Teaching Sound Editing with Audacity and Makey Makey

TAP@GGC TECHNOLOGY AMBASSADOR PROGRAM

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DESCRIPTION OF TAP PROGRAM

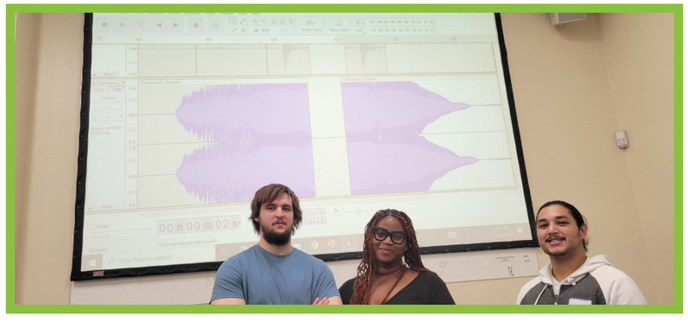
TAP stands for Technology Ambassador Program which is a program for anyone with an interest in Information Technology. The program lets students learn more about different technologies while creating outreach workshops to promote an interest in STEM in their community. It also allows TAP students to develop better communication and leadership skills while also letting students be creative in designing their projects.The TAP program promotes the acquisition of research skills and encourages students to attend conferences to present their projects.

PROJECT GOAL

Our project aims to increase interest in Information Technology by introducing the audience to a fun and engaging project that teaches sound editing and Makey Makey technology skills.

PROJECT DESCRIPTION

- For the project we chose a Halloween theme to engage our audience
- Using Audacity we teach how to edit sound audio to make a sound spooky for our different Halloween stories.
- We created six different Halloween Stories to produce different fun audio.
- We play the stories sound using Makey Makey and Scratch



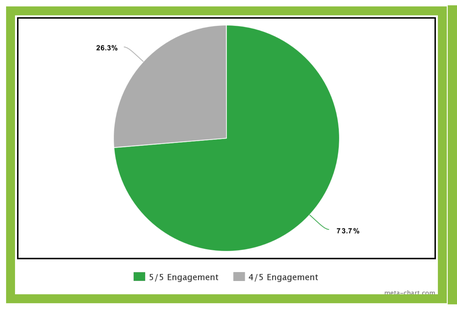
OUTREACH EVENTS

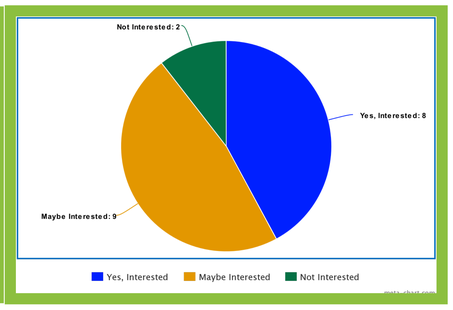
We did several outreach events, including TAP Expo, Super Saturday Series, and one GGC classroom workshop.

Our workshop includes: introduction of the Tap program, pre-survey, a walk-through how to use a Makey Makey through a website called, Scratch, a time to play with the Makey Makey. Then we teach them how to edit sound audio and export audio through a software called, Audacity, a time to create their own sounds which they will upload to Scratch, and finally a post survey about the skills learned in the workshop.

WORKSHOP RESULTS

- Many students were either a newbie or had no experience with using Makey Makey and Audacity.
- Most of the students found using a Makey Makey and audacity to be entertaining. **73.7% (out of 19) gave our workshop a 5/5 in terms of engaging, while the rest gave it a 4/5.**
- 100% gave our workshop the highest rating of 5 on group's ability to keep the class engaged and focused.
- **Most (17 out 19) of our participates they are somewhat interested in programming/game development.**
- All but 2 students found our workshop to be relatively easy giving the difficulty less than a 5 out of 10.
- Our Post Survey showed a moderate interest in the new programming and game development, with mix of maybes and yes as the results.
- Audience found the set up part of the workshop confusing.
- For the next workshop, having everything set up and downloaded prior will alleviate this issue.





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2. Proceeding publication at CCSC: SE meeting, 2019, Auburn, AL. “Using Technology to Create Synthetic Instruments and Engage Students While Teaching Algorithmic Skills” by Alex Smyntyna, Khadijah Nixon, James Broome, Hieu Dinh, Anca Doloc-Mihu, Cindy Robertson

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STARS Computing Corps - https://www.starscomputingcorps.org/

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