Assistive Technology Mobile Apps

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Track A
17:30 – 18:00
HST
Introduction

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An Introduction to Mobile Apps for K-12 Students with Special Needs: An Instructional Website for Educational Technology Students
If you teach, have you used your mobile devices (smartphones, tablets) for instruction?
A. Yes  
B. No
Audience Survey

What is your comfort level when using Mobile Technology in your instruction, classroom or institution?

A. Very Comfortable
B. Somewhat Comfortable
C. Indifferent/Neutral
D. Somewhat Uncomfortable
E. Very Uncomfortable
The purpose of this Instructional Design (ID) project is to develop and evaluate a website introducing University of Hawaii at Manoa ETEC graduate students to selected mobile applications for K-12 students with special needs.
Inspiration of Project

ETEC-647 Fall -2012
• Emerging Technologies – Mobile Applications
• Dr. Grace Lin

ETEC-442 Fall-2012
• Computers in Education
• New section teaching about mobile applications
Inspiration of Project

ETEC-647 Group Project

• Create an iBook prototype of this project
• Included
  – Small literature review
  – Research and tested mobile apps for students with special needs
  – Presented iBook – Class Presentation
Literature Review

Ubiquitous computing – everyone has a mobile device, smart phone, tablet

Reluctance to allow the use of mobile devices in the classroom (Barrinentos, 2010)

Now many educators excited to implement such technologies (Lin et al)
Literature Review

As compared to computers and laptops, these devices are portable, inexpensive, and durable (Banister, 2010).

Can be used at home, the bus stop, and at school (Banister, 2010).
Module Design

Learning module designed using ARCS model. (Attention, Relevance, Confidence, Satisfaction)

Created instructional website with instructional videos and interactive surveys.

Mobile app reviews with YouTube videos and links to written reviews
Module Design

Demographics Survey (Pre-Test)

Attitudinal Survey (Post-Test)
Module Design

Welcome Research Participant!

Using technology for instructional purposes is nothing new. For years now we have used personal computers and laptops in the classroom. We now find ourselves in the age of mobile devices, such as tablets, and smartphones. One cannot imagine leaving home without our phone in hand. Assistive technology can help people with disabilities in their educational endeavors. In the hands of those with special needs, educators are discovering new ways to use these technologies.

Many graduate level Educational Technology (ETEC) students are teachers themselves, or are going to be Technology Integrators in K-12 institutions. Special education and students with special needs is an important part of any primary or secondary school’s curriculum. Therefore, the purpose of this Instructional Design (ID) project is to develop and evaluate a website introducing University of Hawaii at Manoa ETEC graduate students to selected mobile applications for K12 students with special needs.

Please take a few moments to view the module introduction video.
Module Design

This survey is anonymous. Please answer the survey below and be sure to enter your 4-digit identification number when asked. The data gathered will help to evaluate the effectiveness of this learning module.

Assistive Technology Demographics Survey

* Required

Please enter your 4-digit number for identification purposes. Be sure to use this same number for the Attitudinal Survey at the end of this module *
**App Name:** Ear Machine

**App Description:** iPhone Hearing Aid App.

**App Uses:** Amplify sound for user.

**iTunes Category:** Business

**Target Audience:** Hearing impaired persons.
Module Design

Written Review: Click here to read the review at Aidis Trust and also look at the review at BridgingApps.org

Video Review: See below
Results

12 Participants  7-Female / 5- Male

All finished both surveys and left relevant comments.

All were very positive about the learning module
Results

This learning module was easy to understand.
The level of difficulty was about right for me.
The length of the module was manageable.
Results

Based on what you learned in the module, do you feel more confident in your knowledge of mobile applications for students with special needs?

The module will make it easier for me to integrate mobile applications in the classroom setting for special needs students.

I learned a lot about Mobile Apps for students with special needs from the module.

The mobile applications reviewed in the module were helpful with respect to teaching students with special needs.

Based on what you learned in the module, do you feel more confident in your knowledge of mobile applications for students with special needs?

1 - Strongly Disagree

5 - Strongly Agree
"I am an administrator in a K-12 public school system and I encourage the use of mobile devices in the classroom."

"I think it’ll be the norm in a few years and the use of their familiar mobile devices will be motivational."
Participant Comments

All for it, as long as you have a way to keep them (the students) on track.”

“The use of “these devices be monitored to ensure they are being used for academic purposes.”
Process created by Dr. Ari, Dr. Mike, and Dr. Peter really helped keep us on track.

Feedback, Feedback, Feedback. Thanks to my critical friends Tod, Sean, and Justine, and our advisor Dr. Ari.

Had outstanding support of participants, and fellow classmates.
What went right / wrong

Had technical issues with Google Forms and Weebly website.

Did well but could have been less stressful keeping up with deadlines.
Future Implications

Original concept was a resource website for apps for students with special needs

Could make a comprehensive website with lots of apps

Cover more disabilities such as Autism

Cover apps for all mobile devices (Apple, Windows, etc)
Questions?