Western Pennsylvania School for Blind Children (WPSBC)

“WPSBC’s mission is to be a leading educational facility and outreach provider. WPSBC offers a full range of exceptional individualized special education services fostering maximum independence for students with visual impairment.”

WPSBC is an educational facility committed to teaching students who are visually impaired with severe concomitant disabilities. WPSBC also provides early intervention and outreach services to visually impaired students, with or without additional challenges, throughout western Pennsylvania.

Did you know?

• The majority of WPSBC’s students also have cognitive and ambulatory challenges and the school’s facility and programming are tailored for boys and girls who require distinct educational and supportive services.

• WPSBC approximately has 175 enrolled students annually from 242 school districts within western Pennsylvania. Students may enroll at age two and they can continue until 21.

• WPSBC staff focus on helping students use their “residual” vision to the best of their ability. The curriculum emphasizes the acquisition of life skills.

Blind & Vision Rehabilitation Services of Pittsburgh (BVRSP)

“We believe that every person with vision loss and hearing loss can be taught to use their other senses and the vision that remains to live independently and with confidence. We believe that every blind person can learn adaptive techniques and develop new skills so they may live independently.”

BVRSP is a private, nonprofit, United Way agency that believes in independence through rehabilitation. For over 100 years, BVRS of Pittsburgh has worked with people who are blind, deafblind or vision impaired to become independent.

Did you know?

• Many of the BVRSP instructors are are blind or vision impaired themselves.

• BVRSP programs include: Personal Adjustment to Blindness Training; Vocation and Employment Services; Low Vision Services; State-of-the-Art Computer Access Technology Center; Summer Youth Programs; Services for Seniors; Preschool Vision Screening; In-Home Instruction; Community Services; Day Programs for People with Disabilities.

• BVRSP also offers vocational and employment services, a low vision rehabilitation program, and employment.
These are some of the clues sighted people use to navigate...

Sighted people can rely on signs and maps to orient themselves and obtain information about potential danger in their environment. Imagine if you could not see that the path in front of you was icy, or if you couldn’t see where to turn in a train station...

Orientation and Mobility specialists train visually impaired people to navigate independently.

Less complex skills of human guide and various other indoor safety skills and techniques (such as hand trailing a wall) are introduced first.

More advanced complex outdoor skills and techniques are then introduced.

Even the most adept travelers have a need for indoor and/or outdoor familiarization services from an O&M specialist.
Visually Impaired Technology Use

Examples of assistive navigation technologies

- Mobile phones ranging from conventional phones to smart phones
- GPS devices
- Google Maps
- Sendero (LookAround)
- Ariadne
- Around Me
- BlindSquare
- mp3 players
- Mobile Speak screen reader
- Barcode readers
- “Pen Friend” for labeling
- A scanner with optical character recognition (OCR) technology
- A braille printer (“Braille Embosser”)
- Text-To-Speech (TTS) technologies
- A personal digital assistant (PDA) called “Freedom Scientific” with a braille display
- Headphones to avoid interference with TTS applications in loud environments

Barriers that preclude adopting new assistive technologies

- High Cost
- Blocking other sense
- Lack of standardization across navigation applications
- Large size of devices, which render them less portable
- Poor user interfaces
- Unfavorable weather conditions

Technology preferences

<table>
<thead>
<tr>
<th>Likes</th>
<th>Dislikes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Speech capabilities</td>
<td>Too many levels of instruction in menus</td>
</tr>
<tr>
<td>Windows-like features/menus</td>
<td>Any features relying on sight</td>
</tr>
<tr>
<td>Shortcuts</td>
<td>Difficult keyboards</td>
</tr>
<tr>
<td>LookAround and Localization features</td>
<td>Short battery life</td>
</tr>
</tbody>
</table>

Preferred technology input modalities

- Speech/Voice
- Tactile Buttons
- Touch Screens/Gestures
- Screen Reader

Preferred technology output

- Audio
- Vibration/Audio
- Vibration/Audio/Braille

Technology training

- The need for technology training varies greatly depending on the individual and device in question. Some use personal training or assistance with new technologies, the majority do not.
- For learning complex technologies, it could take several days to weeks or longer. Simpler technologies could be learned in less than a day. New technologies are learned most rapidly when the directions and layout are clear and intuitive, and there is access to braille instructions.