

Pedagogy Kiosk Usability Report

Madison Pisone

Introduction:

The purpose of this training manual is to educate the audience on methods to improve teaching. There were three different general methods introduced; Group Malfunctions, Classroom Management, and Behavioral issues. Each of these methods has several videos providing a visual tutorial for the various teaching tips.

Process Description:

Four groups contributed to the creation of this manual. One of the groups was the Developer Group, which was dedicated to creating the actual user interface of the Pedagogy Kiosk. The other three groups each took on one of the general methods and produced content. As previously mentioned, the developer group created the kiosk architecture to house the information presented by the content groups.

Each of the content groups was responsible for creating six YouTube videos that provided specific teaching tips. They were also responsible for producing captions to accompany the short videos. To create the videos they used a 360 camera, Adobe Premiere Pro, a microphone, and Audacity. The 360 camera allowed the groups to create the interactive display as you can drag and explore the scenes of the videos to see everything going on. The videos were edited using Adobe Premiere Pro. Audio was captured by the microphone and Audacity was used to edit the audio files.

The developer group was responsible for creating housing for the content produced. This was done through GitHub which provided a space to develop together and in unison. To create the framework for the kiosk HTML and CSS were used. Each member of the developer group was responsible for communicating with the individual content groups and ensuring that information was placed correctly on the kiosk.

Usability Study Description:

In addition to the kiosk, I created a Usability test which helped evaluate the functionality and efficiency of the kiosk. The test comprises six questions which are:

- How easy is it for you to navigate through the kiosk?
- Which of the teaching sections did you find most interesting?
- What did you learn from the section you selected in the previous question?
- Did you experience any issues?
- If yes, please elaborate

I chose these questions because I wanted to explore the functionality of the kiosk. The criterion for functionality ranges from the simplicity of the user interface to what the user actually gained from the kiosk. Each of the questions have different response methods ranging from multiple choice, linear rating, and open response. The purpose of this is to provide more variety and detail when responding.

Results:

Overall, it seemed that the kiosk was effective in presenting its intended material as 5 out of 6 users reported a score of two or lower in response to the first question, see Figure 1. These results bolster the work of the developers and the architecture that they created to present the information. It proves that the website was functional and easy to understand. However, there was one outlier vote where they rated the kiosk navigation as difficult. This vote contributes to 16.7% of the overall vote; or a rather insignificant amount of dissatisfaction.

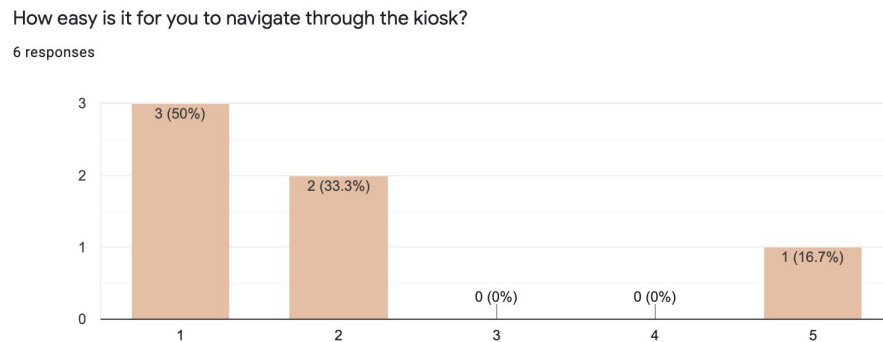


Figure 1: Results from Question 1 of the Usability Test

The second question identified which general teaching method the user found most interesting. In addition, the third question asked them to elaborate on what they learned from their chosen section. Amongst the users it was evenly split between which general teaching method they found more interesting, see Figure 2. This is intriguing because there was no majority vote meaning each section of the kiosk provided value. This data provides valuable feedback when assessing further modifications. For example, it would aid the discussion surrounding content modification for the kiosk as it quantifies the information presented

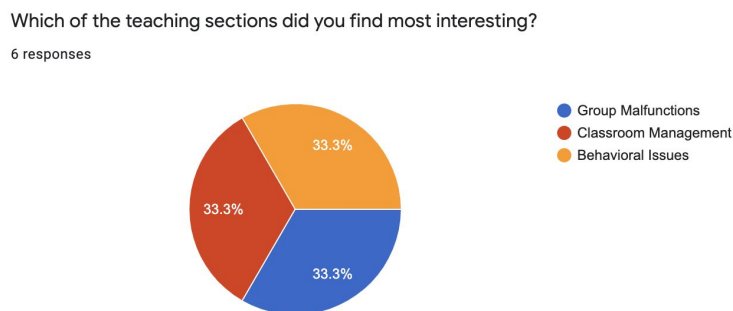


Figure 2: Results from Question 2 of the Usability Test

The fourth question asked the user if they experienced any issues. All users responded “no” to this question. This unanimous vote concluded that the kiosk was very successful. The training manual checked the boxes for usability and effectiveness. Moving forward, a question should be

added to the usability study to ask the user to elaborate on their navigation experience, as one user claimed it was difficult. Additionally, a larger sample size should be tested to ensure that these results are consistent.

Appendix:

Pedagogy Kiosk: <http://www.pitt.edu/~sjq4/PedagogyKiosk/index.html>

Usability Test: <https://forms.gle/L5pE3UwVVxk5ZxBTA>