



MakeyMaking and Music Creation: Making Meaning Through Words Pictures Sound and Science

Gena R. Greher Ed.D.

Gena_Greher@uml.edu

<https://g.greher.com>

This interdisciplinary project was developed for music education students in order to highlight the benefits of hands-on technology approaches to engaging their future students in exploratory activities, requiring a fair amount of problem-solving skills and creative and critical thinking.

Literacy, Arts & the Makey Makey Project:

- Students choose a poem or song lyric that resonates with them in some way.
- Students will design/build a visual representation of some aspect of that poem or lyric such as a drawing or sculpture and create an aural representation of this work that will be performed interactively with the Makey Makey through the interface of their artwork.
- Students will map their sounds through either SoundPlant or Scratch to be triggered by the MakeyMakey device.
- They will then share their object/instrument through an in-class performance and sharing session.

While this project can be used for students at any level, it is used in this instance in a music teacher education class to help music education students explore and discover the myriad connections to other subjects through the creation of a tangible object. However, this project would be equally well suited for general education classes or English Language Arts classrooms.

Through technology and instrument building we can foster greater access to the development of young students' musical and computational thinking skills and opening our music education students to more inclusive approach to teaching.

Benefits & Challenges:

- The main benefit of the Makey Makey was that it required us to make both musical and technical decisions in order for it to work.
- Understanding conductivity was crucial in this project and provided a

- tremendous opportunity for cross-curricular lessons.
- The Makey Makey allows for students without those specific skills to both compose and improvise, and in a "fun" way.
 - Most students are naturally drawn to gadgety things, and the Makey Makey is no exception! It definitely has a "cool" and "fun" factor that makes it appealing to kids (and even adults!)
 - This device would also be invaluable while working with special needs kids in ways that I haven't even thought of yet.
 - Probably the biggest challenge in using the Makey Makey in a classroom setting is making sure that it doesn't just become a toy or gadget.
 - For its full potential to be reached, the device (and the user!) need to achieve a legitimate musical accomplishment beyond just playing and exploring.
 - This would definitely happen with some guidelines (but not too restrictive as to squelch creativity) from the teacher.
 - In regard to learning, I observed (again) that we learned a lot on our own and from members of our groups. I've known this for a long time, but it's always nice for a little confirmation. :)
 - I remember a point when I was first trying to figure everything out. It took me an hour to figure out how to map one sound and I don't think I have ever been so focused and into what I was doing. When I finally figured it out, that eureka moment made all the frustration worth it. It's been a while since I've felt that satisfaction and excitement...



<https://vimeo.com/279920496>

"It's a great tool to help students learn how to complete a circuit but also be creative in any way they can. Makey Makey's also help older students find some of their creativity that may have been lost along the way."

Mostly this project helped many of my students to move outside of their perfectionist tendencies and professional blind spots as well as help them experience the importance of exploration, play and creating something from scratch.