Meeting the Technology Professional Development Needs of a Diverse Faculty

by

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Field Project

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This field project paper has been examined and approved.

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Abstract

This document details a field project using surveys and technology professional development. The purpose of this project was to investigate when and how to plan staff technology training that meets the personal needs of each staff member. In addition, this project identified other barriers regarding technology.

The teachers of St. Mark Lutheran School in Green Bay, WI, participated in this project. Two surveys were distributed in three rounds, but not every teacher participated in each survey. The Leadership and Scheduling survey had an 88 percent response rate. The Technology Needs assessment survey had a 98 percent response rate. Teachers participated in technology professional development through large group sessions, one on one sessions, or online sessions. St. Mark Lutheran is thankful for its technology advancement, but is realistic that barriers exist that hinder growth.

Acknowledgments

I would like to acknowledge and thank those who supported me throughout my Master's journey. I thank my capstone review committee, Professor James Grunwald, Professor Gail Potratz, and Professor Jason Schmidt for their thoughts and proofreading skills. I'd also like to thank the faculty and staff at St. Mark Lutheran for learning technology alongside me and providing feedback to strengthen our technology program. Finally, I thank my wife, Sarah, and daughters, Jordan and Autumn, for giving me support and encouragement as needed. To God be the glory! Amen

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Chapter I: Introduction

Identify the Issue

St. Mark Lutheran School, Green Bay, Wisconsin, is blessed regarding technology resources. Interactive whiteboards, video projectors, Chromebooks, and G-Suite for Education are a few tools teachers may use to integrate technology into the curriculum. The problem occurs when attempting to plan and schedule training sessions that match the various technological competency levels of the teachers.

St. Mark has a large faculty and finds it difficult to meet after school due to extracurricular duties and family obligations. Eight half day in-services are scheduled throughout the year, but since that in-service time is normally dedicated to numerous agenda items, lesson improvement, and curriculum development, it is challenging to use this time for technology training. This lack of time for training presents a problem because the faculty needs ongoing training to help them consistently integrate technology within the curriculum. While the faculty meets twice a month for a 25 minute technology training, this is not enough time to accomplish the school's training goals.

Additionally, the size of the faculty creates a gap of competency levels. Planning training means that certain faculty members are learning a brand new concept while others have already mastered the fundamentals. Finding a training program that works for the whole faculty is a necessity.

Importance of the Project

Teachers are the most important people in the classroom. As technology continues to evolve, teachers must continue to grow in using technology to support learners in their classroom. Moreover, they must also be able to transition these new skills to a

personalized learning environment. To do so, teachers need training that is personalized, as well as time to learn these new skills. The big picture is that teachers are not trained well enough in how to integrate technology effectively into their classroom. Most teachers would say they get thrown into technology without having people there to train them (Lytle, 2012).

Project Purpose or Goal

The purpose of this project was to investigate when and how to plan staff technology training that meets the personal needs of each staff member. In addition, this project identified other barriers regarding technology integration. The results of this project determined what training times work best, established how to deliver effective professional development methods for the St. Mark faculty, and identified potential barriers in technology training.

Chapter II: Literature Review

Introduction

Technology is an integral part of education and schools are embracing technology to engage students and create active learners. Teachers who integrate technology develop engaging lessons and become successful in its use. New technologies arrive on a regular basis so technology professional development is key. If teachers are going to use technology in their classroom, teachers will have to take the initiative to learn new technologies. However, there are barriers that prevent teachers from learning and making effective use of technology in the classroom.

Barrier Definition

A barrier may be defined as a circumstance or obstacle that keeps people or things apart or prevents communication or progress (Barrier, n.d.). Different descriptions have been written for barriers to technology education. Examples are extrinsic and intrinsic, teacher-level and student-level, or just by type. For the purpose of this research, this paper will explore types of barriers that affect technology use in the classroom.

Barrier Types

Attitudes and beliefs.

Teacher attitudes and beliefs are a barrier to technology training. Every faculty has teachers who are resistant to change. Since technology changes rapidly, some faculty resist, referring to new technologies as fads (Young, 2010). When it comes to technology teachers will either like or dislike the use of technology. Ertmer (2005) argued that the decision of whether and how to use technology for instruction ultimately depends on teachers themselves and the beliefs they hold about technology. Some teachers must be

convinced of the benefits of technology use. Certain conditions must be met before the use of technology tools and resources can support effective learning. These included having a specific purpose for using the tool or resource, using technology with the right kinds of lessons, and making sure students use the technology for its intended purpose (Francom, 2016). Setting the right course will create a positive attitude towards the use of technology for instruction.

Confidence.

Confidence affects teachers' ability to integrate technology into the curriculum. Teachers face many demands in their educational roles. Educators are responsible for classroom management, improving their teaching skills and knowledge, creating lesson plans that engage students, and extracurricular duties. When you add instructional technology to the list, anticipation of these extra responsibilities may make instructors reluctant to adopt the technologies unless they are confident the technology supports are already there (Reid, 2014). Teachers may feel anxiety as they attempt to integrate technology into the curriculum and be overwhelmed by its use. The more training experiences teachers have, the more confident they will be using technology in the classroom. Teachers who are confident are willing to integrate technology and may be more open to additional training to engage new teaching techniques.

Leadership.

School leadership is key to promoting and providing the right opportunities in technology training. According to Dinham (2005), leadership is important in developing effective, innovative schools and in facilitating quality teaching and learning. One of the primary roles of school leadership is to support teachers and create a shared vision for

technology use. According to Yee (2000), successful school principals should inspire a shared vision for comprehensive integration of technology and foster an environment and culture conducive to the realization of that vision. Also, these principals should portray passionate commitment to providing appropriate professional staff development for their staff members (Yee, 2000). A shared vision can be achieved by creating expectations that professional development plans will include a technology component (Ertmer & Ottenbreit-Leftwich, 2010). While the principal and technology director generally create a school's technology plan, to ensure successful integration, teachers must have a voice in the technology plan creation. In other words, a well-developed technology plan with a common, shared vision promoted by the administration is of greater importance to Information and Communication Technology's successful adoption than the technology support team alone (O'Reilly, 2016). If a faculty is committed to a technology plan and vision, then it is committed to technology integration with the school's curriculum.

Technical Support.

Teachers are in the classroom to teach students. Classroom technology problems are a major source of frustration when technical barriers impede the smooth delivery of the lesson or the natural flow of the classroom activity (Sicilia, 2005). Teachers expect classroom technology to work, and if it fails, they do not want to be troubleshooting the problem. Time spent troubleshooting problems mean valuable class time is lost, or in most cases, the technology is not used at all (Sicilia, 2005). The next step is to contact technology support.

However, teachers can feel uncomfortable asking for help from school technology coordinators who also carry a full teaching load (Brinkerhoff, 2006). According to

Ronnkvist, Deter, and Anderson (2000) 87% percent of the schools surveyed indicated that someone served in the role of technology coordinator. However, only 19% of these technology coordinators reported working full-time (i.e., 35 hours or more per week) in that capacity. WELS schools face this same dilemma. Quite often, the technology coordinator is also a full-time teacher. They may lack the time to provide consistent and regular technology support or demonstrate how to effectively integrate technology into the school's curriculum. Technical support takes precedence when time is an issue so less time is spent helping teachers improve their knowledge of technology and working it into their lessons.

Professional Development/Training.

Twenty-first century teachers are in a new era where the tools they use are drastically different from the tools used in the past. Today, we expect teachers to use technology in ways that extend and increase their effectiveness (Ertmer & Ottenbreit-Leftwich, 2010), but the reality is that today's teachers represent a diverse cohort with varying degrees of facility when it comes to effectively deploying technology tools (O'Reilly, 2016). Teachers are hungry for training that helps them feel confident and makes them competent to teach technology to today's students.

Professional development is critical to the successful integration of technology in the classroom. Many teachers feel inadequate concerning technology skills and the knowledge of how to incorporate technology into lessons. Many faculties have indicated they feel ill-equipped to change the way they teach and thus would like access to structured, formal training (Brownell & Tanner, 2012). Training support, however, must become a priority to ensure that teachers understand how to effectively integrate

technology into their lesson plans. Sixty percent of K-12 teachers believe adequate preparation has not occurred to support the level of implementation of technology to enhance student outcomes. Ninety-one percent of teachers believe that current training on using technology is necessary to model 21st century learning (Williams, 2017).

Teachers have a strong desire to know how technology can be implemented into the curriculum. A majority of certified educators reported they would be more likely to use technology with training/professional development (Pritchett, Pritchett, & Wohleb, 2013). A technology coordinator or instructor must be in sync with the needs of his or her faculty and staff. An effective technology instructor is sensitive to individual differences that hinder or foster learning, promoting those factors that enhance learning while identifying as early as possible those individuals who may be at risk (Downey & Kher, 2015).

Professional technology development is not a serve all proposition. Staff and teachers are on their own unique level of understanding. Technology coordinators must investigate the proper methods to create a learning experience for everyone involved in the professional development. For some teachers, informal and flexible learning (e.g., discussion with peers, blogs, or classroom observations) provide additional opportunities to continue their professional development. Offering a range of meaningful experiences for the teacher to choose from can give a better picture of the professional development opportunities which teachers have found most effective (O'Reilly, 2016).

Time.

Time constraints hinder teachers' ability to plan and prepare technology integration. According to Sicilia (2005), the most common challenge reported by teachers

was the lack of time they had to plan technology lessons, explore different internet sites, or look at various aspects of educational software. Teachers need more preparation time to place instructional technologies into lessons and the learning process.

WELS teachers, by the nature of their Callings, are generally full-time teachers who are either assigned or agree upon extracurricular duties. Administration creates a yearly schedule for faculty meetings and professional development, but this designated schedule may not be sufficient to accomplish the school's technology goals. Due to extracurricular and family obligations, it is a struggle to schedule additional time to learn technology skills and keep current. According to Williams (2017), research shows that integration of technology does not happen over a short period of time. Teachers need to have the opportunity to model the technology, monitor student progress in behavior, motivation, and assessment which can take can take a number of years to see the technology effects on learning. Administration and faculty will need to find mutual times throughout the year to ensure that training blossoms and is moving forward.

Summary

Technology professional development has many barriers to overcome, but it is vital to the education of students. In today's society, educators must engage in lifelong professional development to keep up with changing professional demands, technology integration being one (Scott, 2008).

Chapter III: Implementation

Introduction

St. Mark Lutheran School has a staff of 15 teachers on three campuses. Twelve teachers and the principal are staffed at the Green Bay campus, and there is one preschool teacher each at the De Pere and Riverside campuses. This project aimed to solve a problem at St. Mark's Lutheran School, namely, how and when to plan staff technology training that meets the personal needs of each staff member. This chapter discusses the staff technology surveys given, and the adjustments that were implemented in staff technology training after the first and second round of surveys.

Procedures

In order to determine how and when to plan staff technology training that meets the personal needs of each staff member, the St. Mark Lutheran School faculty took two surveys which were given three times during the course of the 2019-2020 school year. The technology director was the researcher so he chose not to fill out the surveys. Survey links were created and delivered to staff in September, December, and April of the 2019-2020 school year. Staff was given three weeks to complete the two surveys in each round of surveys.

The two surveys were created using Google Forms. The Technology Needs Assessment survey (Appendix A) assessed the technology needs of the staff, and the Leadership and Scheduling survey (Appendix B) addressed technology leadership and the scheduling of training. A meeting was conducted with the St. Mark Lutheran School faculty before the beginning of the 2019-2020 school year to explain the project, the forthcoming surveys, and to obtain their consent prior to distributing the surveys. The

results of the surveys distributed in September were analyzed to determine the direction of faculty training sessions for the first two quarters of the school year, and the results of the surveys distributed in December assisted with determining the training sessions for the third quarter and into the fourth quarter. The results of the surveys distributed in April assisted with identifying any further technological barriers and gave teachers a final opportunity to answer how and when to plan staff technology training that meets their personal needs.

Artifacts and Findings

As previously stated, two Google forms were used three times as the assessment tools for determining how and when to plan staff technology training that meets the personal needs of each staff member. The first round of surveys was filled out in September before any technology professional development occurred. The second round of surveys was completed in December after seven technology training sessions occurred, and the final round of surveys was given in April after four additional technology training sessions occurred.

The Leadership and Scheduling survey was completed by 12 teachers the first time, 11 the second time, and 14 the third time. The Technology Needs Assessment Survey was completed by 14 teachers the first time, 13 the second time, and 13 the third time. The number of potential teacher respondents was 14.

Technology Needs Assessment Survey Questions.

The first three questions of the Technology Needs Assessment Survey (Appendix A) focused on staff rating their technological skill levels. Questions 4 through 9 focused on how the staff prefers to learn technology and how they integrate technology into the

classroom, collaborate professionally, and use technology in daily administrative tasks. Questions 10 through 17 asked teachers to answer how they engage students in various technology skills. Questions 18 through 21 asked about the use of assistive technology, parents and student communications, and tools used to collaborate professionally. The final question provided an opportunity for respondents to share their thoughts about technology.

Leadership and Scheduling Survey Questions.

The first four questions of the Leadership and Scheduling Survey (Appendix B) used a five-point Likert scale to rate the leadership and effectiveness of the principal and technology director. Questions 5 and 6 focused on if the technology director was assisting staff promptly and provided enough time to assist them. Questions 7 and 8 asked about the degree of success related to five technology categories and an awareness of the school's technology vision. Finally, questions 9 through 11 investigated when and how often the staff was willing to meet for professional development during the school year and summer.

Technology Needs Assessment Survey Results.

