



Using Technology with Deaf and Hard of Hearing Students

This workshop is designed to share research findings and be a resource to instructors, counselors, service providers, interpreters and other support staff with d/Deaf and Hard of Hearing students in post-secondary education. By engaging in dialogue and discussion after presentation with educators to think and use technology creatively with their d/Deaf and Hard of Hearing Students.

[Assistive Technology and Educational Technology]

- ***Assistive Technologies*** are tools that **student use** to increase their academic performance.
- ***Instructional Technologies*** are tools that **teachers use** to expand their instructional process.

[Assistive Technology]

- Definition: **Assistive or Adaptive Technology** commonly refers to *"...products, devices or equipment, whether acquired commercially, modified or customized, that are used to maintain, increase or improve the functional capabilities of individuals with disabilities..."* From: [Assistive Technology Act of 1998](#)

[Instructional Technology]

- Definition: **Educational technology** is defined as "the study and the ethical practice of facilitating learning and improving performance" through developing and then implementing instructional processes and materials (AECT, 2006, as qtd. in Reiser & Dempsey, 2007, pg. 6). This 2006 AECT definition refers to several key terms. The term "ethical" refers to the professional conduct and professional standards for educational technology and design. The term "facilitate" refers to the concept that educational technology helps facilitate and guide learning instead of just controlling or creating learning. From: [\(Almost\) Everything You Want to Know about Educational Technology](#)

[Purpose of the Research]

- To prove and show that there is a need for educators that work with d/Deaf HH students in community college, university, and K-12 setting to use technology as an educational tool in the d/Deaf HH student's learning process. Not only to focus on technology specifically designed for d/Deaf HH students but also recognize existing technology that can be used for any and all students on campus and including them into the teaching design. With the purpose of improving their skills and knowledge base in Basic Skills in English (reading and writing), Math, and Public Speaking, to name a few subject matters. To broaden the educator's perception that using technology with their d/Deaf HH students is not limited to technology specifically designed for them but to use any and all existing technology available as part of the d/Deaf HH students' active learning process. Specifically to find what technological resources exist on campuses.

[Research Questions]

- Why have educators of d/Deaf HH students not supported the use of technology as an educational tool in helping a d/Deaf HH student's academic success and instead only used technology as a communication access tool?

[Findings]

- Finding # 1 – Part 1: Query, Part 2: Survey

As part of the research, I have queried and surveyed different listservs to collect data on if technology was used to enhance d/Deaf HH students academic success.

- Results from the query and survey has shown that technology was only used as an communication access tool with d/Deaf HH students in post secondary education and in K-12 education. Also it was found that the use of technology with d/Deaf HH students is not part of the campus's curriculum plan. Overall the findings from the data collected show that there not much support in using technology with d/Deaf HH as part of the curriculum even though the results show there is a need.

[Findings]

- Finding # 2: Review of Literature

Research of literature has shown that there are more articles on using Distance Learning with d/Deaf HH students. Very few articles embraced the idea of incorporating assistive technology and educational technology in the educator's teaching design or part of the curriculum. These findings produced the development of checklists for educators to use when considering the use of technology with their d/Deaf HH students.

[Findings]

- Finding # 3: Developing a Database

During research, I was able to come up with an unorganized database of possible technological solutions and resources. In my attempt to organize the database, I came to the conclusion that I am not able to become the sole decider on what works or doesn't work for d/Deaf HH students without input from colleagues.

[The Problem(s)]

1. Most of the technology designed for d/Deaf HH students are focused on being a communication access tool and not as an educational tool to help with their academic success.
2. Due to economic hardship and lack of resources, most schools cannot afford to acquire existing technology that may improve academic success for d/Deaf HH students.
3. Lack of support in the curriculum plan to include technology as part of d/Deaf HH students academic success as well as lack of resources that encourages the use of technology.

[Recommendations]

- Due to technology and its usage is always changing and improving. A collaboration with other educators that work with d/Deaf HH students and colleagues in the field of Deaf Education: online.
- Development of a Matrix with technological solutions that has been tried and used with d/Deaf and HH students. This Matrix will be online as the form of a Wiki and will be maintained and supported by educators.
<https://edutech4deaf.wikispaces.com/>
- Educators to tap into what is already available to them, becoming involved in trainings offered by their campus's Learning Center or training centers such as the California Community College's High Tech Center Training Unit: <http://www.htctu.net/>. Or using Assistive Technology Initiative Resources for CSU Campuses.:
<http://www.calstate.edu/accessibility/section508/standards/>
- Using a checklist for Assistive Technology and Educational Technology to think about what resources are on campus. Assistive Technology is already part of the campus's educational plan according to Section 508. Educational Technology requires more creative thinking outside the box.

[Checklists]

- The Assistive Technology Checklist is focused on software and operating system used according to the standards in Section 508.
- The Educational Technology checklist/guideline are not definite and serve to help educators expand their thinking process when including technology as part of their teaching design.
- Also the focus of the Educational Technology checklist/guideline shifted away from possible technological solutions to finding what technological resources are on their campus – either human knowledge or mechanical knowledge. The end purpose of the checklist/guideline is to direct the educator to tapping into existing resources and support in their own educational setting.

[Discussion and Dialogue]

Resources for Educators interested in using Technology with their d/Deaf HH students.

- [TechMatrix](#) - Assistive Technology Tools and Resources for Learning
- [Go to Web 2.0](#) is a site that complies is commonly associated with web applications that facilitate interactive learning

[Links]

Link to Resource for Educators using Technology with Deaf and Hard of Hearing Students and a copy of the Powerpoint presentation:

www.tinyurl.com/deaftech

Link to the collaboration matrix of Assistive Technology and Educational Technology used for d/Deaf and Hard of Hearing students in the K-12, Community Colleges, Universities and Vocational Programs:

<https://edutech4deaf.wikispaces.com>

[About the Presenter]

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