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Community Engagement Project

Seattle Pacific University – Winter 2020

Technology Tools Implementation

Executive Summary

The purpose of this community engagement project is to evaluate a needs assessment for how teachers can best integrate new technology tools in the classroom. I selected this project because there are two technology-based programs our school asks parents to put money towards at the beginning of the year but that are not being implemented regularly (or at all) or with mastery because there is no training for teachers. I wanted to see what teachers need in order to feel comfortable and ready to implement technology tools and platforms that are available at our school. The major goals of this report are:

- Using a Likert Scale, determine the utilization, competency, and readiness that teachers currently have
- Determine what specific areas teachers would like support in
- Determine what PD would best support educators at my school

The findings from the survey sent out to teachers show that generally, teachers are willing and wanting to use technology in their classroom with most teachers (71%) on the higher end of the Likert Scale (3-5 rating) of currently using educational technology in their classroom 2 or more times a week. On the other hand, 62% of teachers feel they have been trained on the resources provided by our district (Likert Scale – 5- 12% , 4 – 25%, and 3 – 25%) with 38% feeling like they have not been trained (equal split between a 1 and 2 on Likert Scale). The open-ended questions that were asked in the survey resulted in seeing that there were 2 main separations of what teachers are wanting PD support in. 86% of teachers (6 out of 7 teachers with one teacher not responding directly to this question) reported wanting support with learning how to use the

IXL and RazKids programs that are paid for by our school and parent community. In addition, only 29% of teachers (2 out of 7 teachers) wanted support with teaching students how to log on and take care of equipment.

These findings lead me to the conclusion that PD and differentiated PD/PLC support for teachers would be beneficial in order to increase the percentage of teachers who understand how to use educational technology resources. Recommendations from this conclusion are that all general education teachers should have multiple sessions of PD on the specific programs that we have paid for at our school. In addition, targeted smaller sessions of PD during PLC time for the teachers who are wanting support on how to teach students to log in and take care of equipment.

Background

Ed-tech company [Glimpse K12](#) studied \$2 billion in school spending and found that on average, [67 percent of educational software product licenses](#) go unused. Glimpse K12 tracked 200,000 curriculum software licenses purchased by 275 schools during the 2017-2018 school year. The analysis found educational software was the biggest source of wasted spending in K-12 districts. – Michelle R. Davis of EdWeek Market Brief

The purpose of this evaluation and report stems from reports such as Glimpse K12, which highlights how funds from schools are getting wasted because teachers are not using the resources that have been purchased. Without training and continued support for educators, these financial resources will continue to be wasted. Until dedicated PD is put into place, more than a one-and-done PD session, teachers will not have the skills to use educational technology

consistently. At my school, there are currently very few teachers using technology that the school has purchased or is available via district resources especially in the K-1 classrooms. I have heard from multiple teachers that the time it would take for them to tackle learning the programs themselves and starting implementation in their classrooms feels overwhelming. These conversations occurred informally and led to the decision to more formally collect data and determine what supports teachers were specifically wanting.

Methods

Research Design: The methods used for this project were a 5-point Likert Scale with 4 open-ended questions to deepen my understanding of what educators want for technology support and implementation in our school. The scale was used as a guide for determining the general areas that teachers feel they need more support and the open-ended questions narrowed down what specific topics teachers would like to understand better. The survey questions focused on utilization, competency, and readiness on a scale of 1-5. The open-ended questions focused on gathering data about what types of PD were desired as well as what PD teachers did not want. In addition, two of the questions focused on general feeling about pros and cons of using digital educational technology in the classroom.

Participants: I work in a small school and chose to focus on the general education teachers. The participants were general education teachers with varying years of experience in education. The age of participants ranged from 23 – 42 years old.

Procedures: I sent out the survey via email and did 3 follow up emails to encourage participation. The survey was anonymous so that teachers felt they could respond honestly.

Instruments: To collect data, I chose to use Microsoft Forms as my survey platform. I chose Forms because our school district uses Microsoft tools, so teachers are familiar with filling out these types of surveys.

Analysis: 86% responded to the survey which is 6 out of 7 teachers.

Findings and Discussion

One immediate concern I had from my data results was that I did not have specific wording to go along with my 1-5 rating. This has resulted in assumptions being made by me and will need to be cleared up with more detailed discussions with my survey participants. If I were to do these questions again, I would instead use a 1-3 rating with yes, sometimes, no. This would give me a clearer picture with less gray area. For the findings below, I am assuming that selecting a 1 or 2 is a no or close to a no, a 3 is sometimes and 4 and 5 are yes.