The Technology Needs Assessment Survey 1 Results (Appendix C) revealed that staff would benefit from technology training that would be helpful in classroom instruction, beneficial to student learning, and a topic that could be covered in-depth. The technology director chose to train the staff in Google Slides during the first and second quarter due to its versatile uses, and because six teachers rated themselves being "Not Familiar" or "Beginning" on question 2 of Technology Needs Assessment Survey 1 (see Figure 1) which asked teachers to rate their skill level in various technologies.

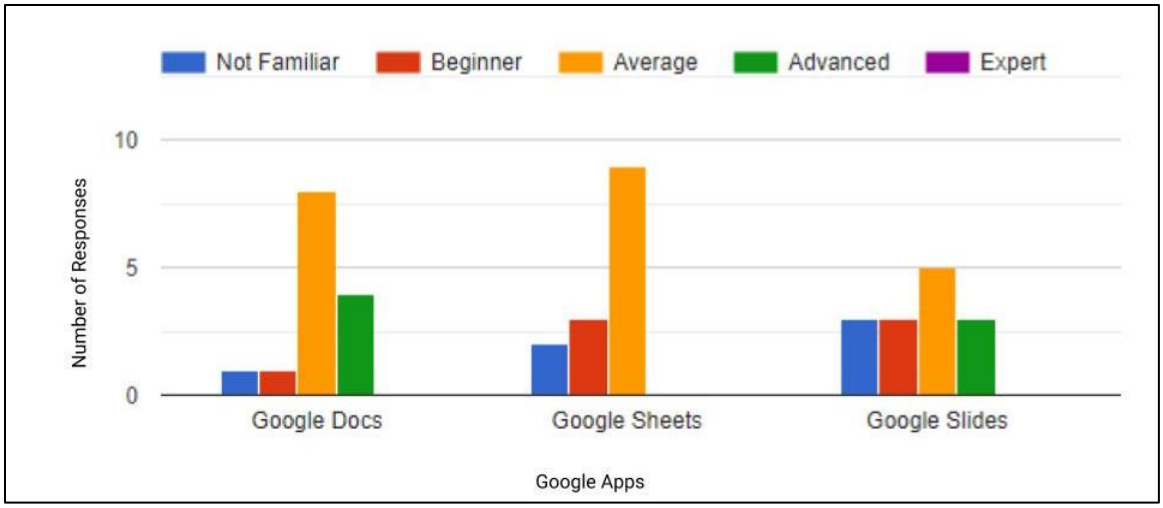

Figure 1: Self-Assessment of Google Apps Skill Levels, Survey 1

In addition, responses to question 3 of Technology Needs Assessment Survey 1 asked, "What Professional Development topics do you feel you would benefit from?" Responses indicated it might be beneficial to "dig really deep into a topic" or "benefit from picking out the technology that is going to be very helpful to my students and learning how to use that technology."

Technology Needs Assessment Survey 2, question 2 results (Appendix D) showed a change of one teacher in Google Slides from "Not Familiar" to "Beginner" and one less in the "Advanced" category from Technology Needs Assessment Survey 1, question 2 results as shown in Figure 2.

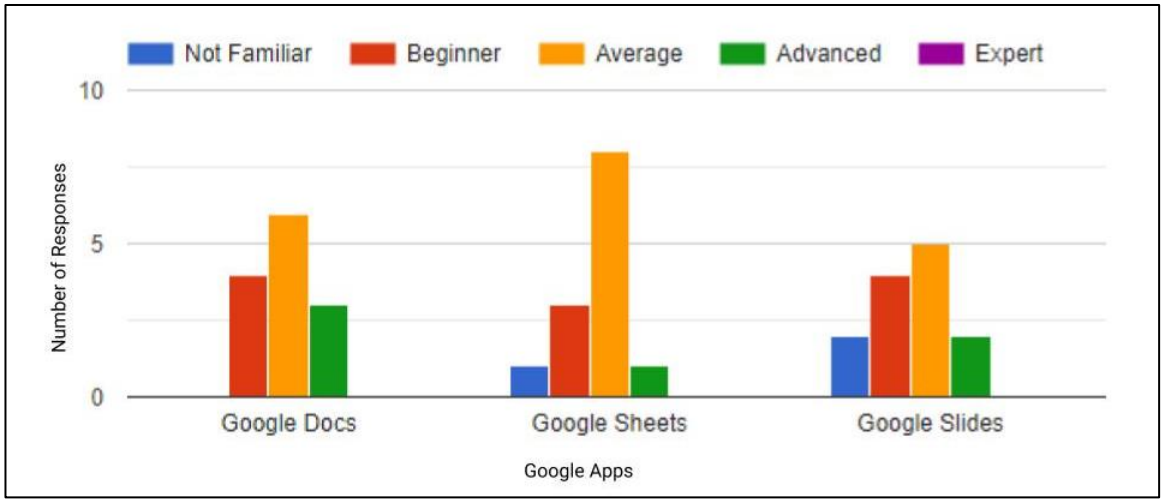

Figure 2: Self-Assessment of Google Slides Skill Levels, Survey 2

One teacher that selected "Advanced" on the first survey did not participate in the second survey so the "Advanced" rating only shows two teacher ratings. Training in Google Slides ended in December so the chart showed little change in the self-evaluation with Google Slides.

Technology Needs Assessment Survey 3, question 2 results (Appendix E) showed three teachers at "Beginner," six teachers at "Average," and four teachers at "Advanced" in Google Slides as shown in Figure 3.

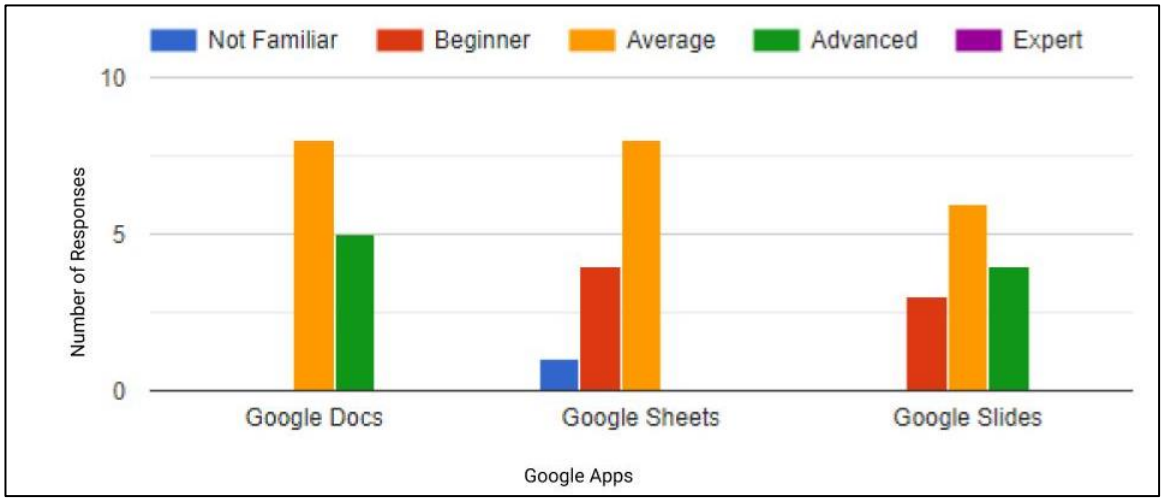

Figure 3: Self-Assessment of Google Slides Skill Levels, Survey 3

The researcher believes this was a result of teachers using Google Slides more in the third quarter of the school year after professional development in the first two quarters and the result of mandatory virtual classroom teaching in the fourth quarter due to COVID-19.

At the end of the second quarter teachers were asked to consider technology training in either Google Docs or Google Drawings for the third quarter. Teachers felt that Google Docs would be most helpful. During the third quarter the technology director provided large group professional development, one-on-one professional development, and online training in Google Documents.

Technology Needs Assessment Survey 2, question 2 results (Appendix D) showed four teachers at "Beginner," six teachers at "Average," and three teachers at "Advanced" in Google Documents as shown in Figure 4.

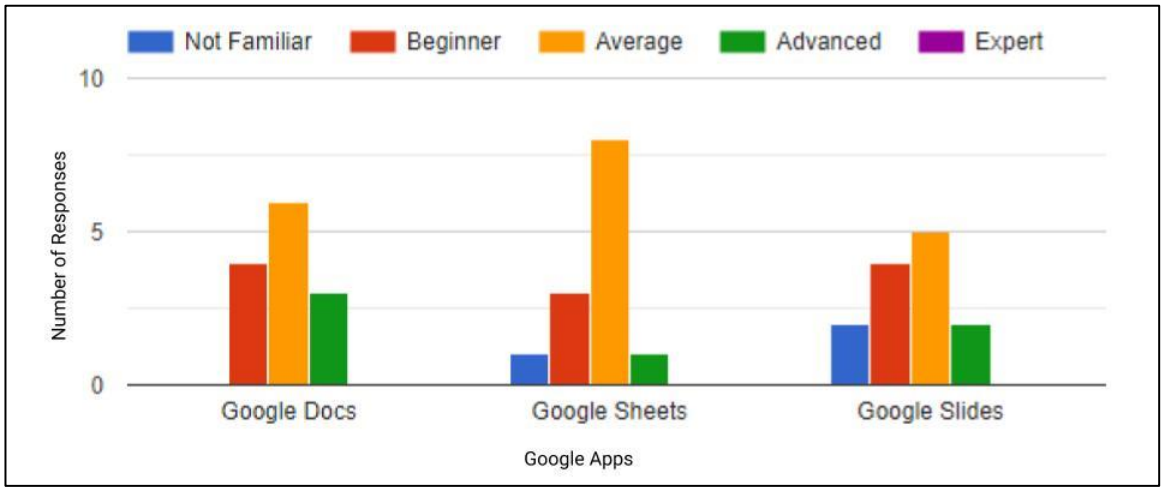

Figure 4: Self-Assessment of Google Docs Skill Levels, Survey 2

Technology Needs Assessment Survey 3, question 2 results (Appendix H) showed eight teachers at "Average," and five teachers at "Advanced" in Google Documents as shown in Figure 5.

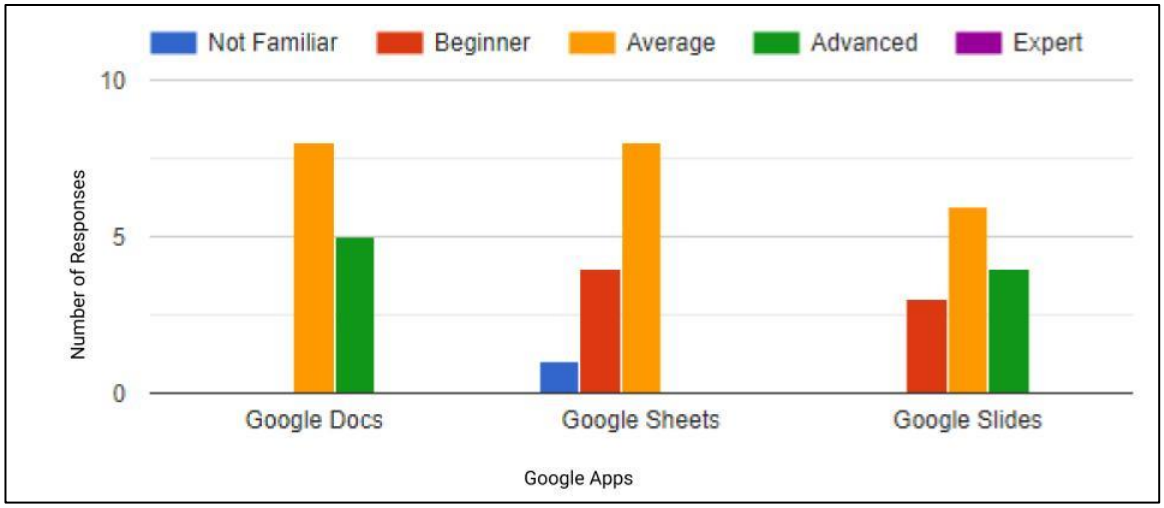

Figure 5: Self-Assessment of Google Docs Skill Levels, Survey 3

The results show a positive effect on the varying training methods associated with the Google Document trainings.

Leadership and Scheduling Survey Results.

Leadership and Scheduling Survey Results (Appendices F-H) indicate that the technology director might benefit from more release time to devote to technology leadership, personal education, training and teaching teachers, and help with technology integration in the classroom.

Question 6 on the Leadership and Scheduling Survey (Appendix B) asks if the technology director is provided enough time to assist staff with technical support and instructional technology. On a sliding scale of 1-5, with 1 meaning “Not at All” and 5 meaning “Absolutely,” the technology director time provision scores averaged 3.00 on the first survey, 3.27 on the second, and 3.14 on the final survey. The ratings seem to imply that given increased release time, the technology director might be able to improve technical support and instructional training.

Additional results from the Leadership and Scheduling Survey are included in the next section of the paper, Technology Barrier Exploration Results.

Technology Barrier Exploration Results

The technology surveys and technology training were well received. Below, you will find summaries of technology barriers explored in the surveys. More detailed survey results can be found in Appendices C through H.

Attitudes and beliefs.

Setting the right course will create a positive attitude towards the use of technology for instruction. To set the course, the staff must know the vision for instructional technology in the classroom. Question 8 on the Leadership and Scheduling surveys (Appendices F-H) asked if teachers were aware of St. Mark's technology vision for the use of instructional technology in the classroom. The survey results revealed that the technology vision was clear to most teachers, but not all.

