What is C-Print?

**C-Print** is a speech-to-text system that provides a text display of spoken information in a real time setting.

The text display provides communication access for individuals who cannot hear, or otherwise process auditory information directly.
What is C-Print?

- Two approaches for creating text in real-time
  - Keyboard-based word abbreviations
  - Automatic speech recognition (ASR)
- Used stand alone or as adjunct to another accommodation
- Supports real-time access and storage of the text for notes after the event
- Educational software for student participation and notetaking
The Service Provider

- Captionist –

- A C-Print captionist is trained to include as much information as possible, generally providing a meaning-for-meaning translation of the spoken English content.
  - Input using abbreviation system and/or ASR
  - Text condensing strategies (meaning-for-meaning translation)
  - Training and prep/editing time
The Technology

- Technology
  - C-Print Pro™ software
  - Laptop computer
  - Dictation mask
  - Networking
Input Options

- **Abbreviation System**
  - Rule example: Type the letter “k” for the sound /k/, no matter how it’s spelled. 
    e.g., kfe = coffee
  - Adding and editing existing dictionary based on individual need

- **ASR**
  - Dictation mask
  - Shadowing
    - Greater accuracy and access to other speakers
  - Punctuation and formatting
  - Typing and corrections
Display Options

Option 1
- 2 laptops
  Captionist and Student

Option 2
- 1 laptop
  Captionist
- 1 VGA or TV monitor
  Student
Benefits of C-Print for Students

- C-Print provides information that is permanent and complete
  - The text display remains on the screen for approximately one minute (depending on the size of the text)
  - The stored text of the lecture transcript is available after class and is a valuable study tool
- C-Print Pro helps manage multiple visual demands placed on deaf/hard of hearing
Students Who Benefit Most

- Support services need to be matched to needs and preferences of students
- Language preference is English
- Reading level of 4th grade or above
- May know little or no sign language
- Others
  - Low vision
  - Learning disabilities
  - Physically challenged
  - English as a second language
Student Responsibilities

✨ Real Time
- Check text display during class
- Be aware of what is happening in the classroom
- Ask questions to ensure understanding

✨ Notes
- Pick up the notes ASAP
- Keep the notes organized in a binder
- Study the notes
Appropriate Environments

- Classroom lectures
- Group discussions
- Business meetings
- Community and private events/meetings
Features in C-Print Pro Software

- Separate text displays
  - Captionist and student
- Keyboard and ASR input
  - Abbreviation system and IBM ViaVoice™
- Network capabilities
  - Includes chat
- Educational tools
  - Notes
Separate Text Displays

- User (captionist and student) can adapt screen to individual needs
  - Control font type, color and size
  - Student actions don’t affect flow of information from captionist
    - Ability to scroll back through captionist text
Keyboard and ASR Input

- Regular and conversion of abbreviations
- ASR interface – output of text produced by IBM ViaVoice engine
- Simultaneous use with ASR and keyboard input
Networking Capabilities

- Server/Client connection
- Identification of clients connected to network
- Messaging feature separate from text display
Educational Tools

- Split screen option for student to take notes
- Tools to assist student when taking notes
  - Highlighting
  - Tagging students notes to captionist text
- Options to save and print files in different formats
  - Captionist notes only
  - Student notes only
  - Merged notes
Captionist Training

- **Method**
  - Online, self-paced
  - Mentoring/In-service strongly recommended (if available)

- **Cost**
  - $250 (academic price)
  - Entitles participant to access for one year

- **Length**
  - Varies depending on individual
  - Estimated time for online and offline assignments – 55-60 hours

- **Topics covered** include abbreviation system, voice, condensing and summarizing, captionist role, formatting text and preparing notes
Recommended Skills (Captionist)

- **Requirements**
  - Typing speed of 60+ wpm
  - Excellent listening skills
  - Excellent English skills
  - Technical ability, computer skills
  - Desire to learn
Cost Considerations

✧ Hardware
  ✦ Laptop(s), display options (2nd laptop or monitor), linking cable or wireless network cards

✧ Software – C-Print Pro

✧ Captionist salaries
  ✦ Rates range between $12–$40/hr. depending on variety of factors, e.g., location, proficiency, etc.

✧ Other
  ✦ Laptop carrying case, portable stand, disks, etc.
Other Considerations

✿ **Logistics**
- How notes will be distributed?
- What is the classroom setup?

✿ **Ergonomics**
- How long will a captionist be required to type?

✿ **Roles**
- What are the roles/responsibilities of the captionist, students, administrators, etc.?
Ongoing Initiatives

- Software development
  - Remote features
  - Other platforms – Mac, Tablet PC
- Resource materials for teachers, parents and students
- Captionist proficiency exam
- Training and professional development materials
Contact Information

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