Learners with Blindness or Low Vision
Legal Definition

- Legally Blind
  - Visual acuity of 20/200 or less in the better eye even with correction (e.g. eyeglasses)
  - Width of the field of vision is not greater than 20 degrees

- Low Vision
  - Visual acuity following between 20/70 and 20/200 in the better eye with correction
Educational Definition

- Who has difficulty accomplishing visual tasks, even with prescribed corrective lenses, but who can enhance his or her ability to accomplish these tasks with the use of compensatory visual strategies, low vision or other devices, and environmental modifications (Corn & Koenig, 1996, p. 4).
Educational Definition

- It is the preferred definition.
  - Visual acuity is not a very accurate predictor to determine how people will function with the sight they have.
  - Only a small percentage of those who are legally blind have no vision, while majority can see to some degree.

- Beliefs
  - Stresses method of reading instruction.
  - Individuals who are blind must learn to read Braille or use audio methods.
  - Those with low vision can benefit from using Braille.
Serious Impairments (Congenital)

- Glaucoma
  - “sneak thief of sight”

Cataracts
- clouding of the lens

Diabetic retinopathy-interface from blood supply to retina

Cortical visual impairment-( results from infection, stroke, etc.)
Problems affecting Children

- Visual impairments are due to prenatal causes and heredity
- Retinitis pigmentosa-tunnel vision and night blindness
- (prenatal)-syphilis and rubella
- Retinopathy of prematurity-is found in premature infants-less now

Strabismus-condition in which eyes are directed inward or outward
  *problem-can cause blindness
Nystagmus-condition in which eyes move involuntary resulting in dizziness
  *can be a sign of brain malfunction
Most common are errors of REFRACTION (bending of light rays as passing through the eye).

**Myopia** - nearsightedness
- eyeball too long, cannot see things farther away

**Hyperopia** - farsightedness
- eyeball too short, cannot see things close up

**Astigmatism** - blurred vision
- cornea or lens of the eye is irregular
Braille

- What is it?
  -- Quadrangular containing from 1 to 6 dots.
  -- Dots represent letters, numbers, and even punctuation marks.
  -- Best method for reading Braille is to use both hands.

- Braille Codes
  - Literary Braille—use in everyday situations
  - Nemeth Braille—use for mathematical and scientific symbols.

- Ways to write Braille
  - Perkins Brailler - It has 6 keys, 1 for each dot of the cell, which leave an embossed print on the paper.
  -- Slate and Stylus – Paper is held in a slate while a stylus is pressed through openings to make indentations on paper.
Perkins Brailler

Slate and Stylus

5/11/09
In 2003 32 states passed a bill to make Braille more available for students with visual impairments.

2 Important components:
1. Braille must be available for students if any members of the IEP team, including parents, indicate that it is needed.
2. Teachers of students with visual impairment need to be proficient and Braille.
Accommodations

- Mobility
  - Long Cane
  - Guide Dogs
  - Tactile Maps
  - Human Guides

- Technological
  -- Kurzweil 1000
  -- Braille Notetakers
  -- Screen Readers (Zoom Text)
1. Do you see what I smell?

1. Pirate Toss
Resources

www.disabilityresource.vic.edu/viewer.asp

Foundation of Exception Learners An Introduction to Special Education

5/11/09