Teachers must believe in their ability to use technology in their classroom. On a sliding scale of 1-5, with 1 meaning "Not at All" and 5 meaning "Absolutely," question 5 on the Technology Needs Assessment surveys (Appendices C-E) asked how comfortable teachers were in integrating technology into their classroom. The average score was 3.57 on the first survey, 3.38 on the second, and 3.46 on the final survey. Overall, teachers feel comfortable integrating technology, but growth can occur within the staff.

Confidence.

Confidence affects teachers' ability to integrate technology into the curriculum. The Technology Needs Assessment Survey 1, question 1 (Appendix C) asked teachers to rate their overall ability with technology. Four teachers rated themselves as beginners, seven as average, and three as advanced (see Figure 6).

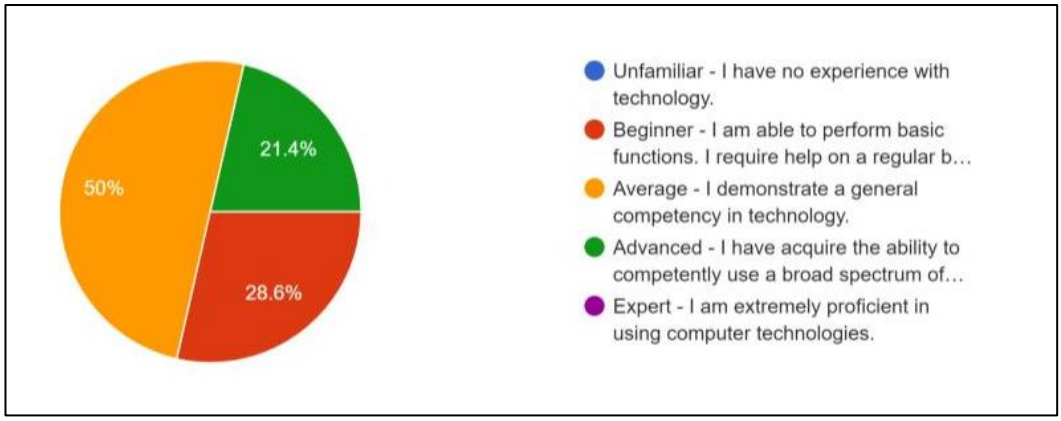

Figure 6: Self-Assessment of Technology Ability, Survey 1

The second round of the Technology Needs Assessment Survey, question 1 results (Appendix D) showed the same outcome except one less teacher took this survey so the question shows one less response in the average rating (see Figure 7).

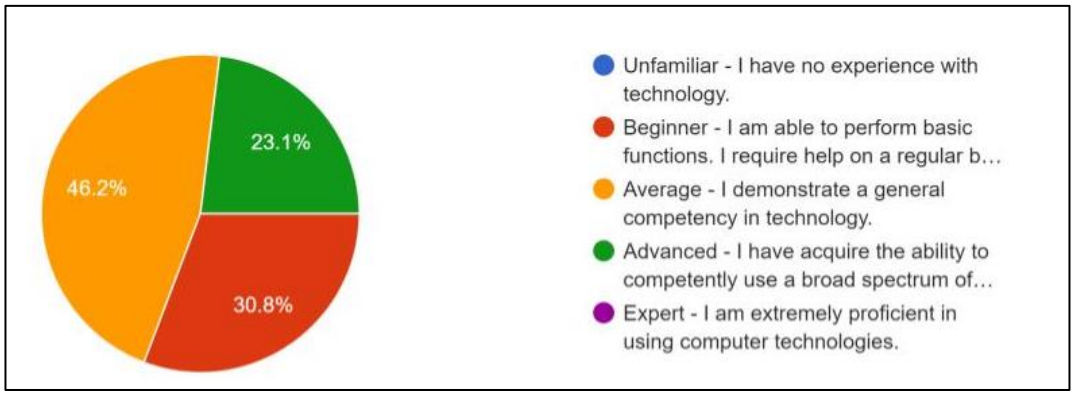

Figure 7: Self-Assessment of Technology Ability, Survey 2

However, the third round of the Technology Needs Assessment Survey, question 1 results (Appendix E) showed two teachers rated themselves as beginners, eight as average, and three as advanced (see Figure 8).

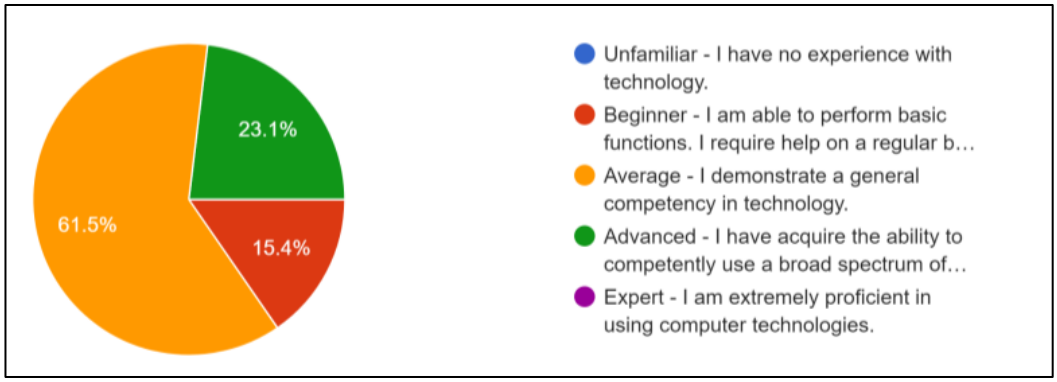

Figure 8: Self-Assessment of Technology Ability, Survey 3

The third survey indicates an increase in confidence in two teachers.

Leadership.

St. Mark Lutheran began the 2019-2020 school year with a first-time principal. Question 1 on the Leadership and Scheduling Survey (Appendix B) asked, "Is the principal providing technology leadership for the school?" On a sliding scale of 1-5, with 1 meaning "Not at All" and 5 meaning "Absolutely," the principal's technology leadership scores averaged 3.66 on the first survey, 3.45 on the second, and 3.71 on the final survey. Overall the principal seems to be providing effective technology leadership. However, the survey results indicate that the principal could promote, provide, and encourage more technology training which could be done using staff in-service time. Also, he could hold the staff accountable for using technology more and according to the vision of the school.

In comparison, the technology director, who has been with St. Mark for five years, appears more effective in providing technology leadership. Question 3 on the Leadership and Survey (Appendix B) asked, "Is the technology director providing technology leadership for the school?" On a sliding scale of 1-5, with 1 meaning "Not at All" and 5 meaning "Absolutely," the technology director leadership scores averaged

4.16 on the first survey, 4.09 on the second, and 4.36 on the final survey. However, each survey provided comments stating the technology director could be more effective if given more time. Technology quickly evolves. Given time, the technology director would be better equipped to understand, train, and help teachers with new technologies.

The technology director is encouraged to differentiate trainings for teachers at different levels of technological ability, provide more one on one training, and use in-service to show teachers how to incorporate technology in lessons. Additional release time will create and provide these requested training opportunities.

Technical Support.

The technology director is also a full-time teacher. Therefore, he may lack the time to provide consistent and regular technology support. Question 5 on the Leadership and Scheduling survey (Appendix B) asks, "Is the technology director able to assist with your technology needs promptly?" On a sliding scale of 1-5, with 1 meaning "Not at All" and 5 meaning "Absolutely," the responses averaged 4.00 on the first survey, 3.45 on the second, and 4.07 on the final survey. The technology director attempts to be prompt when technical support is needed, but realizes that more time is needed to research, trouble-shoot, and address technical issues in a timely manner.

Professional Development/Training.

Professional development is critical to the successful integration of technology in the classroom. The technology director conducted 11 in person or online trainings during the first three quarters of the school year. In addition, the technology director met with teachers for one to one trainings or sent out web links or videos to support technology questions.

Before any professional development in technology took place, the Leadership and Scheduling Survey 1 (Appendix F) was completed. Question 7 (see Figure 9) asked teachers to rate the degree of success St. Mark's technology has had in implementing professional development. Four teachers rated professional development implementation "Not Successful," and nine teachers rated it "Right on Target."

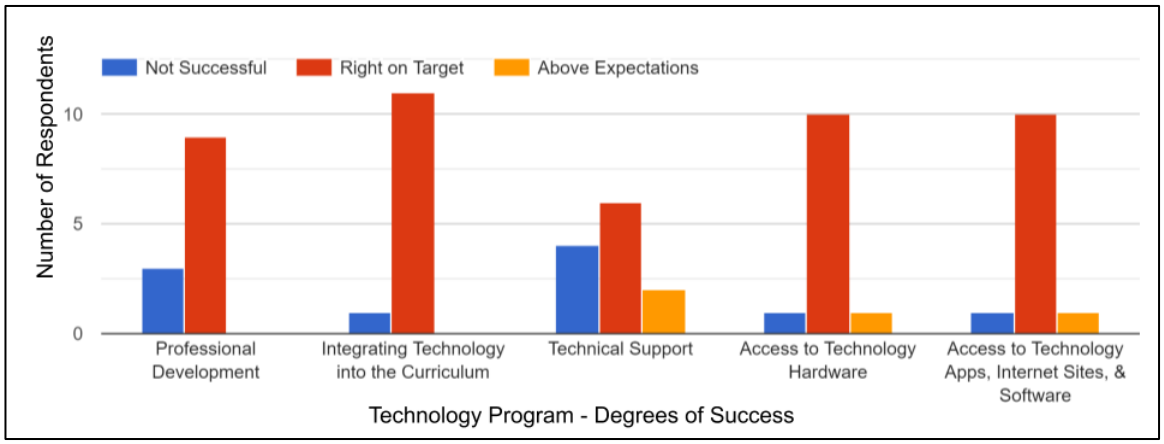

Figure 9: Professional Development Degree of Success, Survey 1

Leadership and Scheduling Survey 2, question 7 (Appendix G) was completed in December of 2019 (see Figure 10). Ten teachers rated professional development implementation "Right on Target," and one teacher rated it "Above Expectations."

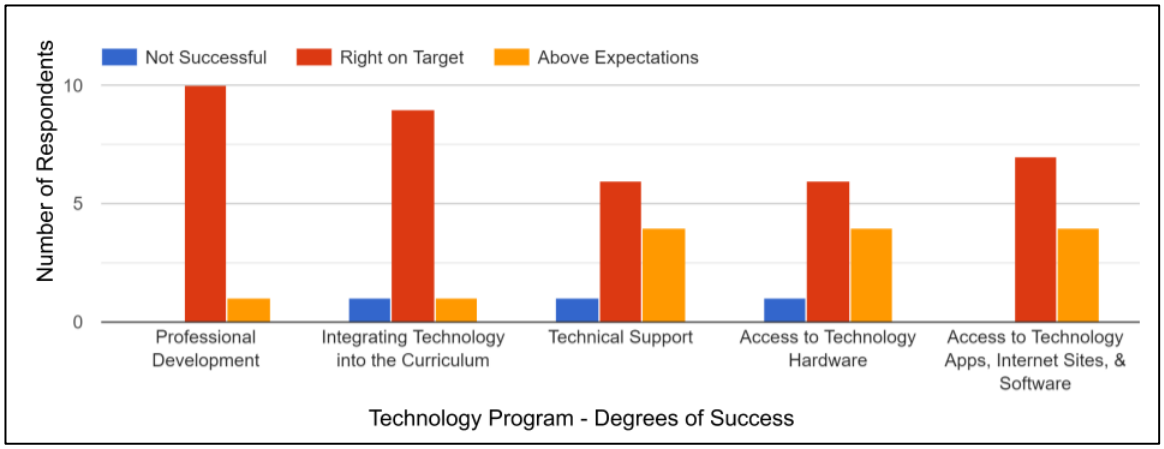

Figure 10: Professional Development Degree of Success, Survey 2

Leadership and Scheduling Survey 3, question 2 (Appendix H) was completed in April of 2020 (see Figure 11). Two teachers rated professional development implementation "Not Successful," eight teachers rated professional development implementation "Right on Target," and four teachers rated it "Above Expectations." The increase in "Not Successful" for Leadership and Scheduling Survey 3 could potentially be related to the mandatory transition to remote learning in response to COVID-19 and having to be more self-reliant in learning technology.

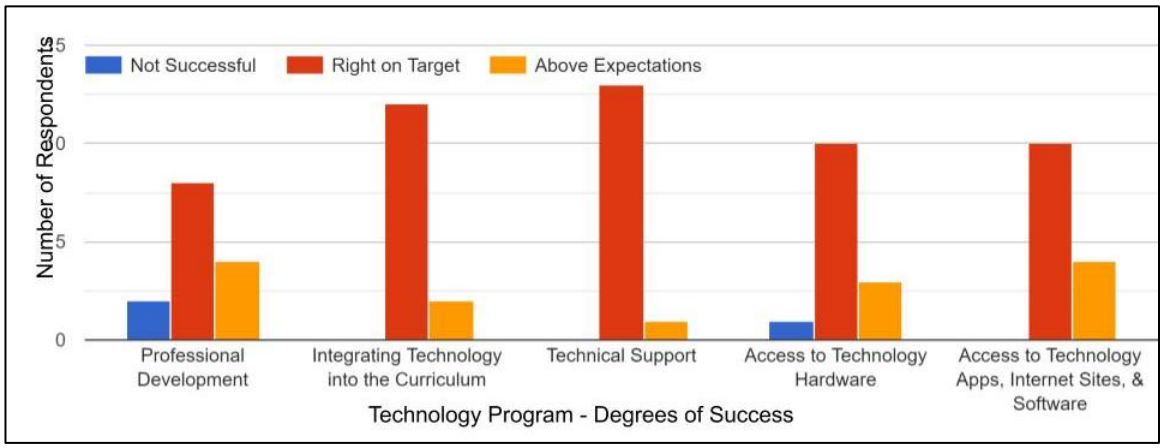

Figure 11 Professional Development Degree of Success, Survey 3

Teachers have a strong desire to know how technology can be implemented into the curriculum. Question 3 on the Technology Needs Assessments (Appendices C-E) asked teachers to provide topics for future technology professional development. Survey results indicate that teachers wish to dig deep into topics that might be most useful in a classroom rather than just scratch the surface with multiple technologies.