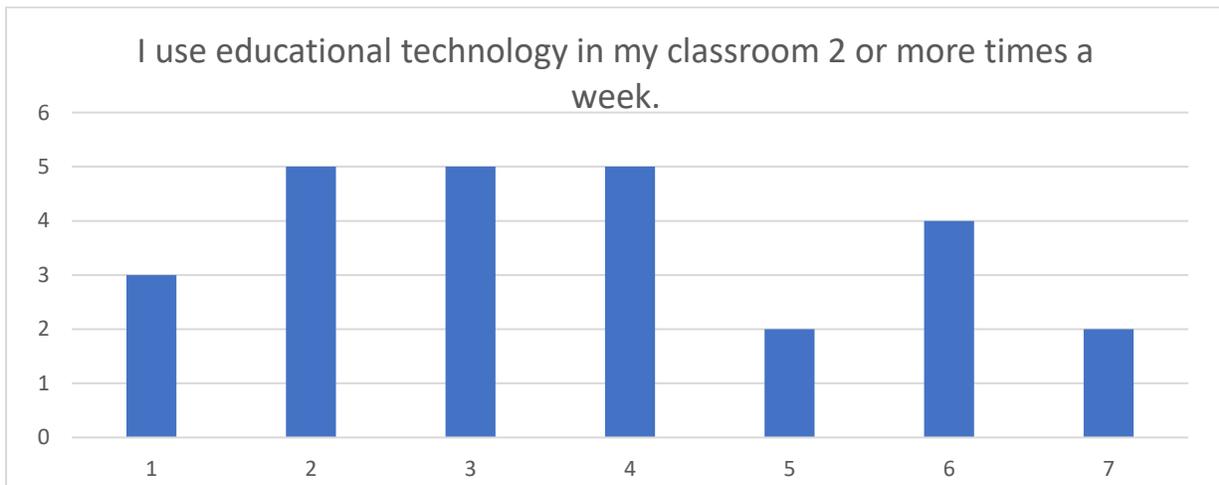


Table 1 – Current technology use

Table 1 indicates that 71% of the general education teachers in our schools are already using educational technology in their classrooms. A follow up question related to these results would

be what type of educational technology teachers are using? I realized through my survey results that getting specific details about what they are using and how they are using it would be helpful in determining if teachers are thinking similarly about what using educational technology means. Is this an app, a device, a learning platform, etc.? This will be discussed further in the Next Steps section.

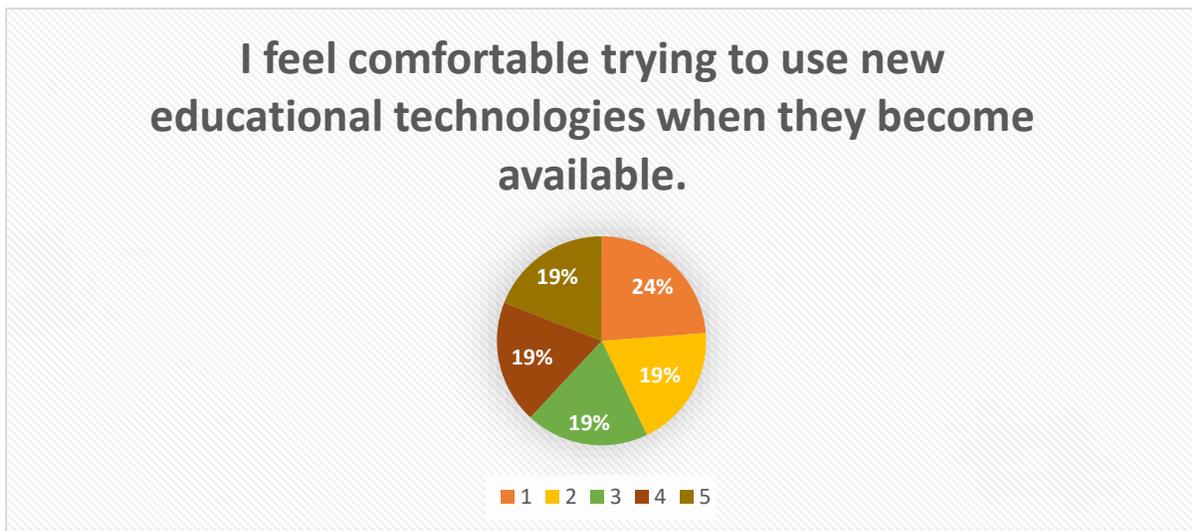


Figure 1 – Comfort with new technologies

There is a wide range of comfort levels related to using new technology with only 7 participants. 57% of teachers have a general 3-5 rating indicating a mid to upper level of comfort or willingness to try new educational technologies when available. 38% feel less comfortable when trying new educational technologies. This led me to analyze the data relating to how teachers are feeling about the amount of training they have received and the correlation between training and comfort with pioneering new technology.

I have been trained on how to use the digital education resources SPS and Cedar Park have available.

