"Tech Tools: Integrating Technology into Education in a Meaningful Way"

.

An Honors Thesis

by

Rebecca P. Glusco

California, Pennsylvania

2020

California University of Pennsylvania

California, Pennsylvania

We hereby approve the Honors Thesis of

Rebecca P. Glusco

Candidate for the degree of Bachelor of Science

Date

Nonenher 18, 2020

18Nov. 2020

11-18-2020

11 18

18 Wanter 2020

Faculty

ong Ed D.

Marcia Hoover, EdD Honors Thesis Advisor

thD.

Christina Fisanick, PhD Second Reader

hD

Peter Cormas, PhD Honors Advisory Board

Craig Fox, PhD Associate Director, Honors Program

M. G. Àune, PhD Director, Honors Program

https://glu8859.wixsite.com/techtools/

The Coronavirus has caused many issues since it's spread in the United States at the beginning of March of 2020. With the severe spread of COVID-19, most schools have either gone completely online or they have a blended model where they are partially in school and partially online. There are very different types of learning being used in schools during this time, there is remote learning, online learning, and traditional learning. Remote learning is also called synchronous learning meaning that students and teachers meet on some form of video chat (i.e. Zoom, Google Meet) and get direct instruction. Online learning is also called asynchronous learning meaning that the students are presented with premade material that they can do at their own pace. Traditional learning is the everyday classroom pre-COVID-19. Most schools are using a combination of those three styles to create a hybrid model. When the lockdowns started in March of 2020, "schools were scrambling to make the shift to online teaching and learning, the corona virus was taking the lives of thousands of people-including educators" (Bushweller, 2020). These major implications are a large part of the reason that I chose this project. Schooling has changed dramatically in the last nine months, since the shift to online and remote learning. Personal observation and research showed that there are little to no places that compare and contrast different websites or resources. One noteworthy resource is Commonsense Media (https://www.commonsense.org/education/), this resource has kept up

with the times by incorporating information about remote or distance learning. Therefore, the idea of creating a website that would do exactly that was born. It provides a unique resource of multiple different kinds of websites or tools that can be used online with students. Teachers and students need more support now than ever.

There are many teachers that are struggling with this severe change in the schooling atmosphere. "Teachers will also need training on establishing a remote learning 'cadence,' balancing synchronous (live lessons) and asynchronous (assignments and projects completed anytime) teaching, finding supplementary online curriculum materials, and reconfiguring time management to remote teaching environments" (Lieberman, 2020). There are teachers who are having issues finding a way to intrigue and engage the students with them not in the physical classroom. Many teachers are not familiar with the technological resources that are at their disposal. Most of the resources mentioned have free versions that can be used in a classroom, virtual or in-person. This thesis project focused on finding a way to show those teachers that there are tools out there that can help them in their adventure in these unprecedented times. There have been many circumstances where schools have had to go completely remote at a day's notice. One of the local schools in my area has closed quickly and moved to remote learning due to a severe spike in the number of cases in the school (Dallastown Area School District, 2020). Teachers who choose to use technology in their classes have an easier time transitioning from in-person to remote learning.

One big issue that has been noted by teachers is that they are struggling to get feedback on how the students are receiving the information they are presenting. To help the teachers gain a better understanding of the student's knowledge, teachers are able to use these resources to collect live data from the students which will help the teachers direct their instruction more effectively. Resources such as Quizizz, Quizalize, Kahoot, Socrative, Gimkit, Formative, and Classkick. These resources are covered in more detail in the Formative Assessment tab of the website.

Students are struggling with online learning, having issues with being attentive to teachers that are using the lecture method to present information. "[Students] are bored. A lot of teachers are finding it is difficult to give work that's not just videos to watch" (Rothenberger, 2020). There are multiple tools included on the website that cover ways to present knowledge. They can be found under the Direct Instruction Presentations Tab. Students are also struggling with the amount of work and the lack of help from the teachers. There are tools that could be utilized by students as well, such as Quizlet or Gimkit. Students can take charge of their own learning and help themselves by making study tools.

When I began designing the website, I decided that a fun and engaging color format would be a good fit for the information I was planning to provide. This website is meant to be used by students and teachers alike, so fun colors needed to be involved. I also separated all of the websites/tools that I did research on into categories. I then put them into the individual tabs and separated them within the tabs by their similarities. For example, Padlet and

FlipGrid were put next to each other because they are the most similar. Padlet one is words based and FlipGrid is videos based. I did this for all the different websites and tools.

After researching different website creation applications, I decided to use Wix.com to create my site. Wix.com came highly recommended by a professor and it was one of the most user friendly. It was super easy to navigate, and it also gave me access to a phone view option of my website. I was able to edit both the phone view and the computer view which I believe is very important for a site to have. Overall, it makes the website more accessible. There was also a unique feature that allowed me to link individual websites to my website. It's as easy as clicking the button below the paragraph to go directly to the linked site. I linked the opening page so that the user could go directly to the tabs from the front page by clicking the corresponding name.

Overall, the intention of this thesis project is to help teachers and students navigate this difficult and constantly changing time. There are multiple resources for school districts to use to determine which Learning Information System will best fit their needs. There are more resources than what was covered on the website, and there is still more room to grow. This thesis project does not end here, I intend on continually updating the website with new resources that I find during my time as a teacher.

Reference

Bushweller, K. (2020, June 02). Assessing the Impact of COVID-19 on Ed-Tech Use. Retrieved January 01, 2021, from <u>https://www.edweek.org/technology/assessing-the-impact-of-covid-19-on-</u> ed-tech-use/2020/06

Dallastown Area School District. (2020). Communications. Retrieved January 01, 2021, from <u>https://sites.google.com/dallastown.net/dasdcovid19/communications?authu</u> <u>ser=0</u>

Lieberman, M. (2020, July 22). The Pivot Back to Remote Learning: Checklists for Teachers, Principals, and Ed-Tech Leaders. Retrieved January 01, 2021, from <u>https://www.edweek.org/leadership/the-pivot-back-to-remotelearning-checklists-for-teachers-principals-and-ed-tech-</u> leaders/2020/07?MvBriefArticleId=19664

Rothenberger, Z. (2020, May 10). Teaching in the Time of Coronavirus: A Conversation with a Math Teacher in Texas. Retrieved January 01, 2021, from https://knowlesteachers.org/blog/teaching-in-the-time-of-coronavirus-aconversation-with-a-math-teacher-intexas?gclid=CjwKCAiArbv_BRA8EiwAYGs23CVi_liFzdSvnbpCLVGeVBG1 Ge0PWFE_QLbn8ba_e7M2j8vg7pmt8RoC4YoQAvD_BwE