Teachers desire training in parent communication tools and more training in the school's student information system, Sycamore. Some teachers would like a review of how to add and edit their Classroom Page on the school's website. Training is needed on apps or tools that are self-grading like Google Forms. Finally, small group or one-on-one

training was requested by lower grade teachers who need more help with basic technology skills like creating a Google contact group or helping younger students use technology in the classroom.

Like students, each teacher has preferred learning modalities. Teachers were able to state the learning styles they preferred in the Technology Needs Assessment Surveys, question 4 (Appendices C-E). The survey provided six ways technology training could occur. Large group professional development was selected 14 times. Small group professional development was selected 26 times. One to one peer training was selected 16 times. One to one with the technology director was selected 15 times. Online training was selected 5 times and video training was selected 7 times.

Time.

Administration and teachers need to establish technology training times throughout the school year so that teachers blossom in their knowledge of technology and integrate it into the curriculum. Due to extracurricular and family obligations, it is often difficult to schedule time to learn technology.

The Leadership and Scheduling Surveys, question 9 (Appendices F-H) asked how often staff was willing to meet each month during the school year for technology professional development. There were 37 responses on the three surveys that broke down as follows: 11 submissions for once a month, 24 submissions for twice a month, 1 submission for three times a month, and 1 submission for weekly training each month.

Currently the staff meets twice a month on Tuesdays from 7:15-7:45 for technology professional development. According to the Leadership and Scheduling Survey, question 10 results (Appendices F-H), this time slot remains the most popular

time slot for training with any day working for professional development. However, the Leadership and Scheduling Survey 3 results (see Figure 12) showed a change in that six teachers indicated that the 7:00-7:45 a.m. time frame is also a possibility.

	6:45-7:45 a.m.	7:00-7:45 a.m.	7:15-7:45 a.m.	3:30-4:00 p.m.	3:30-4:15 p.m.	3:30-4:30 p.m.
Monday		5	5	3		2
Tuesday		6	6	3		
Wednesday		6	6	3		1
Thursday		6	4	4		
Friday		6	6	2		

Figure 12: Professional Development Training Time Preference, Survey 3

Technology training is vital during summer. It enables teachers to learn and prepare technology for use in the curriculum. The Leadership and Scheduling Surveys, question 11 (Appendices F-H) asked how often staff was willing to meet during the summer for technology professional development. The Leadership and Scheduling Survey 3, question 11 results (see Figure 13), showed that a majority of teachers prefer one technology training per month.

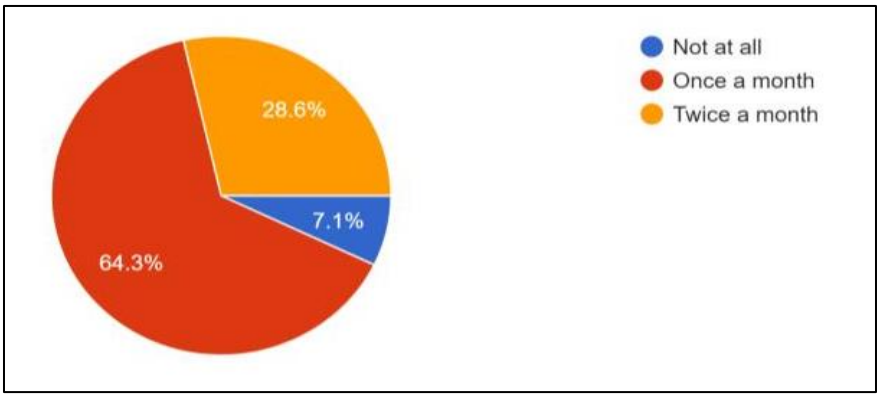

Figure 13: Professional Development Summer Training Time Preference, Survey 3

Chapter IV: Reflective Essay

Introduction

The purpose of this project was to investigate when and how to plan staff technology training that meets the personal needs of each staff member. In addition, this project identified barriers regarding technology integration. This final chapter will reflect what training times work best, how to deliver the most effective professional development, and potential barriers in technology training.

Conclusions

Currently the staff meets twice a month on Tuesdays from 7:15-7:45 for technology professional development. According to the Leadership and Scheduling Survey Results (Appendices F-H), this time slot remains the most popular time slot for training with any day working for professional development. Leadership and Scheduling Survey 3 Results (Appendix H) showed that six teachers indicated the 7:00-7:45 a.m. time frame is a possibility also. The staff may be willing to accommodate one training from 7:00 – 7:45 a.m. each month. Staff training times will be a discussion point at a future faculty in-service.

Teachers prefer varied delivery methods for technology professional development. Technology Needs Assessment Survey, question 4 (Appendices C-E), asked teachers which methods they preferred to learn technology for their teaching practice. By comparing Technology Needs Assessment Survey 1, question 4 results (see Figure 14 and Technology Needs Assessment Survey 3, question 4 results (see Figure 15), a conclusion is that as teachers gained more experience in training, they began to appreciate the variety of methods that could be effective to receive training. The

technology director should consider making use of different training methods depending on the technology training goal. If training is happening on how to update a class webpage, large group training might be the best option. If a teacher wants to learn how to use a texting service, like Remind, this might be accomplished one on one.

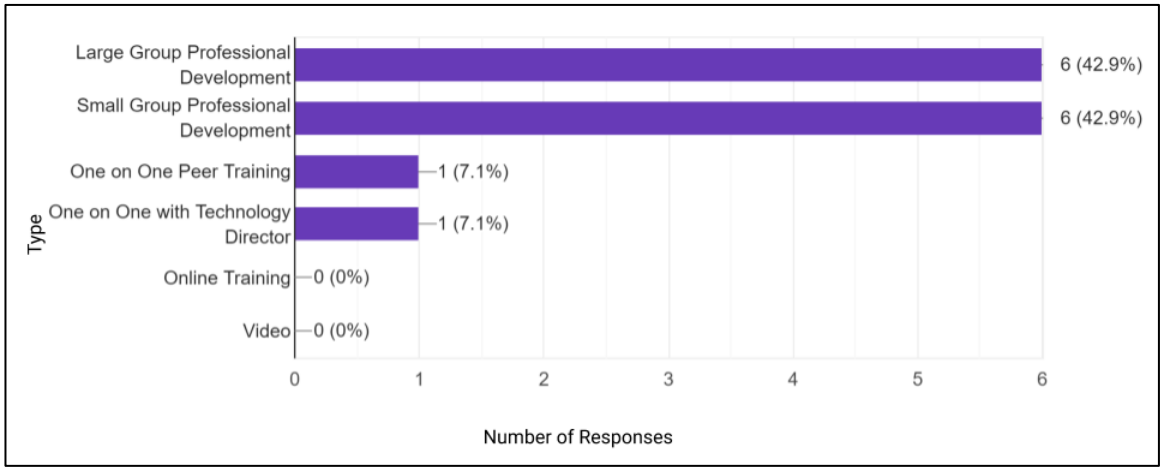

Figure 14: Professional Development Technology Training Format, Survey 1

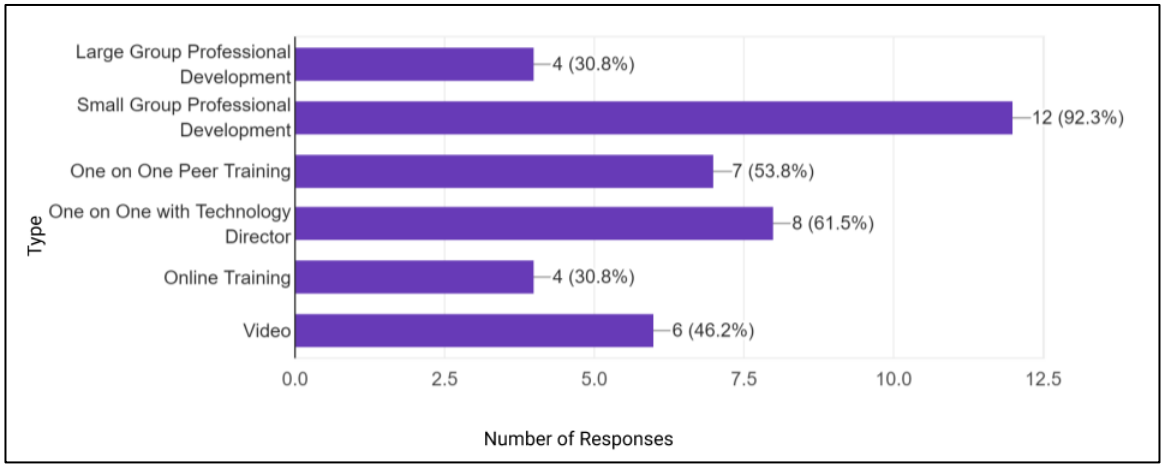

Figure 15: Professional Development Technology Training Format, Survey 3

The technology director is providing effective leadership. However, he needs more release time to assist teachers with integrating technology in the classroom, preparing professional development, addressing technical issues more quickly, and time to research best practices.

Recommendations

Based on the results of the surveys, technology trainings conducted, and meetings with the technology director, numerous improvements can happen next school year. The first item that will be discussed is the school's technology vision. Once the technology vision and objectives are set, staff will all be on the same page regarding the vision.

The second recommendation is to provide the technology director 50% release time. Due to the technology director's scope of work, this recommendation was included in the 2020-2021 school budget and approved. The technology director will have 50% release time starting in the 2020-2021 school year.

The third recommendation is to set trainings for teachers based on the level of their technological capabilities and/or grade level. Teachers at the lower grades are looking for simple activities to use in their classrooms while upper grade teachers are seeking advanced tools to use in lessons or to demonstrate learning with students.

Finally, teachers can get overwhelmed if training in too many technology tools during the course of a school year. The technology director is advised to focus on two to four tools each school year so that those tools are utilized more efficiently and effectively.

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Appendix A: Technology Needs Assessment Survey

1. How would you rate your overall ability with technology?

- ◯ Unfamiliar - I have no experience with technology.
- ◯ Beginner - I am able to perform basic functions. I require help on a regular basis.
- ◯ Average - I demonstrate a general competency in technology.
- ◯ Advanced - I have acquire the ability to competently use a broad spectrum of computer technologies.
- ◯ Expert - I am extremely proficient in using computer technologies.

2. Please rate your skill level for each of the following.

	Not Familiar	Beginner	Average	Advanced	Expert
Google Docs					
Google Sheets					
Google Slides					
Google Forms					
Google Sites					
Google Classroom					
Promethean Board					
Classroom Website					
Sycamore					
PlanbookEdu					
Multimedia Presentations					
Screencasting					
Video Editing					
Problem Based Learning					
Assistive Technology					
Podcasting					
E Portfolios					
Internet Searches					
Personal Learning Network					
Twitter					
Flipped Classroom					
Building Webquests					

Assessment with Technology					
Kahoot					
Quizizz					
Quizlet					
Flipgrid					
SeeSaw					

3. What Professional Development topics do you feel you would benefit from?

4. I like to learn new ways to use technology in my teaching practice through.

- [ ] Large Group Professional Development
- [ ] Small Group Professional Development
- [ ] One on One Peer Training
- [ ] One on One with Technology Director
- [ ] Online Training
- [ ] Video
- [ ] Other:

5. I feel comfortable integrating technology into my classroom.

	1	2	3	4	5	
Not at all	○	○	○	○	○	Absolutely

6. Please indicate how often you integrate technologies in your teaching activities.

- ○ Not at all
- ○ Once a month
- ○ Weekly
- ○ About half my classes
- ○ Almost every class

7. Please indicate how often you integrate technologies in your assigned schoolwork.

- ◯ Not at all
- ◯ Once a month
- ◯ Weekly
- ◯ About half my classes
- ◯ Almost every class

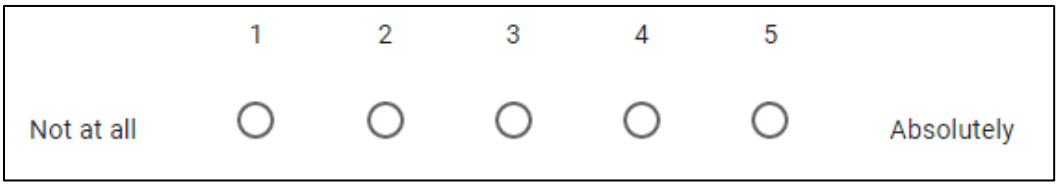
8. Please indicate how often you integrate technologies to collaborate professionally.

- ◯ Not at all
- ◯ Once a month
- ◯ Weekly
- ◯ About half my classes
- ◯ Almost every class

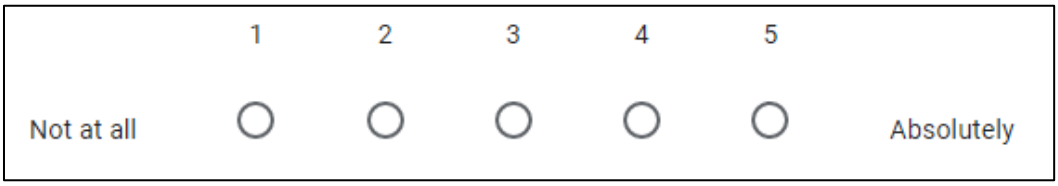
9. Please indicate how often you integrate technologies in your administrative tasks (e.g., TeacherEase, communication).

