



# **Assistive Technology (AT) and Web-based Environments**

**John Rempel, AMAC**

**Quality Control Accessibility Analyst**

# How People with Disabilities Use the Web



**Auditory**

**Cognitive and Neurological**

**Physical**

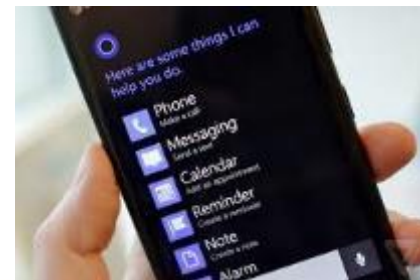
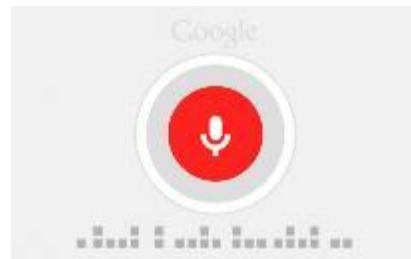
**Speech**

**Visual**



# Speech-to-Text

- **Siri (Apple)**
- **Google Now (Google)**
- **Cortana (Microsoft)**



# TTS and STT Combination

amazon echo

Always ready, connected, and fast. **Just ask.**



# Text-to-Speech

- JAWS
- NVDA
- VoiceOver (Mac)
- VoiceOver (iOS)
- TalkBack for Android
- Window-Eyes



# Refreshable Braille Displays

- **Refreshable Braille Displays**



# Optical Character Recognition

- **Open Book**
- **Kurzweil 1000**
- **Text Cloner Pro**



# Screen Magnification Programs

- **MAGic**
- **ZoomText**
- **Windows Magnifier**
- **Mac Zoom**
- **Zoom and Magnifier (iOS & Android)**





# Speech Recognition Software



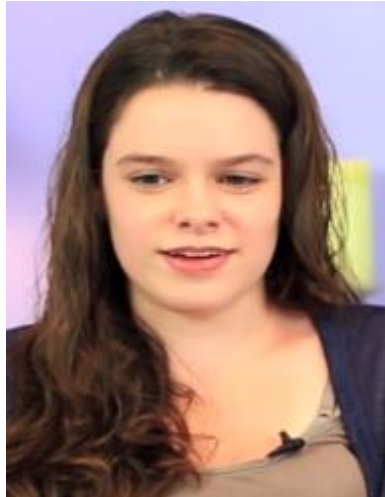
**Turn spoken words into text**

**Connect with the timing of  
your thoughts**

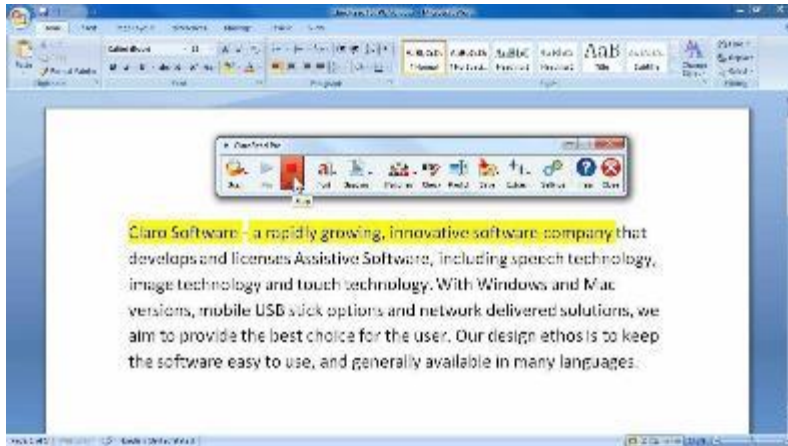
**Dictation speed 70 to 100  
words per minute**

# Video of Student Using Speech-to-Text Technology

**Video of Student integrating speech-to-text solutions into her personal life and educational pursuits.**



# ClaroRead



**Text-to-Speech**

**Visual Highlighting**

**Read back any on-screen text and program commands**

**High Quality Screen Reader**

**Keyboard Echo**

**Save to Audio**

# Premier Literacy Suite



**Text-to-Speech  
software**

**Post writing to “cloud  
applications”**

**Scan and read  
documents**

**Integrated Dictionary**

**Create study notes**

# Perspective Videos: W3C-WAI, Part 1

## Perspectives Videos



[Keyboard Compatibility](#)



[Colors with Good Contrast](#)



[Clear Layout and Design](#)



[Text to Speech](#)



[Large Links, Buttons, and Controls](#)



[Video Captions](#)



[Customizable Text](#)



[Voice Recognition](#)



[Understandable Content](#)



[Notifications and Feedback](#)

# Screen Reader Demonstration



- **Title Page**
- **Links**
- **Headings**
- **Graphics**
- **Multimedia**
- **Tables**
- **Keyboard Access**
- **Low Vision**



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## Questions?, Part 2