

**Part III:** 

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**Trainer's Guide  
Suggested Training Activities**

After the group has completed Parts I and II of the case study, one or more of the following questions and follow-up activities could be used to discuss the accommodation and the process involved in greater depth. Part III is designed for trainers and normally would not be given out to participants. Part III usually works best as a total group discussion, ranging from a few minutes up to 10-15 minutes. Questions or activities are typically followed by information to assist in supplementing participant discussion. Trainers are encouraged to add other questions to focus discussion on specific learning objectives and local or state issues.

**Compare functional capacities/limitations to essential functions of the job.**

**In this case the date of disability preceded the enactment of the American's with Disabilities Act. (ADA) Discuss how the rehabilitation process may have differed after the ADA was passed.**

**Wachovia was exceptionally responsive to hiring an employee with a significant disability. What are some strategies for gaining this level of cooperation with an employer who is not initially open to this level of intervention?**

- One strategy to discuss is building communication and confidence with an employer by initially seeking placement of employees requiring more limited AT and work site adjustment. After the relationship is more solid, a counselor can introduce potential employees with greater needs.)

**What are some other options to consider as the functional limitations of a consumer progress and screen magnification alone is no longer sufficient?**

- *Optical character recognition (OCR) technology offers blind and visually impaired persons the capacity to scan printed text and then speak it back in synthetic speech or save it to a computer. Little technology exists to interpret graphics such as line art, photographs, and graphs into a medium easily accessible to blind and visually impaired persons. It also is not yet possible to convert handwriting into an accessible medium.*

*There are three essential elements to OCR technology—scanning, recognition, and reading text. Initially, a camera scans a printed document. OCR software then converts the images into recognized characters and words. The synthesizer in the OCR system then speaks the recognized text. Finally, the information is stored in an electronic form, either in a personal computer (PC) or the memory of the OCR system itself.*

*All OCR systems create temporary files containing the texts' characters and page layout. In some OCR's these temporary files can be converted into formats*

*retrievable by commonly used computer software such as word processors and spreadsheet and database software. The blind or visually impaired user can access the scanned text by using adaptive technology devices that magnify the computer screen or provide speech or Braille output.*

*Current generation OCR systems provide very good accuracy and formatting capabilities at prices that are up to ten times lower than a few years ago. If an individual has a pc and the screen access equipment, the price range for a pc-based OCR system is \$2,000-\$3,000. Self-contained OCR systems and those that come bundled with a pc are in the \$4,800-\$5,500 range.*

**There are three elements to OCR technology, as noted above. What are synthetic speech systems and how do they work?**

- *A synthetic speech system is composed of two parts: the synthesizer that does the speaking and the screen reader that tells the synthesizer what to say. The synthesizers used with PC's are text-to-speech systems. Their programming includes all the phonemes and grammatical rules of a language. This allows them to pronounce words correctly, although names and compound words can cause problems, as they often contain unusual spellings and letter combinations.*

*The synthesizer can be a card that is inserted into the computer, a box attached to the computer by a cable, or software that works with the computer's sound card. Some synthetic speech sounds robotic, although some can sound almost human. Prices range from approximately \$150 to \$1,300.*

*The speech program is loaded into the computer's memory. Commands are sent to the synthesizer by (1) pressing different key combinations on the computer keyboard; (2) pressing keys on a separate keypad; or (3) automatically when changes occur on the computer screen. These commands instruct the synthesizer to read a word, line or full screen of text. Different key combinations give the commands to spell a word, find a string of text on the screen, announce the location of the PC cursor or focused item and so on.*

*There are screen programs available currently for use with the PC running DOS, Windows 95, Windows 98 and Windows NT. Each incorporates a different command structure and most support a variety of speech synthesizers. Prices range from approximately \$400 to \$1500.*

An excellent list of resources for other magnification systems for the computer screen, OCR technology and synthetic speech systems is found on the American Foundation for the Blind website, at [http: www.AFB.org](http://www.AFB.org).

