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Terminology

- ÿ **Speech Recognition (SR):** Sometimes referred to as “voice recognition,” software that translates speech into text or allows a user to control an application using voice commands.
 - o **Continuous Speech Recognition:** As opposed to *discrete speech recognition* that requires users to speak one word at a time, continuous recognition allows users to speak, more or less, naturally. In addition to learning vocabulary, it develops a profile of the user’s grammar and word usage.
- ÿ **Speech Synthesis Technologies (TSS):** Software that produces computer generated speech from text.

Related Resources

- ÿ **Computing Out Loud** - <http://www.out-loud.com/>
An independent site for users of speech recognition software with helpful information about products and implementation. Includes an excellent comparison between Dragon Naturally Speaking and ViaVoice features.
- ÿ **Liberated Learning Project** - <http://www.liberatedlearning.com/>
Ongoing project since 1998 using speech recognition software to perform real-time transcription of lectures in college classrooms.
- ÿ **LD Online** - http://www.ldonline.org/ld_indepth/technology/technology.html
Comprehensive website for Assistive Technology professionals. Includes product reviews and evaluations, interviews with experts in the field, implementation information as well as a wide array of related links and resources.
- ÿ **Microsoft Speech Technology** - <http://www.microsoft.com/speech/>
An overview of Microsoft’s speech technologies initiative including current products, R&D strategies, links to partner sites, implementation information and documentation.
- ÿ **Moore: Speech Recognition Next Hurdle, But a Long Time Away**, David Berlind, ZDNet Tech Update, 7/10/2002 - <http://techupdate.zdnet.com/techupdate/stories/main/0,14179,2873890,00.html>
- ÿ **Speaking to Write: Realizing the Potential of Speech Recognition for Secondary Students with Disabilities** – <http://www.edc.org/spk2wrt/index.html>
Funded by the U.S. Department of Education and National Institute on Disability and Rehabilitation Research (NIDRR) this site offers research on the use of speech recognition software in secondary schools (including results from a decade long study), practical guidelines for planning and implementation as well as resources for further investigation. Specific documentation is provided for DragonDictate, the earlier version of the software employing discrete recognition technology.
- ÿ **Teaching Machines to Hear Your Prose and Your Pain**, Anne Eisenberg, NY Times, 8/1/2002 - <http://www.speech.sri.com/press/nyt-aug01-2002.html>

Software Applications

- ÿ **Speech Recognition**
 - o **Dragon Naturally Speaking 6, ScanSoft** - <http://www.dragonsys.com/naturallyspeaking/>
 - o **ViaVoice 10, IBM** - <http://www-3.ibm.com/software/speech/desktop/w10.html>
 - o **Office XP, Microsoft** – <http://www.microsoft.com/speech/>
 - o **Apple Computer Speech Recognition and Speech Synthesis Technologies** - <http://www.apple.com/macOS/speech/>
 - o **Soliloquy Learning** – <http://www.soliloquylearning.com>
Recently released educational software employing speech recognition to develop young reader’s fluency. May be used to support guided reading programs, intervention support and ESL. Incorporates teacher management and student progress tracking tools.
 - o **Companion, Talking Desktop** – <http://www.talkingdesktop.com>
Innovative tool providing speech recognition, text to speech synthesis and remote control features.
- ÿ **Text-to-Speech**

- o **Aurora 3.05** – <http://www.aurora-systems.com>
Aurora for Windows is speech synthesis software designed to help people with learning disabilities and dyslexia write and spell better. It also helps people with physical disabilities communicate with the people around them. Includes Aurora Prediction, Echo, Talk and Realvoice.
- o **Kurzweil 3000** - http://www.kurzweiledu.com/products_k3000win_features.asp
Kurzweil 3000 is a software application that reads aloud, visually indicates the text being read, and employs a number of advanced techniques for making the material accessible to people with reading related disabilities.
- o **Mac PlainTalk** - <http://www.apple.com/macos/speech/>
Part of the Mac Easy Access suite of tools and taking advantage of Apple Computer's speech synthesis technology engine, this feature offers talking alerts in 26 different languages. Requires additional software add-ons for more than limited functionality.
- o **Microsoft 2000/XP Narrator** - <http://www.microsoft.com/speech/>
Accessibility tools included in the operating systems. Offer very limited text to speech for systems setup and alerts. Not viable as a solution for users with visual impairments. Add on products would be required.
- o **Write: OutLoud** - <http://www.donjohnston.com/catalog/catalog.htm>
An easy to use talking word processor.

Hardware and Peripherals

- ÿ **EmKay's Wireless RF Microphone** - \$229
Emkay's RF Wireless Headset is a single channel, full duplex system, with a transmit range greater than 20 feet The RF utilizes Emkay's high quality Noise Canceling Electret Microphone - the industry's top-rated microphone element - allowing it to be used in the noisiest of environments and still deliver maximum performance.
- ÿ **Phillips Speech Microphone Pro USB** - \$300
The SpeechMike Pro USB combines a professional dictation microphone, loudspeaker and a trackball mouse into a single ergonomic housing. Building on Philips Speech Processing's' 40 years of experience in Dictation, the unique SpeechMike Pro USB has been designed specifically for the latest speech related applications for PC's such as speech recognition and digital dictation.
- ÿ **Plantronics SR-100X Monaural Speech Recognition Headset** - \$19.95
Inexpensive analog headset that satisfies the bare minimum requirements for speech recognition. Recommended by Microsoft for XP.
- ÿ **Plantronics DSP100 Digitally Enhanced USB Headset** - \$69.00
Middle priced digital headset that is designed for speech recognition. USB digital input allows for improved recognition and reduces background noise.
- ÿ **Sony Digital Voice Recorder ICD-MS515** - \$329
The Sony Portable Digital Recorder records all dictation on small, compact, high capacity, and reusable MemoryStick media cards up to 256Mb. Approximately 3 hrs of voice can be stored on included 8Mb memory stick. USB connector for plug and play to VR applications.