- ◯ Not at all
- ◯ Once a month
- ◯ Weekly
- ◯ About half my classes
- ◯ Almost every class

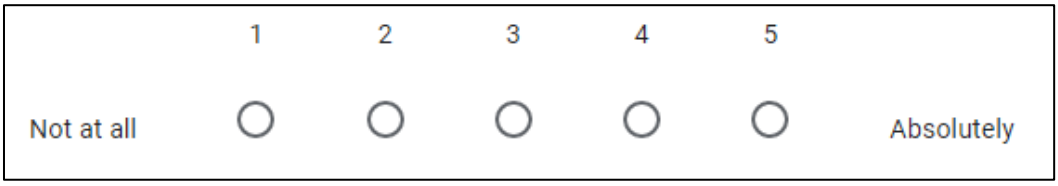
10. I feel I have adequate availability to technology in order to benefit my students' education.



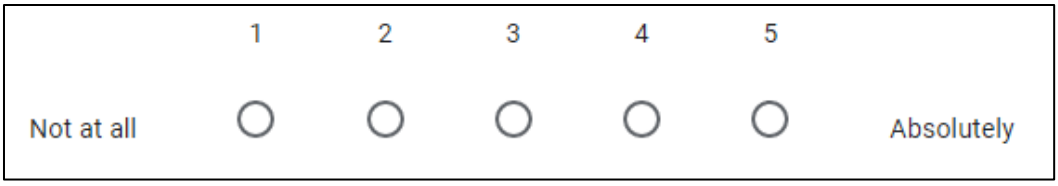
11. My students use the internet safely and wisely and have been taught cyber safety lessons.



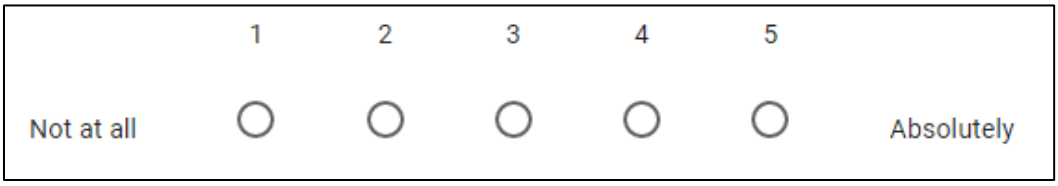
12. I use technology to foster my students' critical thinking skills.



13. I am knowledgeable about problem based learning and utilize this teaching/learning method within my classroom?

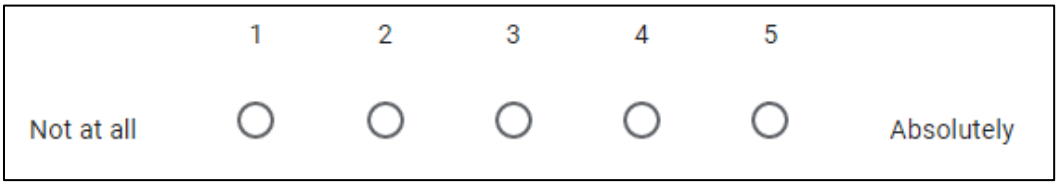


14. I engage my students in real world lessons using digital tools.



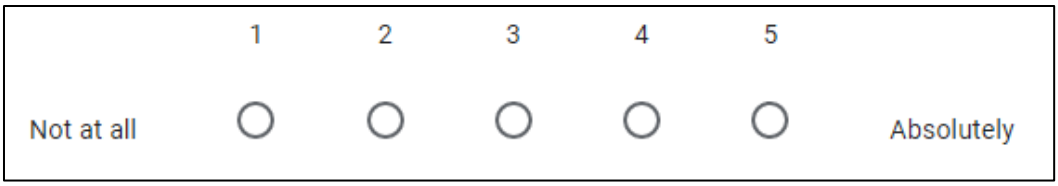
15. Please give examples for the answer above.

16. I allow my students to express their learning using new and innovative web 2.0 tools. Ex. blogs, SeeSaw, slideshows, Flipgrid, video, audio, etc.

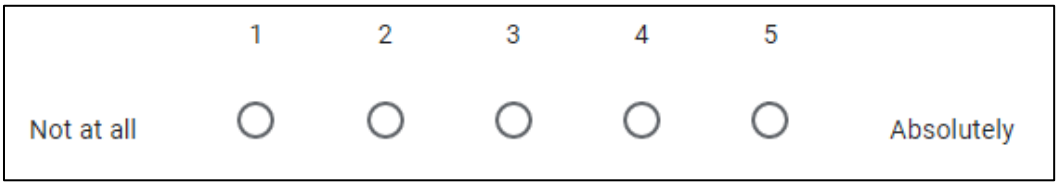


17. Please give examples for the answer above.

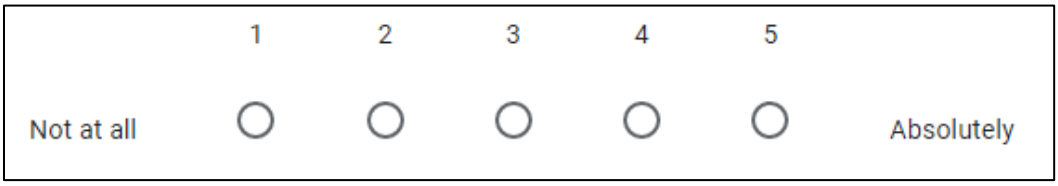
18. I am knowledgeable about assistive technology and look to incorporate these tools for my students at risk.



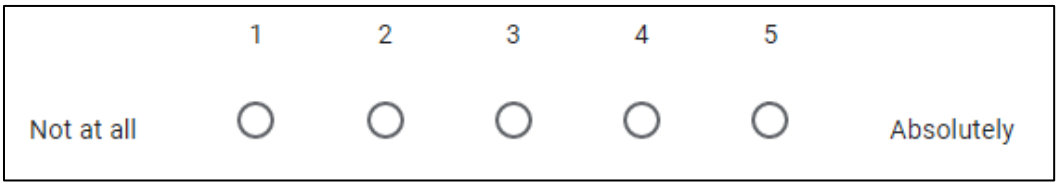
19. I am aware of who to contact at school about the use of assistive technology for at-risk students.



20. I use web based tools in order to communicate with students and parents. Ex. Email, Remind.



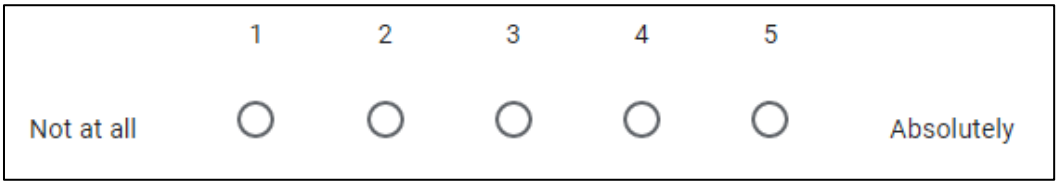
21. I collaborate with educators both locally and globally in order to enhance my professional learning. Ex. Twitter, Personal Learning Network, Organizations, Facebook



22. Feel free to list any educational technology advantages or concerns you have had within your classroom.

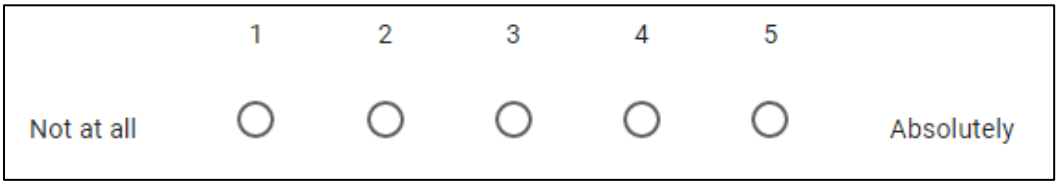
Appendix B: Leadership and Scheduling Survey

1. Is the principal providing technology leadership for the school?



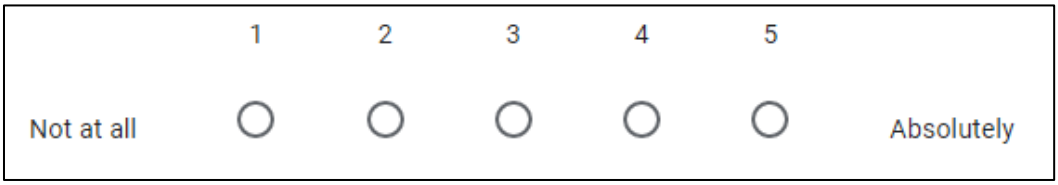
2. How could the principal be more effective in technology leadership?

3. Is the technology director providing technology leadership for the school?

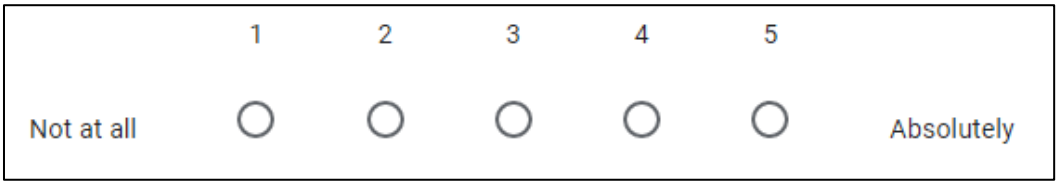


4. How could the technology director be more effective in technology leadership?

5. Is the technology director able to assist with your technology needs promptly?



6. Is the technology director provided enough time to assist staff with technical support and instructional technology?



7. As of today, rate the degree of success St. Mark's technology has had in implementing the following.

	Not Successful	Right on Target	Above Expectations
Professional Development	○	○	○
Integrating Technology i...	○	○	○
Technical Support	○	○	○
Access to Technology H...	○	○	○
Access to Technology A...	○	○	○

8. How aware are you of St. Mark's technology vision for the use of instructional technology in the classroom?

- ○ I am not aware of what the vision is for use of instructional technology in the classroom.
- ○ I am aware of what the vision is for use of instructional technology in the classroom.

9. How often are you willing to meet each month during the school year for technology professional development?

- ○ Once a month
- ○ Twice a month
- ○ Three times a month
- ○ Weekly each month

10. Which technology training times are best during the school year?

	6:45-7:45 a.m.	7:00-7:45 a.m.	7:15-7:45 a.m.	3:30-4:00 p.m.	3:30-4:15 p.m.	3:30-4:30 p.m.
Monday	☐	☐	☐	☐	☐	☐
Tuesday	☐	☐	☐	☐	☐	☐
Wednesday	☐	☐	☐	☐	☐	☐
Thursday	☐	☐	☐	☐	☐	☐
Friday	☐	☐	☐	☐	☐	☐

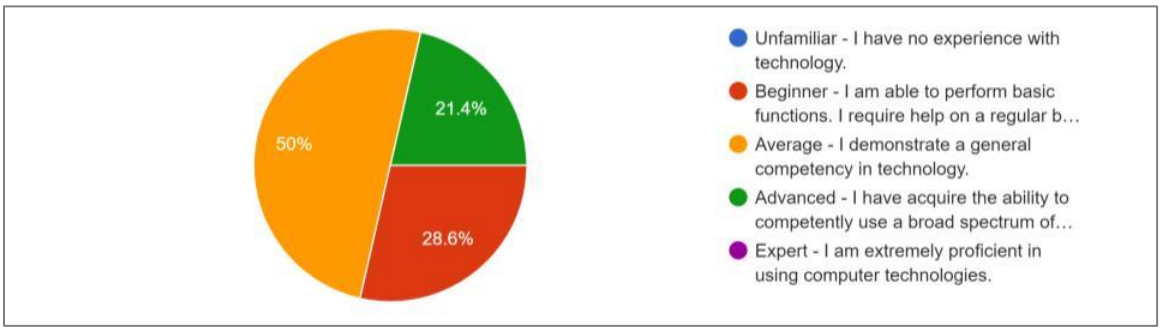
11. How often are you willing to meet each month during summer for technology professional development?

- ○ Not at all
- ○ Once a month
- ○ Twice a month

Appendix C: Technology Needs Assessment Survey 1 Results

The results of the quantitative questions are represented in the written answers and graphs, showing the number of teachers that gave each rating. When rating 1-5, 1 is not at all, and 5 is absolutely.

1. How would you rate your overall ability with technology?



2. Please rate your skill level for each of the following:

	Not Familiar	Beginner	Average	Advanced	Expert
Google Docs	1	1	8	4	
Google Sheets	2	3	9		
Google Slides	3	3	5	3	
Google Forms	2	6	4	2	
Google Sites	3	7	4		
Google Classroom	1	7	3	3	
Promethean Board	3	3	6	2	
Classroom Website	2	5	6	1	
Sycamore	2	3	5	4	
PlanbookEdu		2	8	4	
Multimedia Presentations	6	4	4		
Screencasting	6	6	2		
Video Editing	11	2		1	
Problem Based Learning	6	5	3		
Assistive Technology	6	4	2	2	
Podcasting	12	1	1		
E Portfolios	12	1	1		
Internet Searches	3	2	4	4	1
Personal Learning Network	9	1	4		
Twitter	6	3	3	2	
Flipped Classroom	9	4		1	
Building Webquests	11	2	1		

Assessment with Technology	5	3	6		
Kahoot	5	3	1	5	
Quizizz	10	2	2		
Quizlet	3	6	4		1
Flipgrid	3	9	1	1	
SeeSaw	8	5		1	

3. What Professional Development topics do you feel you would benefit from?

I just need the basics in everything for teaching PreK, but also how to use things as a parent. I have no background with any of the programs and am just trying to figure it out which turns into frustration most of the time.

