Insights into Visual Impairments
• WAC 392-172A-01035
• Child with a disability or student eligible for special education.
• (n) Visual impairment including blindness means an impairment in vision that, even with correction, adversely affects a student's educational performance. The term includes both partial sight and blindness.
Statutory blindness is blindness as defined in sections 216(i)(1) and 1614(a)(2) of the Social Security Act (the Act). The Act defines blindness as visual acuity of 20/200 or less in the better eye with the use of a correcting lens. We use your best-corrected visual acuity for distance in the better eye when we determine if this definition is met. The Act also provides that an eye that has a visual field limitation such that the widest diameter of the visual field subtends an angle no greater than 20 degrees is considered as having visual acuity of 20/200 or less.

http://www.ssa.gov/disability/professionals/bluebook/2.00-SpecialSensesandSpeech-Adult.htm
Characteristics of Visual Impairments

• **Partially Sighted**: A visual impairment that adversely affects a student's educational performance even when corrected to the extent possible.

• **Low Vision**: If someone's vision is between 20/70-20/160 and cannot be corrected, the student has moderate to low vision.

• **Legally Blind**: From 20/200-20/400 is legally blind with severe low vision. From 20/400-20/1000 is profound visual impairment, and is very close to total blindness.

• **Totally Blind**: The lack of light perception is known as total blindness or total visual impairment.
Common Eye Conditions

• **Amblyopia**
  Amblyopia is also known as lazy eye. Children with a lazy eye may or may not be perceptible. Sometimes a lazy eye visibly turns in or out, but sometimes there is no outward sign. Amblyopia causes the eye to have reduced acuity due to the poor positioning of the eye and weak muscles. The treatment is commonly a patch over the normal eye that makes the lazy eye work harder. Surgical corrections are also common.

• **Nystagmus**
  Nystagmus is a condition in which there is involuntary and rhythmic movement or oscillation of the eye. It is often caused by an underlying ocular or neurological disorder.
• This condition is common in children who were premature babies that required high concentrations of oxygen at birth.

• Scarring and detachment of the retina can result from this condition.
• **Strabismus**
  In this condition, both eyes are unable to gaze at an object at the same time. Strabismus is caused by a muscle imbalance.

• **Retinitis Pigmentosa**
  This is a degenerative condition that is inherited. Retinitis pigmentosa results in a loss of peripheral vision, and eventually the student is left with a severe visual impairment.
• **Optic Nerve Hypoplasia**
  Optic nerve hypoplasia (ONH) refers to small or underdevelopment of the nerve which transmits vision signals from the eye to the brain.

• **Septo-optic Dysplasia**
  Septo-optic dysplasia (SOD) is a rare, congenital disorder. Findings include optic nerve hypoplasia with a thin or absent septum pellucidum and/or corpus callosum and pituitary dysfunction. Optic nerve hypoplasia is mandatory for the diagnosis of SOD.
Cortical visual impairment is not a problem with the eye itself, but with the visual cortex area of the brain. These children may also have other developmental delays or cerebral palsy. Vision may change throughout the day, depending on the health, mood of the child, or the environment.
Teachers of Students With Visual Impairments
TVI
Roles and Responsibilities

• Direct Teaching
• Consultation to school staff, parents, students
• Preparing/acquiring/adapting/materials
• Assessment
• Administrative and record-keeping tasks
• Liaison between the school and community organizations and resources
Orientation and Mobility

• “Orientation" is knowing where you are.
• “Mobility" is the ability to get where you want to go.
• The ultimate goal of O&M instruction is for visually impaired persons to be able to travel in any environment as independently as possible.
• To reach this goal, O&M instruction must begin at the earliest possible age. Not limited to totally blind but include infants and preschool children, children with multiple impairments, and children with low vision.
Certified Orientation & Mobility Specialist
COMS
Roles and Responsibilities

• Assessment
• Service Delivery
  – Direct
  – Integrated (team approach)
  – Consultation
• In-Service Education
• Family Education
• Public Education
Assessment to Instruction Continuum

Eligibility for Children with Visual Impairments

I. Medical Diagnosis of Visual Impairment
II. Functional Vision Assessment (FVA)  
   Learning Media Assessment (LMA), including a reading inventory
III. Team Determination of Eligibility based on Educational Needs and impact of identified visual impairment
Program Planning
Expanded Core Curriculum

The Existing Core Curriculum

• English language arts, other languages, to the extent possible
• mathematics science
• health, physical education
• fine arts
• social studies
• economics, business education
• vocational education
• history

The Expanded Core Curriculum

• compensatory or functional academic skills, including communication modes
• orientation and mobility
• social interaction skills
• independent living skills
• recreation and leisure skills
• career education
• use of assistive technology
• visual efficiency skills
### Instructional Needs

- Identify skill set needed to meet IEP goals
- Curriculum & Instruction- identify or develop needed curriculum
- Evaluation
Technology

- Braille Embosser - braille printer
- Braille Translation Software
- Braille Notetaker
- CCTV (Closed Circuit Television)
- Large Print Printers/Copiers
- OCR (Optical Character Recognition)
- Refreshable Braille Display
- Screen Magnification Software
- Screen Reading Software or Text to Speech
Major Challenges

- Recruiting qualified staff- TVI, COMS, Paraeducators with braille certification
- Supervising Qualified Staff
- Developing Appropriate Materials-equipment and technology
- Creating appropriate understanding and awareness among general education staff