

Assistive Technology for Students with Disabilities



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Host Organization: Amazon **ETP Type:** Professional Development
Subject/Grade: K-5 Communications

Abstract

Students with disabilities often rely upon assistive technology for communicating their needs and wants. While special education teachers are trained on the use of these devices, the general education faculty rarely has such training. My ETP will be a professional development for the general education faculty on the use of assistive technologies and how they can assist your students with disabilities using such devices.

Focal Standard(s)

California Standards for Teaching Profession: 1.4: Using a variety of instructional strategies, resources, and technologies to meet students' diverse learning needs.

- *use differentiated instruction to meet the assessed learning needs of students and increase*
- *active participation in learning*
- *adapt materials and resources, make accommodations, and use appropriate assistive*
- *equipment and other technologies to support students' diverse learning needs*
- *utilize multiple types of technology to facilitate learning*

Measurable Objective(s)

General education teachers will learn several of the unique features students with disabilities use to communicate their needs and wants. General education teachers will be able to communicate with students with disabilities who use assistive technology.

Formative Assessment(s)

During the PD, the teachers will demonstrate their understanding by using the devices during the session and showing their understanding.

Summative Assessment

Following the PD, teachers will be asked to complete a survey detailing how the training was received and soliciting for future sessions.

- Name/Grade/Subject:
- Describe your understanding of AT prior to this training:
- Describe your experiences with AT prior to this training:
- Describe what you learned during this training:
- Describe how you will employ/utilize AT when interacting with students who rely upon AT:
- Describe how the training could be improved:
- Describe what you liked about the training:

21st Century Skills and Applications

All technological handheld devices have some form of assistive technology not only available to students with disabilities, but also all people. For example, Siri and Alexa offer hands free, voice-activated software allowing the user to operate the devices hands-free. They also offer text to speech, enlarged fonts, and even detente's that tell the user what they are touching. Amazon devices offer many advantages for the visually impaired community as they will tell the user what column and row they are touching. An interesting, although unintended advantage of these technologies is they assist all of us as we are aging and our vision, hearing, and dexterity becomes more and more challenged.

3. 21st Century Curriculum and Instruction

- Teaches 21st century skills discreetly in the context of key subjects and 21st century interdisciplinary themes
- Focuses on providing opportunities for applying 21st century skills across content areas and for a competency-based approach to learning
- Enables innovative learning methods that integrate the use of supportive technologies, inquiry- and problem-based approaches and higher order thinking skills
- Encourages the integration of community resources beyond school walls

Fellowship Description

I am embedded with the tablet division at Amazon to assist them with their vision of the future organizational structure. This division is responsible for going from an idea for a device through the entire Production Design Process and taking the device to market. During this fellowship, I've met with several experts in the Amazon community who work on Assistive Technology.

Fellowship Connection to School/Classroom

Special education students rely on assistive technology and tablet devices to communicate needs and wants as well as in their academic setting. The connection to the school and classroom is the use of assistive technological devices within the special education classroom and how they support and assist students with disabilities communicate with faculty and peers.

Instructional Plan

Prepare and deliver a PD for general education faculty to inform them how assistive technology benefits students with disabilities as well as how they are used to communicate needs and desires.

Introduction: <https://www.youtube.com/watch?v=-q0eueDigPE>

Question: Have you experienced a student in crisis who is reliant upon assistive technology?
See powerpoint slides in folder

Check for understanding -- Popcorn questions to staff

Summary: Today we learned about how AT can help you when interacting with students with disabilities

Closure: Now that you are trained on the use of AT for our students, you will be able to better serve these students.

Supply List

iPads and tablets for each general education teacher, powerpoint and powerpoint handouts, and projector.

Bibliography

N/A

Keywords

Assistive technology, hands-free devices, iPad, Amazon tablet, text-to-speech

Links to Files in this ETP

[PowerPoint Slides](#)