The common term “blind” may refer to anything from total lack of visual response, to legal blindness using a legal definition, or even “functional blindness”, an educational term denoting reliance on a tactual reading medium, and frequently cane assisted travel.

There are several misunderstandings about the development and education of blind children. The development of blind children generally differs from that of children with normal vision. In fact, blindness can impact all areas of early development, in particular, feeding, language, motor, and social skills. Unlike the popular notion that blind children have better hearing and tactual skills, many blind children have some degree of central auditory dysfunction and are tactual aversive.

Nonetheless, blind children generally attend their local schools and are included in general education classrooms, with itinerant support from a teacher of the visually impaired. Education for children functioning as blind begins at birth through the ECI (Early Childhood Intervention) programs with assistance from the local school districts.

It is essential that blind children get assistance as early as possible to help their families successfully negotiate the roadblocks blindness can create to normal development.

Low Vision Children

Children who have a serious visual loss, but some useful vision, also experience impediments to vision and require educational intervention through the same systems as blind children. Visual impairment has a dual definition—medical and functional. Children with a “serious visual loss after correction” will qualify and require educational services if that loss interferes with optimal educational and developmental learning. The loss may impact development in ways similar to the impact on blind children, with varying degrees of severity, however it still may require intervention, since these children may be seen as seeing normally, and the impact of the vision impairment underestimated.
**Motor**

Vision may impact motor development in the ways listed below:

- Delayed reach
- Poor rotation and protection, weight shifting and weight bearing
- Poor proprioceptive and kinesthetic feedback
- Blocking the trunk/neck/hips, gravity prone or earthbound resistance to position change
- Hitching, tripod-ing, bear walking, rather than crawling and thus insufficient radial input for fine pincer grasp
- Perseverative motor behavior

**Language and Cognition**

Vision is 90% of one’s information about the world and 100% of the relational meaning. Hearing and touch are both temporary and sequential and can only partially compensate for the absent information. Unless children receive systematic meaningful exposure and teaching of the content of the world, the semantic base for meaning is impoverished. Children with visual impairment may not learn the pragmatic rules for interacting; they may not develop initiation and maintenance of communication, or requesting, instead they often compensate by acquiring rote “scripts” and echolalic language.

Cognition may be limited with the development of early schemas stuck at mouthing and banging and shaking, rather than moving on to multiple representational play schemas and novel generative language. There may be minimal abstraction and generalization, with “blindisms” such as light gazing blocking more meaningful participation in the world.

**Self-Help Skills**

Fairy-godmothering or doing parts of an activity for a child so the child neither “owns” the activity, nor experiences doing the complete activity, leaves the child with visual impairment dependent on others in areas such as dressing, grooming, and feeding. In addition, the normal protective biological reaction of rejecting unknown substances can result in the children limiting themselves to a narrow set menu. The natural inclination to not place undue demands on the children, rather than communicating normal expectations, can lead to not attempting toilet training and other independence skills.
Social Skills

The absence of gaze can interfere with bonding; the later entrenchment of blindisms, echolalia and perseverative behavior may interfere with the development of social skills, normal play, and peer interaction. The reluctance of children to venture into the unseen or poorly seen realms of new environments and activities, may further impede social competence.

Education

To optimize the developmental functioning of young children with visual impairment, systematic instruction, as well as helping the family understand their child’s learning differences, are required. The teacher of the visually impaired provides a detailed Learning Media Assessment which may include: sensory channel indicator, functional vision evaluation, learning media assessment and inventory, readiness for literacy media assessment, literacy media assessment, functional or dual literacy media assessment. The teacher may also recommend a low vision clinic evaluation or an assistive technology evaluation. This information, required by law, is used to develop a course of action to prepare the child to achieve success in school, and later in the broader fields of vocation and recreation.

An individual program with specific objectives is developed first with the family, and later with the school to support the child in finding the detours around the roadblocks placed by poor or minimal vision. These services are provided at no cost to any child who qualifies as visually impaired. Birth to two the children are served by a combination of ECI and school district services, and starting at age three, in the school district where the child resides.

Reading and Travel

Reading is the core of all education and a variety of options are available for the visually impaired child.

These include large print and Braille, optical devices ranging from magnifiers and monoculars through a broad range of electronic magnification devices, auditory materials, as well as various combinations. So a child might use Braille for some reading, for which tactual reading is more efficient, and large print or enlarged print, for other applications. Children with multiple impairments may learn some functional reading in print or Braille, or use another tactual symbol system. In addition there is a broad range of technology both for Braille and print.

Similarly, a child may be able to travel visually, with a cane or pre-cane device, or using a combination of both depending on the situation.

The preparation for literacy begins at birth with language and building a base for meaning, reading with the baby from an early age with many different kinds of literacy experiences, good visual and tactual play and training, and exposure to a print and Braille rich environment. Orientation and Mobility, or training for independent travel, likewise begins at birth with purposeful movement in the environment and tool use.
As an educator or health care professional, you can help our young children with visual impairments by learning and understanding how they learn and develop, assisting them in obtaining appropriate supportive services, and most important, believing in their ability to contribute to the great adventure of life!

Further Information

http://www.aph.org/ Materials and equipment
http://www.afb.org/ Materials and information
http://www.nbp.org/ Braille materials
http://www.seedlings.org/Braille books
http://www.tsbvi.edu/ Texas state services and materials
http://www.hadley.edu/ Free courses for students, courses for families and professionals
http://www.nationaldb.org/ Deaf-blind information
http://ohiodeafblind.org/resources/products.cfm  Materials and information
http://www.blindchildrenscenter.org/ Materials for parents
http://www.perkins.org/ Materials and information