .05% of six to seventeen

• One of least prevalent disabilities
Measurement of Visual Ability

• Snellen Chart – measures visual acuity

• Visual Efficiency – the ability to control eye movements and use visual information quickly and accurately

• Functional Vision Assessment – child is observed during daily activities
Causes

- Refraction – the bending of light as it passes through the structures of the eye
  - Myopia (nearsightedness)
  - Hyperopia (farsightedness)
  - Astigmatism (blurred vision)

- Usually can be corrected by glasses or contacts
Eye diseases

- Glaucoma – group of eye diseases that cause damage to the optic nerve
- Cataracts - clouding of the lens of the eye resulting in blurred vision
- Diabetic retinopathy – caused by diabetes, it results from interference with the blood supply to the retina
Primary causes affecting children

- Cortical visual impairment – leading cause of visual impairment, damage to parts of the brain from injury or infection.
- Retinitis Pigmentosa – tunnel vision and night blindness
- Retinopathy of prematurity (ROP) – abnormal growth of blood vessels in the eye.
- Strabismus – one or both eyes are directed inward (crossed eyes) or outward
- Nystagmus – rapid involuntary movements of the eye that cause sizzliness and nausea.
Psychological and Behavioral Characteristics

• Language Development
  – Not impaired by blindness
  – Language is main channel of communication

• Orientation and Mobility – sense of where one is in relation to the surroundings
  – Cognitive mapping – nonsequential way of conceptualizing the spatial environment
  – Obstacle sense – skill possessed by some, where they can detect the presence of obstacles in the environment

• Social Interactions
  – Miss visual cues
  – Society is uncomfortable with blindness
Educational Considerations

• Braille

• Use of remaining sight

• Listening skills

• Orientation and mobility skills
  – Long cane
  – Guide dogs
  – Tactile maps
  – Human guides
Early Intervention

• Should be Intensive and Early

• Focus on parent’s interaction with child and child’s disability