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## reSearch

*A collection of research reviews on rehabilitation topics from NARIC and other information resources.*

### Electronic and Information Technology Access

In this edition of reSearch we explore the topic of the electronic and information technology access. Interest in this topic began with Information Specialists exploring Section 508 of the Rehabilitation Act of 1973. Section 508 was added to the Rehabilitation Act in 1986 and “requires that electronic and information technology developed, procured, maintained, or used by the Federal government be accessible to people with disabilities” (2007, p. 1). In 1998, President Bill Clinton signed the Workforce Investment Act of 1998 expanding and strengthening the technology access requirements put forth in Section 508 (2007, p. 1). Section 508 only applies to Federal departments and agencies and does not include the regulation and enforcement of electronic and information technologies within the private sector. However, the ADA and state laws may be applied to state and private entities.

What is electronic and information technology? The definition from Clinger-Cohen Act of 1996 states “information technology to include any equipment or interconnected system or subsystem of equipment, that is used in the automatic acquisition; storage; manipulation; management; movement; control; display; switching; interchange; transmission; or reception of data or information” (2007, p. 3). Examples include: computer hardware, software, networks, peripherals, and many of the electronic and communication devices used in offices and in the community; and also includes “stand-alone” systems such as information kiosks (2007, p. 3).

This edition of reSearch provides a “snapshot” of research on these types of, and access to, electronic and information technologies over a 10 year period. The Internet and World Wide Web are often covered when researching electronic information technologies. However, little focus is paid to other electronic information technologies such as “stand-alone” systems.

Therefore, research on the Internet and World Wide Web electronic information technologies is excluded. Combined search terms included: Accessible Software/Television, Assistive Technology, Audio Accessibility, Compliance, Electronic and Information Technology Access, Electronic Information Access, Equipment, Information Kiosks/Machines, Information Technology, Section 508, Telecommunication, and Video Accessibility. A listing of approximately 57 additional descriptor terms between the NARIC, ERIC, and PubMed databases can be found at the end of this document.

A search of the REHABDATA database resulted in 71 documents published between 1998 and 2009. The ERIC database resulted in 11 documents between 1998 and 2008. Finally, PubMed database search resulted in 2 documents from 2004 and 2009. The number of PubMed citations would have been higher if not for the duplicate search results of the other databases. The complete citations are included in this research brief.

Citation: (2007). Assistive Technology Partners. **Section 508 information technology access**. Retrieved from <http://www.uchsc.edu/atp/files/Section%20508%20Information%20Technology%20Access.pdf>.

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**NIDRR Funded Projects  
Related to Electronic and Information  
Technology Access**

In addition to document searches, we searched our NIDRR Program Database to locate grantees/projects related to electronic and information technology access. The search resulted in 21 NIDRR funded projects — 9 currently open and 12 which have completed their research activities. Project information and their publications are offered as additional resources for our patrons.

**ADL Access: A Cognitively Accessible Software Application for Augmented Self-Management of Activities of Daily Living**

Project Number: H133S090138

Phone: 541/342-3763

Email: [tkeating@eugeneresearch.org](mailto:tkeating@eugeneresearch.org)

**Caption Accuracy Metrics Development Project**

Project Number: H133G080093

Phone: 617/300-3431

<http://ncam.wgbh.org>

**The Captioned Braille Radio Initiative: Providing Emergency Information for Individuals who are Deaf-Blind**

Project Number: H133G090139

Phone: 202/513-2484

<http://www.nprlabs.org>

**Captioning Solutions for Handheld Media and Mobile Devices Development**

Project Number: H133G070122

Phone: 617/300-3700

<http://www.wgbh.org/ncam>

**Development of a Global Access Information Navigation (GAIN) for Persons Who Are Blind or Have Low Vision**

Project Number: H133S090026

Phone: 530/757-6800

Email: [mikemay@senderogroup.com](mailto:mikemay@senderogroup.com)

**Information Technology for Independence: Community-Based Research**

Project Number: H133A021916

Phone: 412/383-6649

<http://www.pitt.edu/~curbcut>

**Rehabilitation Engineering Research Center for Universal Interface and Information Technology Access**

Project Number: H133E080022

Phone: 608/265-4621

<http://trace.wisc.edu/itrerc>

**Rehabilitation Engineering Research Center for Wireless Technologies**

Project Number: H133E060061

Phone: 404/367-1288

<http://wirelessrerc@shepherd.org>

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*The following projects have completed their research activities:*

**Accessible Location Information Delivered via GPS Cell Phone for People with Visual Impairments**

Project Number: H133G060035

Phone: 530/757-6800

<http://www.wayfinding.org>

**Automated DAISY Book Production System**

Project Number: H133S050018

Phone: 510/582-3437

<http://www.automaticsync.com/caption>

**Development of Virtual Pencil+ Algebra as a Teaching and Equation Processing Tool For Blind or Visually Disabled Students**

Project Number: H133S030198

Phone: 727/347-1313

<http://www.hentermath.com>

**Diabetes Communications for the Disabled**

Project Number: H133S060097

Phone: 585/453-9437

<http://www.med-graph.com>

**Development and Evaluation of a Location-Based Multimedia System for Providing Access to Information in Community Settings**

Project Number: H133S080044

Phone: 719/592-0347

<http://www.ablelinktech.com>

**Information Technology Access for Adults with Cognitive Disabilities: Participatory Development of a Model for Software Accessibility, Training, and Support**

Project Number: H133G010162

Phone: 541/342-3763

<http://www.eugeneresearch.org>