Review of Classroom Page on school website, Pearson, review of putting pictures from desktop to the correct place

I would benefit from picking out the technology that is going to be very helpful to my students and learning how to use that technology. I get to bogged down trying to do "new" things all the time.

Leadership in the church and classroom.

I guess I would rather dig really deep into a topic (whatever might be most useful in a classroom) rather than just scratch the surface with multiple technologies. If that is done, I think they are cool and useful and use them once or twice, but then don't use them again.

technology for early childhood- should they be having any screen time?

More assistive technology options for disabled students

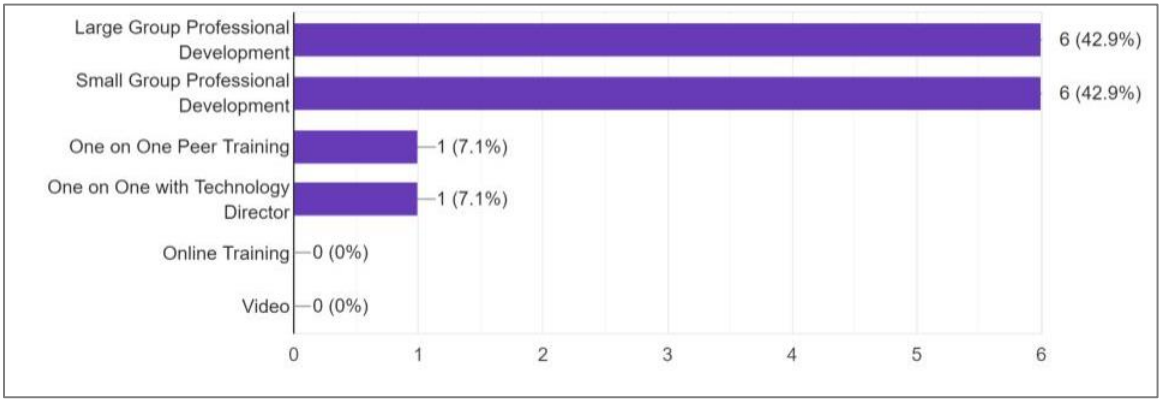
Assessments

Anything, I am really interested in learning as much as I can about the technology that might be helpful in my classroom.

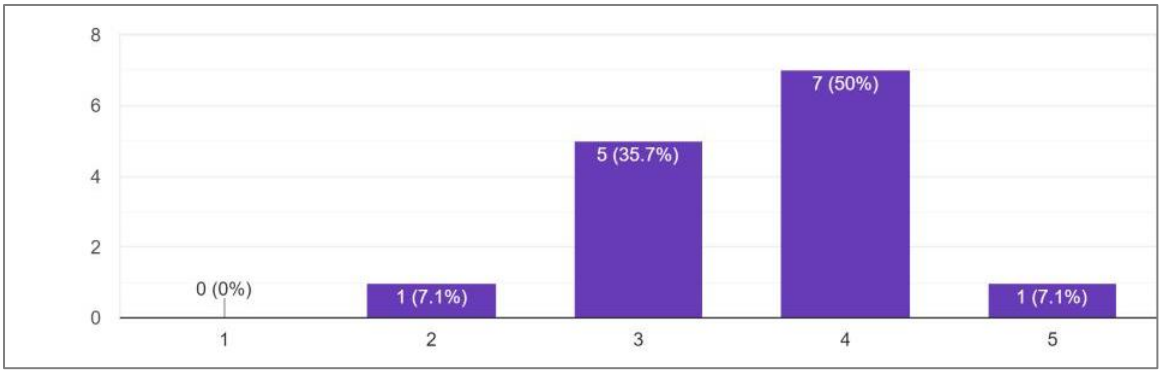
I love to learn about different apps/programs that kids can use or that I can use in my lessons. Anything that deals practically with parent communication or Sycamore are also on my list.

Research and presentation applications

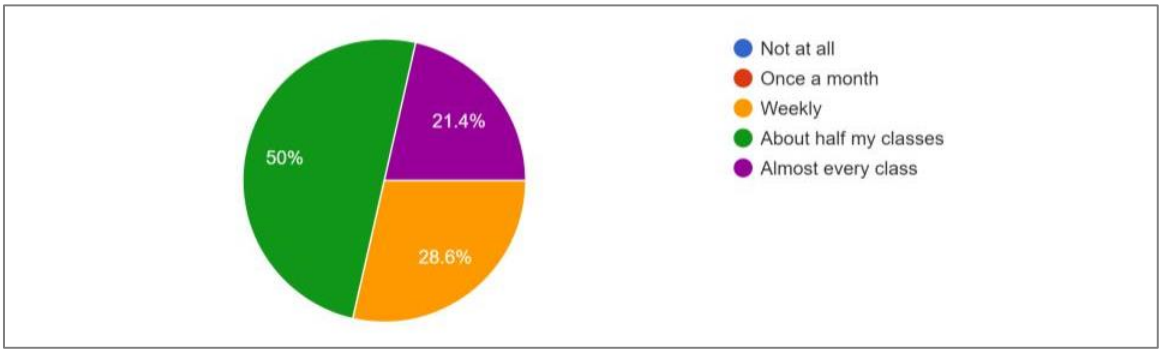
4. I like to learn new ways to use technology in my teaching practice through:



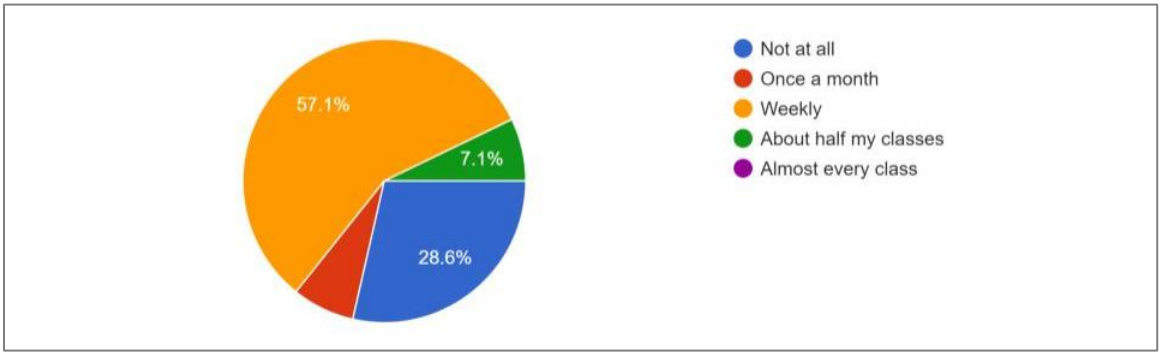
5. I feel comfortable integrating technology into my classroom.



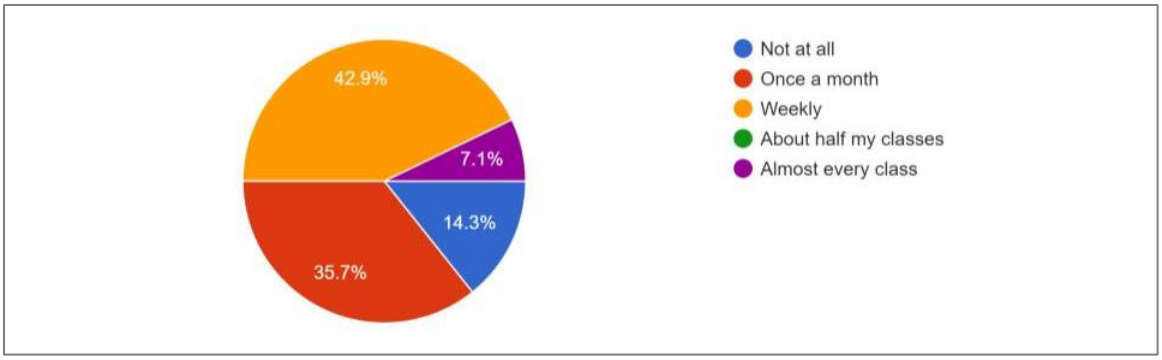
6. Please indicate how often you integrate technology in your teaching activities.



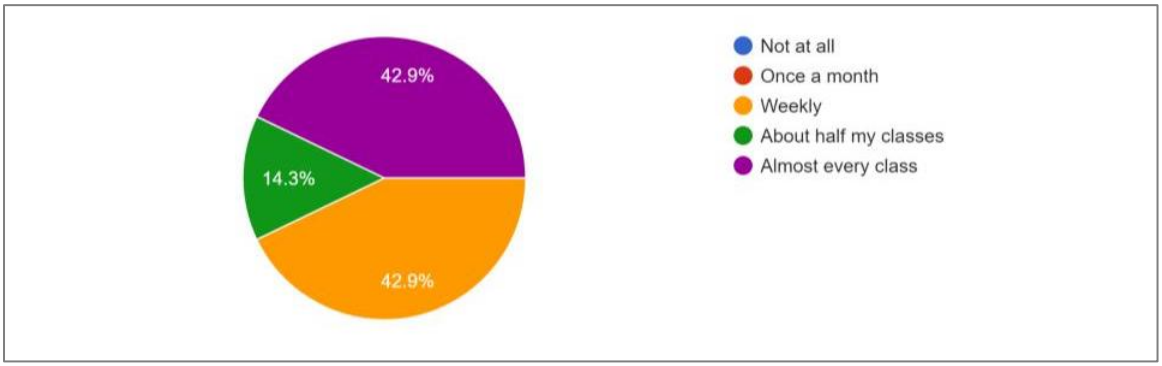
7. Please indicate how often you integrate technology in your assigned schoolwork.



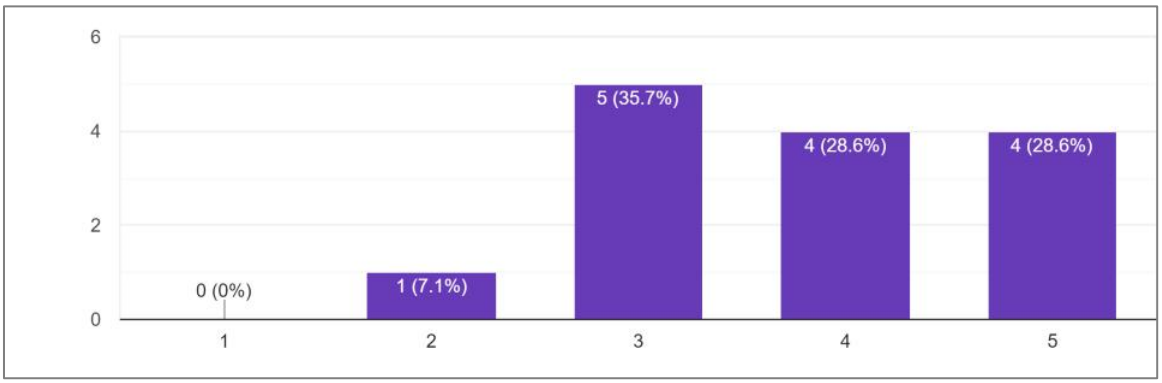
8. Please indicate how often you integrate technology to collaborate professionally.



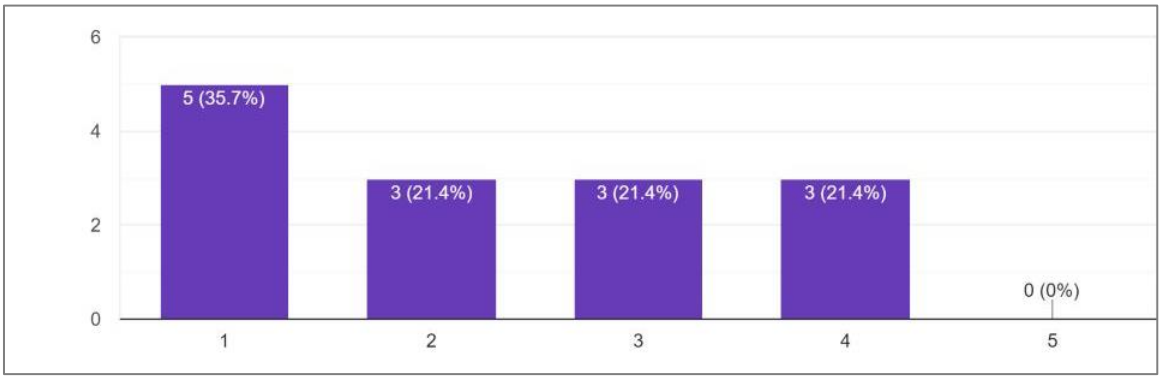
9. Please indicate how often you integrate technology in your administrative tasks (e.g., Sycamore, Email Communication).



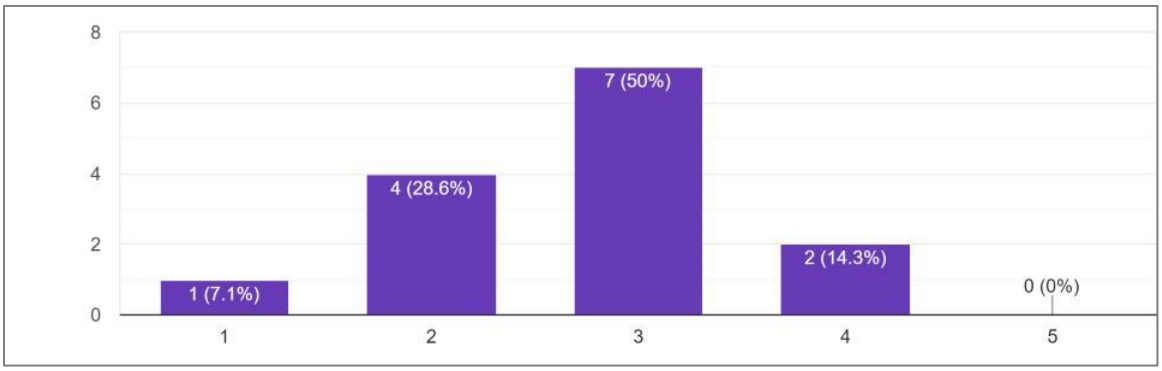
10. I feel I have adequate availability to technology in order to benefit my students' education.



