FastFacts

**Speech-to-Text Services:
An Overview of Real-Time Captioning**

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Overview

Today's technology affords individuals who are deaf and hard of hearing access to the world like never before. Speech-to-text technology is one such tool that brings access to individuals who are visual communicators.

"Speech-to-text" is an umbrella term used to describe an accommodation where spoken communication and other auditory information are translated into text in real-time. A service provider types what is heard and the text appears on a screen for the consumer to read.

There are three main systems which are used to provide real-time captioning: 1) Communication Access Realtime Translation (CART), 2) C-Print®, and 3) TypeWell.

Are there different types of speech-to-text services?

Speech-to-text services fall into two general categories: verbatim and meaning-for-meaning.

1) *Verbatim* speech-to-text service providers type nearly every word spoken, including false starts, misspeaks, and filler phrases. One hour of lecture will produce approximately 25 pages of transcript. CART is a verbatim system.

2) *Meaning-for-meaning* service providers listen to the spoken language then translate it into grammatically correct written language. They will typically eliminate false starts and misspeaks. They use visual formatting such as bold, italics, and lists to reduce the number of words typed. One hour of lecture will produce approximately 15 pages of transcript. C-Print® and TypeWell are meaning-for-meaning systems.

Examples of verbatim and meaning-for-meaning transcripts

Verbatim	Meaning-for-Meaning
>> INSTRUCTOR: Darcy you deal in stocks, don't you?	**Professor:** Darcy you deal in stocks, don't you?
>> STUDENT: Yes, I do.	
>> INSTRUCTOR: I just want to give you this little thing I heard recently, you know, that if you have stock in Continental Bank, you know, get it out really quick because they are about to go bankrupt. Okay? Got that? Good. Good.	**Darcy:** Yes, I do. **Professor:** I wanted to give you a tip I heard recently. If you have stock in Continental Bank, get out now. They are about to go bankrupt. Got that?
Well, this is an example of a false rumor. Today we are going to be talking about rumors and several topics within rumor. We are going to be talking about several topics, they are already listed in your outline but I put them up here. What is rumor?	This is an example of a false rumor. Today we are going to be talking about rumors. We will talk about several topics listed in your outline. • What is rumor? • What are the circumstances concerning the generations of rumor? • When should you believe a rumor? • And is there anything you can do to combat a rumor?
What are the circumstances concerning the generations of rumor? When should you believe a rumor? And is there anything you can do to combat a rumor?	

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What should be considered when choosing a speech-to-text system?

Selecting the most appropriate system will depend on the specific situation and the individual requesting the service. Some individuals will prefer CART because they want to see every word. Other individuals may prefer a meaning-for-meaning system because they become overwhelmed with too much text and want more visual formatting. Some individuals will prefer different services for different settings. For example, a student may request verbatim captioning for a history class, meaning-for-meaning captioning for a sociology class, and interpreting for a math class. There is no "best" system for all situations and all people.

What are the costs associated with each system?

Generally, the cost of providing CART is higher than C-Print® and TypeWell. The reasons for these differences include the cost of the software and hardware associated with each system and the length of training required to learn each system. A CART provider typically earns an associate's or bachelor's degree and their equipment and software runs from $2,000 to over $10,000. The training for C-Print® and TypeWell can be completed in as little as two months and the specialized software and equipment is less than $1,000.

In 2009, pn2 conducted a survey of over 120 institutions regarding salary and wage information for speech-to-text service providers. A summary of the responses can be viewed at: http://pepnet.org/resources/2009interpretingspeechtext.

Can speech-to-text transcripts replace notetakers?

No. The purpose of real-time captioning is to provide real-time communication access. Each system generates an electronic transcript. Institutions may choose to provide students with a copy of the transcript but it is not intended to replace a notetaker. Real-time captioning may not capture all the visual information presented during class, such as PowerPoint or white board content. Notes include this information, as well as outlining the main points of the lecture.

For more information regarding Speech-to-Text, please peruse pn2 Fast Facts *Speech-to-Text Services: Remote Speech-to-Text Services* and *Speech-to-Text Services: Hiring Qualified Speech-to -Text Providers.*

Resources

CART Website-
http://alacarteconnection.com/how-works/

C-Print Website- https://www.rit.edu/ntid/cprint/

Typewell Website- http://typewell.com/

**Visit www.pepnet.org for
additional information and resources**

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