Making "Printed" Posters More Accessible: Considerations and Solutions

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ABSTRACT

Persons practicing in assistive technology are often asked to present information at poster sessions. Accessibility of poster sessions currently equates to the physical presence of the author during the display of a printed poster. This paper considers multiple audio solutions to making printed posters more accessible. Although a range of technology is discussed, many options consist of using off-the-shelf or consumer-friendly technology. Making printed posters more accessible benefits all involved: conference attendees with accessibility needs, poster designers expanding their accessibility skills, students learning to create professional products, and people accessing distance learning platforms.

BACKGROUND

- Accessibility of conference presentations is dependent on the availability of the presenters.
- Platform sessions have both visual and auditory components.
- A standard printed poster is visual unless the author is available to provide the auditory component.

CURRENT METHOD CONCERNS

1. Accessing visual information.
2. Missing any interactions exhibited by the poster (such as sounds or actions) if the author is not present.
3. Catching components of the author's explanation or asking the same questions answered moments earlier when multiple conference participants approach.
4. Having the author available later for new questions or additional verbal exchange.

OBJECTIVE

Consider solutions in making printed posters more accessible.

SOLUTIONS CONSIDERED

- Eliminate poster sessions completely..
  NOT an option because posters are invaluable for interactivity, networking, and moving professions forward!
- Require authors to be present (at all times) when their posters are displayed.
- Make the printed poster session stand alone for anyone to view, at any time. (Use an inexpensive or low tech solution.)

COMMON SOLUTIONS

- Haptic (i.e., touch or tactile sensation): Not addressed!
- Audio

AUDIO SOLUTIONS

1. Make a text file.
2. Convert to audio file.
   - Consider adding stereo or other sounds to enhance text and descriptions of any graphics
   - Consider a simple "wav" or "mp3" to keep costs low. Use a natural "human" voice, at a speed understandable by the general population rather than a speeded-up version, such as those used in screen reader software packages.

DELIVERING AUDIO SOLUTIONS

- Play an endless loop audio file (requires simple head-set at poster).
- Create an audio file with "internal pauses": use a hand set which has 2 or 3 buttons (e.g., start, skip-to-next which would jump to the next pause, and stop), allowing the attendee to simply navigate the audio. (Some mp3 players have "skip ahead" capability.)
- Create a coded audio file, using Daisy (1) Digital Talking Book (DTB) or other accepted "markup" for their player.
- Offer podcasts of individual posters downloadable from the conference web site.
- Provide a handout audio on CD or inexpensive flash disk.
- Publish a phone number that attendees would simply call. Via a simple navigation scheme [i.e., type in number for the poster exhibit (available in Braille/raised letters on each poster)] to listen to the audio file.
- Broadcast on low power FM throughout the poster exhibit area. Many mp3 players and some cell phones contain an FM receiver, which would allow the attendee to listen to the audio file.
- Use Bluetooth or similar technology, allowing attendees to tune in and hear the particular poster audio using their pda/smartphone or other Bluetooth equipped devices.

REFERENCES

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OTHER OPTIONS

- Interactive white board or tactile graphics tablet used for the poster board backdrop.
- Commercial "system" solutions
  - Talking Signs (2)
    Uses an infrared transmitter that directly beams audio information a user can receive and interpret using a battery-powered low cost receiver.
  - Touch Graphics Ping! (3)
    Uses a wireless network of audio that can be received on a standard consumer cell phone.
- "Museum" type display for more permanent posters (4)

PERFORMANCE AND COST

Many of audio solutions presented here are not difficult or costly to implement. Many people create multimedia presentations and podcasts. Aggregating each person's presentation podcast to a conference website would not add significant the art of creating "meaningful" audio descriptions of their graphic cost, but would provide increased accessibility. Additionally, authors would learn a skill that is continually in demand for talking books, distance education, internet web sites, and captioned/described movies.

Many sound player options are inexpensive to purchase or are already in hands of consumers. Most people have cell phones, mp3 players, or cell phones capable of playing mp3 files. The optimal situation is to find ways to use technology the attendee already owns, is familiar with, and understands. As cell phones continue to advance in capabilities, there will be more solutions to accessibility issues.

FINAL THOUGHTS

This presentation provides possibilities for making printed posters more accessible, but does not address a typical occurrence at conferences: the attendee has new questions for the author or wishes additional exchange of information.

A practical option is using technology that currently exists. A question could simply be transmitted to the poster author using text messaging or using an internet relay chat (IRC) system, both of which might be more responsive to the timeliness of the question when the author is not available.