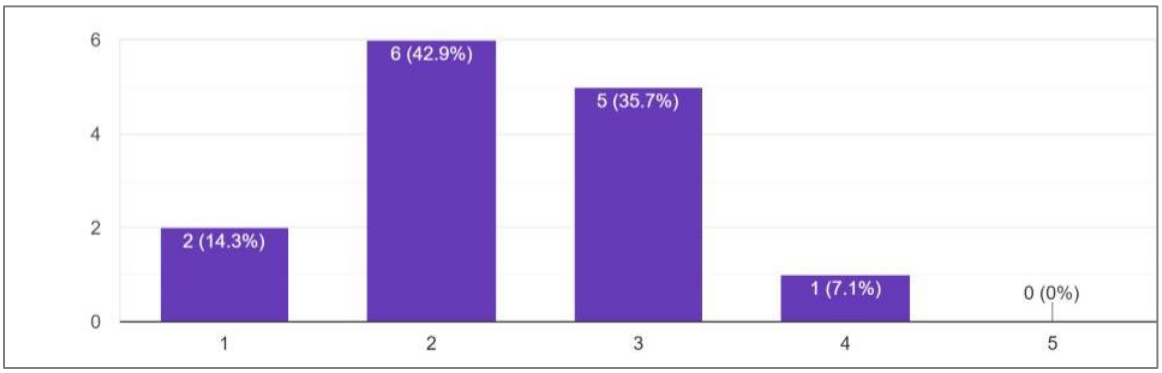
11. My students use the internet safely and wisely and have been taught cyber safety lessons.



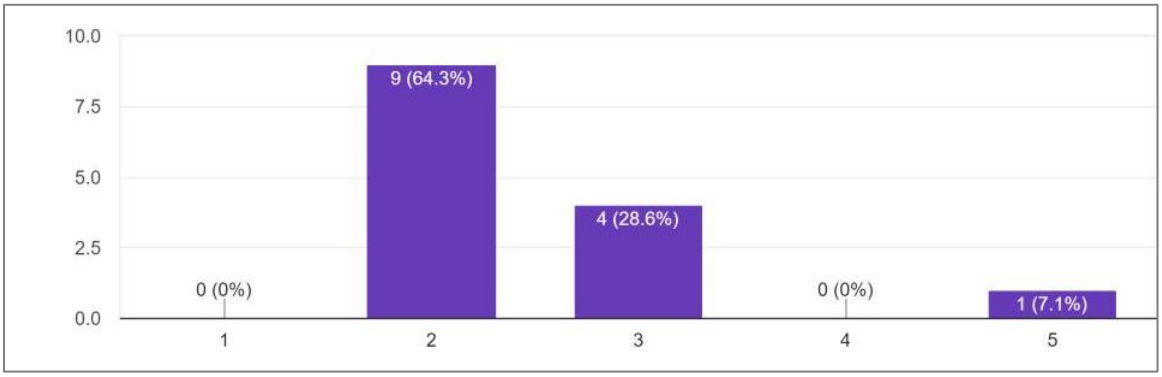
12. I use technology to foster my students critical thinking skills.



13. I am knowledgeable about problem based learning and utilize this teaching/learning method within my classroom?



14. I engage my students in real world lessons using digital tools.



15. Please give examples for the answer above.

Preschool learning games

When they come up with a real life question that I'm not sure about - we Google it.

Math story problems, Videos of topics studied in Science, Social Studies, and Scholastic News
I use a weekly Current Events video and resources to update students on things going on in the world currently.

Foss Web / Pearson Math

"During my robotics and coding class they are given a problem or a task that they have to complete, and then I ask them how knowing that information will help them solve a problem in life. We also use digital tools during math for the three Act Mathematical modeling"

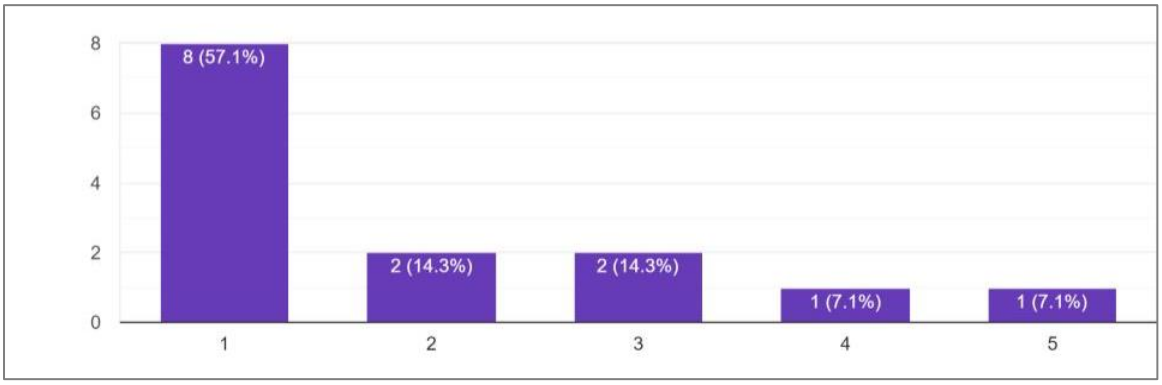
Use screen to show differences between changing seasons with a video

I use my promethean board to show "Let's Find Out" videos to enhance the real-life magazine articles. I use chrome books to engage my students in real life number and letter reviews and habitats using game like situations.

The students in my gifted program use technology to research, photo edit, do coding, do 3d digital drawing, create news broadcasts, edit videos, and more.

I use and iPad and Apple TV to teach letters each week and transition activities.
Some real world math problems online

16. I allow my students to express their learning using new and innovative web 2.0 tools. Ex. blogs, Seesaw, slideshows, Flipgrid, video, audio, etc.



17. Please give examples for the answer above.

My students utilize SeeSaw a bit. They have used Flipgrid in the past, but not this year yet.

Sorry! I should do this more. The only thing I can think of using Google Classroom.

I have done this maybe once or twice total. We did two Flipgrids last year. I have them talk to each other in person and not using online tools

I would like to be able to record each child reading at the end of the school year.
Again, the students in the gifted program--and my elective--do this regularly.
Also, I use technology to allow my struggling writers to give answers and do writing regularly.

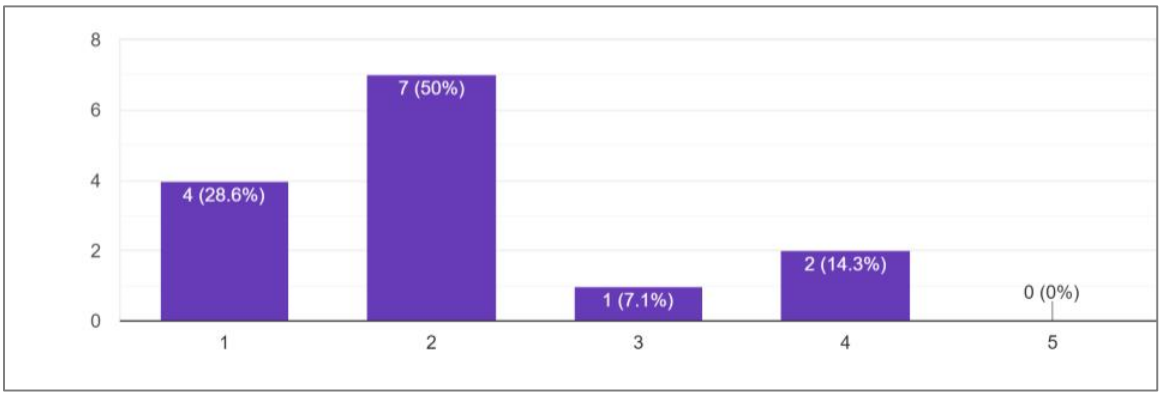
We did some coding in science. Book Reports using slides.

I really would love to do more of this. I know that students are definitely more engaged and actually love to do their "work" when any sort of technology is involved. I truly

believe because they are more engaged using technology, the more they will retain from the lesson/activity.

Flipgrid

18. I am knowledgeable about assistive technology and look to incorporate these tools for my students at risk.



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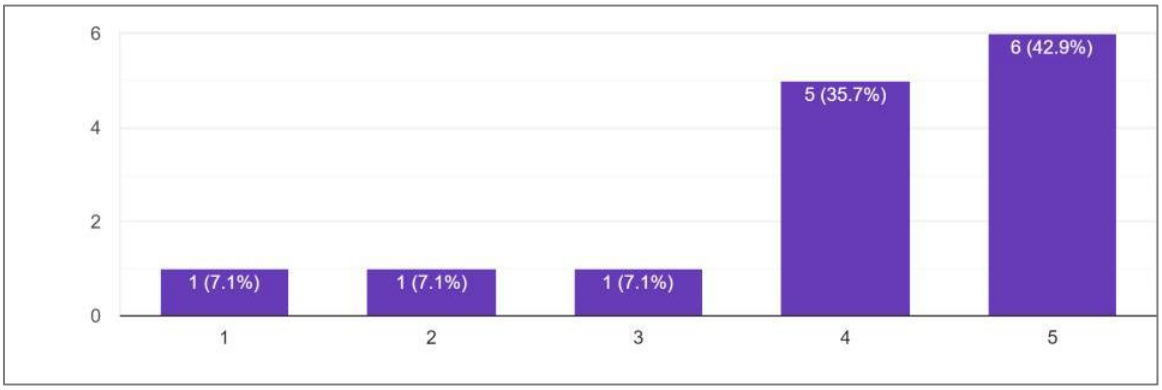
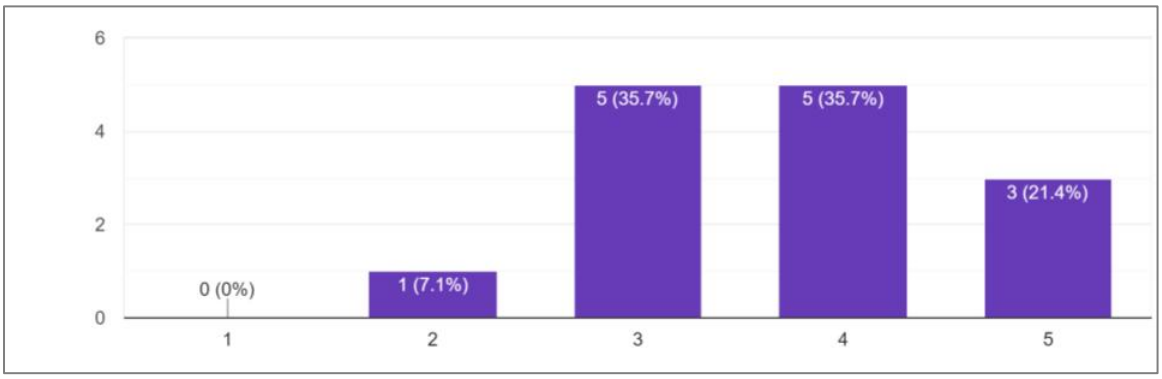
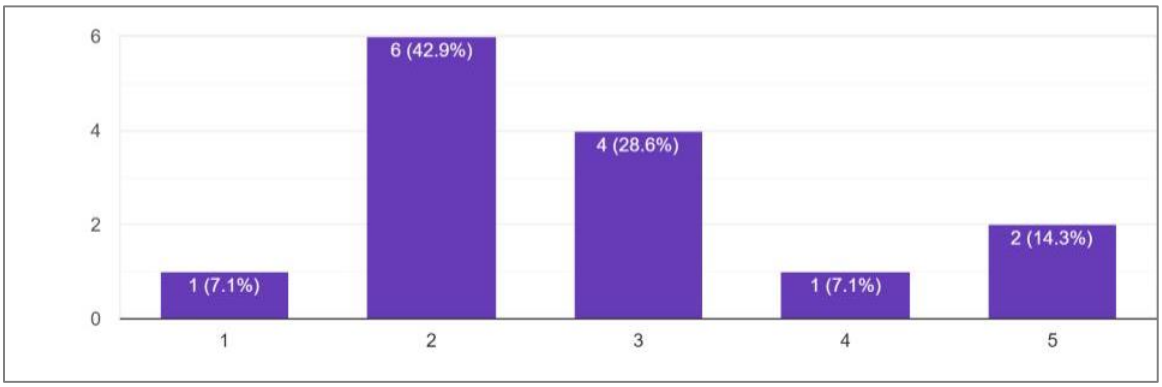


20. I use web based tools in order to communicate with students and parents. Ex. Email, Remind.



21. I collaborate with educators both locally and globally in order to enhance my professional learning. Ex. Twitter, Personal Learning Network, Organizations, Facebook.



22. Feel free to list any educational technology advantages or concerns you have had within your classroom.

My computer does not always connect with the TV in my classroom. SOOOO frustrating.

Students are having difficulties signing in to Pearson.

My concern is getting to bogged down in trying to figure out how to use this technology in the appropriate and safe way. It takes me a long time to figure it out.

Appropriate screen time for ages 3-4?

Our Bee-Bots help my students learn to code as they review colors, shapes, letters and spelling their name. I would like to go beyond that in math and science.