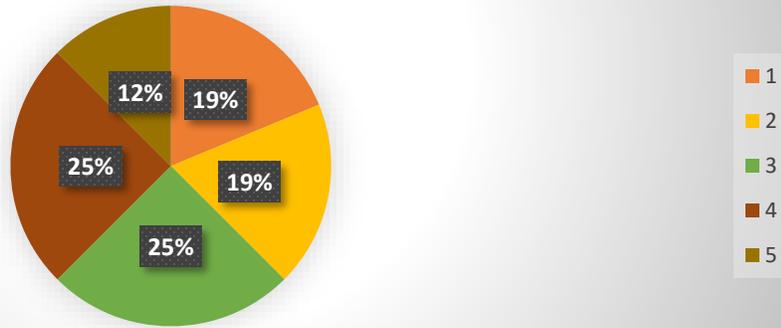


Figure 2 – Training for digital education use

38% of teachers do not feel they have been trained when using the 1-2 rating as a no/close to no answer. 62% of teachers responded with a 3-5 rating. If I think of the 3 rating being a sometimes and the 4-5 rating being a yes, then this breaks down the percentages in an interesting way:

I have been trained on how to use the digital education resources SPS and Cedar Park have available	I feel comfortable trying to use new educational technologies when they become available.
No – 38% Sometimes – 25% Yes – 37%	No – 43% Sometimes – 19% Yes – 38%

Table 2 – Comparison of training and comfort with new educational technologies

There seems to be a correlation between feeling comfortable using new educational technologies and having been trained or somewhat trained previously. This indicates that PD and training could equal more comfort in trying something new when it is presented as an option via the school, the district or from a colleague. I also noticed that the difference between the '3 -

sometimes' rating in the training category jumps up into the '1 to 2 - no' category for comfort with using new technologies. This data implies that if teachers have had little to no training, then they may be less likely to try something new because there is not a feeling of mastery over what they have been somewhat trained on or had to try with no training. This data brings me to the conclusion that stronger training at the forefront leads to more self-sufficient educational technology learners in the future with more confidence in understanding the similarities in figuring out programs independently.

In order to know what PD and training would be most beneficial to the teachers at my school and support independence with implementing educational technologies, I turned my focus to the responses to the open-ended questions in my survey.

Open Ended Questions Results:

What type of educational technology PD would be helpful for you?	What type of PD would NOT be beneficial to you?
RazKids IXL Clever portal	Teaching kids how to sign on Taking care of equipment

Looking at the responses to the open-ended questions, I took the top mentions in each category that were mentioned more than 1 time by teachers. From these responses, my findings indicate that PD focused on how to use digital platforms/programs successfully outweighed the need for PD teaching students how to use devices, signing on and taking care of equipment. There were some crossovers with one response being opposite to the majority of responses – wanting PD for walking students through how to sign on and not wanting Clever portal training. Additionally, IXL

and RazKids did show up in types of PD not beneficial, one time each, yet not by the same person. The person who wrote IXL PD **would not** being beneficial wrote that RazKids **would be** beneficial and the other person wrote that RazKids PD **would not** be beneficial but IXL PD **would be** beneficial. This leads me to the conclusion of the importance of differentiated PD around educational technology so that educators are getting what they need as specifically as possible in order to put the PD to use and have it be time purposefully spent versus time wasted on something they are already familiar with.

Next Steps

The results from the data collected, lead to a few next steps when designing PD to support implementation of technology tools at my school. Continued conversations at whole staff meetings around what it means to be successfully and regularly implementing educational technology will provide a basic starting point and consensus about what this means. From there, having PLC conversations about the finding of these results will fine tune my plan for PD support so that the plan is not from the top down and instead a collaborative effort that speaks to the true needs of each teacher. In order to do this, after talking with PLC's, I will send out a draft of my PD proposals and finalize this after input of possible changes from the general education teachers. This should clear up incorrect assumptions I may be making from the results of the survey since there seems to be high potential for misunderstandings. Finally, my plan thus far is to provide specific PD for how to use RazKids and IXL. I would like to do this PD as an open house style PD where both programs are being worked through with a hands-on approach so that teachers can choose to focus on one or both depending on their needs. This also means that educators who know about these programs could help others who do not and it would be more

of a collaborative effort versus a presentation with one 'expert', since we do have teachers who have a lot to share from their own experiences.

References

Davis, Michelle. (2019, May 19). K-12 Districts Wasting Millions by Not Using Purchased Software, New Analysis Finds. Retrieved from <https://marketbrief.edweek.org/marketplace-k-12/unused-educational-software-major-source-wasted-k-12-spending-new-analysis-finds/>

Appendices

Data Collection Survey Questions

Likert Scale Questions:

- I use educational technology in my classroom 2 or more times a week. **(Utilization)**
- I share with families how to access and use digital education resources from home. **(Utilization)**
- I use the information/data from digital education resources to inform my teaching. **(Utilization)**
- I understand how to set up and use digital education platforms and tools. **(Competency)**
- I know how to teach students to use the iPad or Computer in order to access technology resources at school. **(Competency)**
- I know how to use my interactive whiteboard. **(Competency)**
- I have been trained on how to use the digital education resources SPS and Cedar Park have available. **(Readiness)**
- I feel ready to incorporate technology platforms regularly (1 or more times a week) in my classroom. **(Readiness)**
- I feel comfortable trying to use new educational technologies when they become available. **(Readiness)**

Open Ended Questions:

- What type of educational technology PD would be helpful for you?
(For example: teaching kids to use the tool - iPads/computers/signing on, taking care of equipment, using Clever teacher/student portal, setting up and using programs like IXL/Raz Kids/online SPS resources, teaching digital citizenship, etc.)
- What type of PD would NOT be beneficial to you?
- What are the pros of using technology in your classroom?
- What are the cons of using technology in your classroom?