Unlike most classrooms, mine does not have a Promethean board, so we can't make changes on screen. We watch things projected from my computer, and I need to input

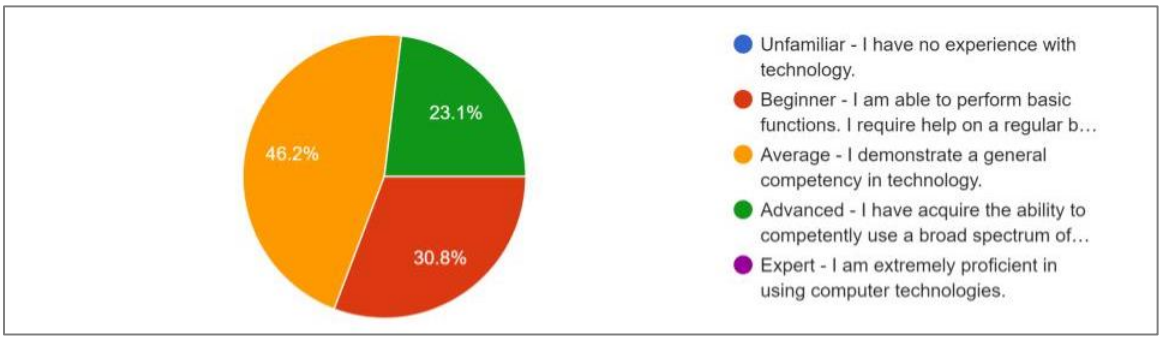
changes and go back-and-forth between screen and white board. However, I do have laptops rather than Chromebooks, and that gives me more advanced options for all students.

Are my students getting enough exposure to technologies they will use in high school?

Appendix D: Technology Needs Assessment Survey 2 Results

The results of the quantitative questions are represented in the written answers and graphs, showing the number of teachers that gave each rating. When rating 1-5, 1 is not at all, and 5 is absolutely.

1. How would you rate your overall ability with technology?



2. Please rate your skill level for each of the following:

	Not Familiar	Beginner	Average	Advanced	Expert
Google Docs		4	6	3	
Google Sheets	1	3	8	1	
Google Slides	2	4	5	2	
Google Forms	2	5	5	1	
Google Sites	3	7	3		
Google Classroom		7	4	2	
Promethean Board	3	3	6	1	
Classroom Website	1	6	5	1	
Sycamore		4	8	1	
PlanbookEdu		1	10	2	
Multimedia Presentations	3	4	5	1	
Screencasting	5	7	1		
Video Editing	9	3		1	
Problem Based Learning	6	4	2	16	
Assistive Technology	6	5	1	1	
Podcasting	9	4			
E Portfolios	8	4	1		
Internet Searches		3	4	5	1
Personal Learning Network	5	4	4		
Twitter	7	1	4	1	
Flipped Classroom	7	4	2		
Building Webquests	10	1	2		

Assessment with Technology	3	5	5		
Kahoot	5	2	1	5	
Quizizz	8	4	1		
Quizlet	4	5	3		1
Flipgrid	5	5	3		
SeeSaw	9	3	1		

3. What Professional Development topics do you feel you would benefit from?

All that involve Tech

Research project presentation tools

Programs to use within the classroom.

Finding more services that brings children's books to life.

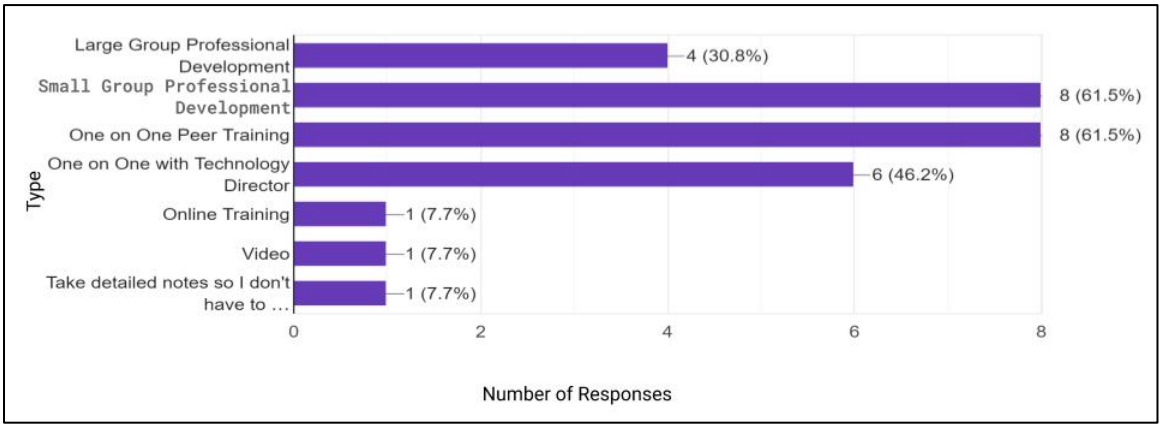
Ipads, my classroom page on website

I don't know what would be the one most beneficial topic to know for kindergarten to help me teach or the children to learn better. I know I've been instructed with many of the topics above, but I don't remember them to even count myself as a beginner.

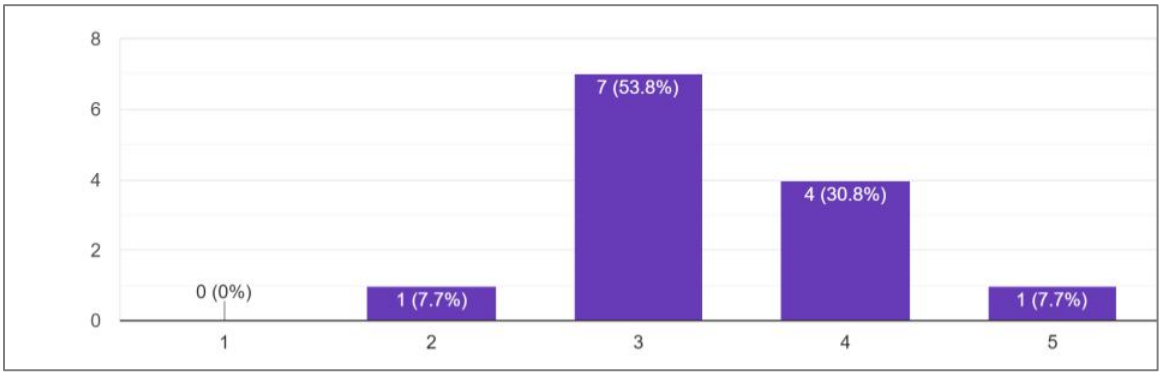
The assessment tools/apps that are self-grading or that share rubrics and other materials.

Best ways to safely communicate with families

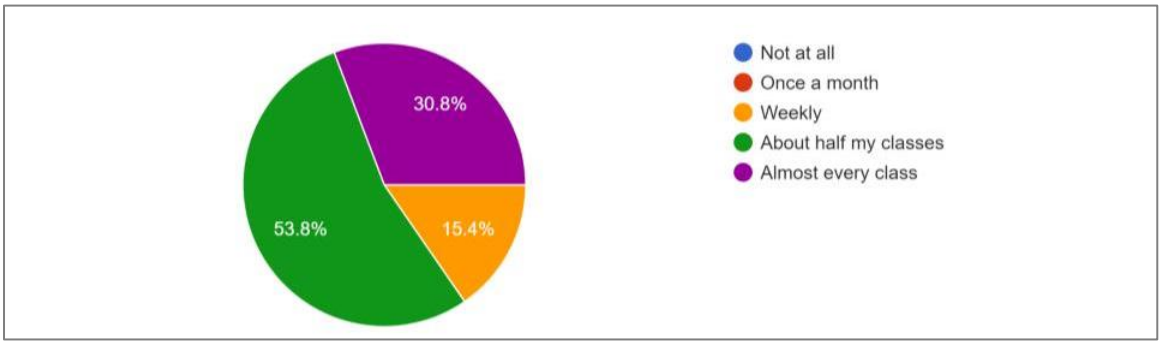
4. I like to learn new ways to use technology in my teaching practice through:



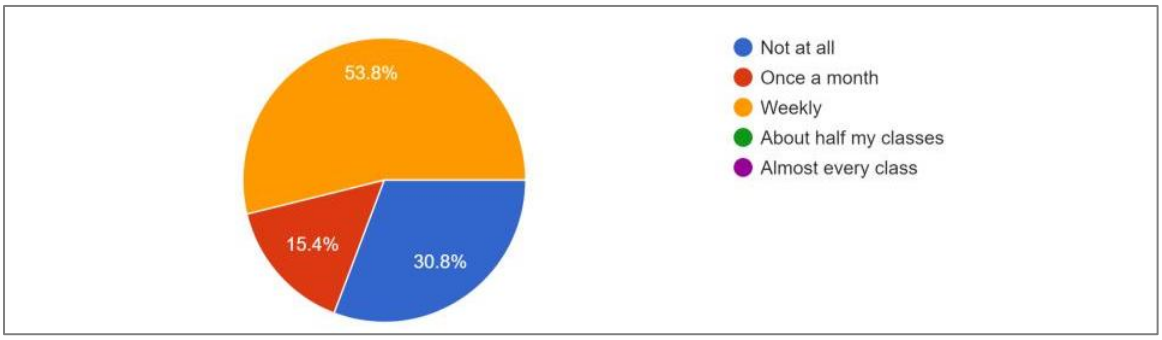
5. I feel comfortable integrating technology into my classroom.



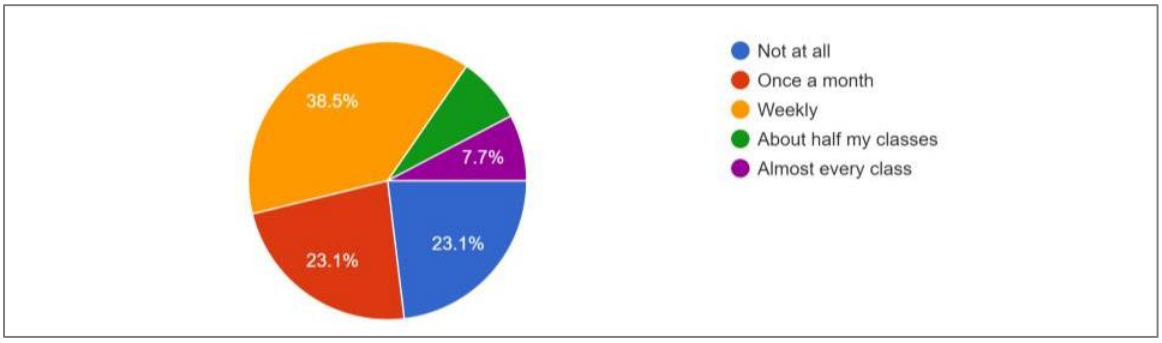
6. Please indicate how often you integrate technology in your teaching activities.



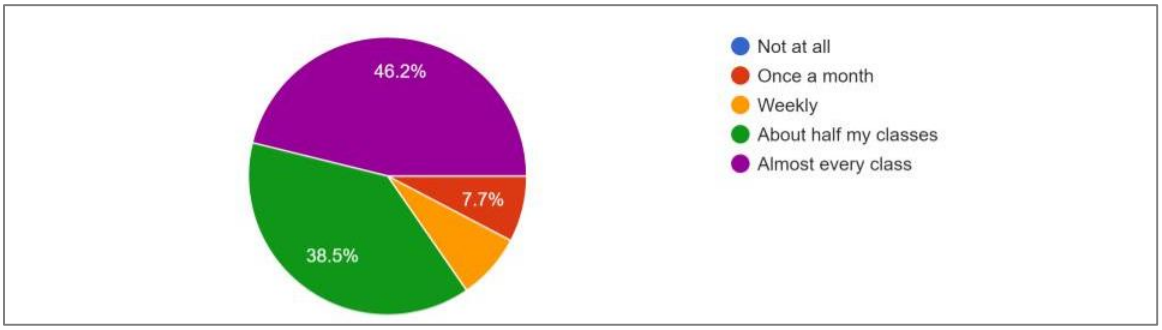
7. Please indicate how often you integrate technology in your assigned schoolwork.



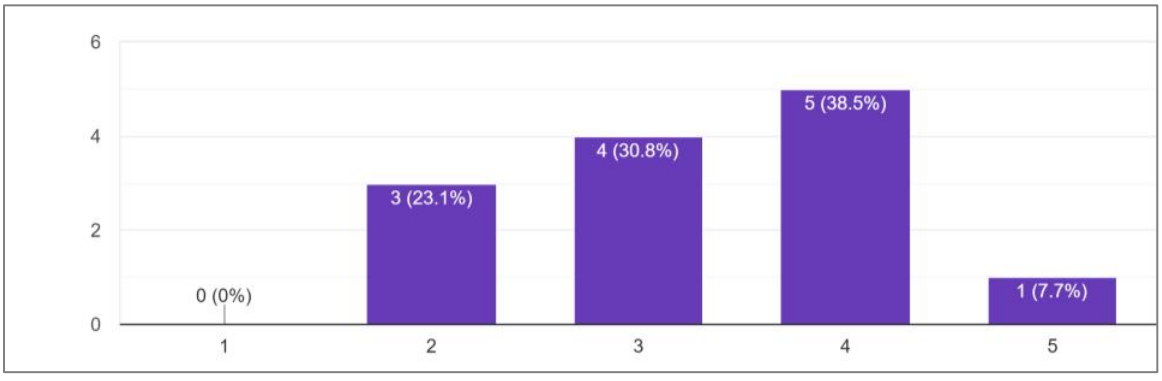
8. Please indicate how often you integrate technology to collaborate professionally.



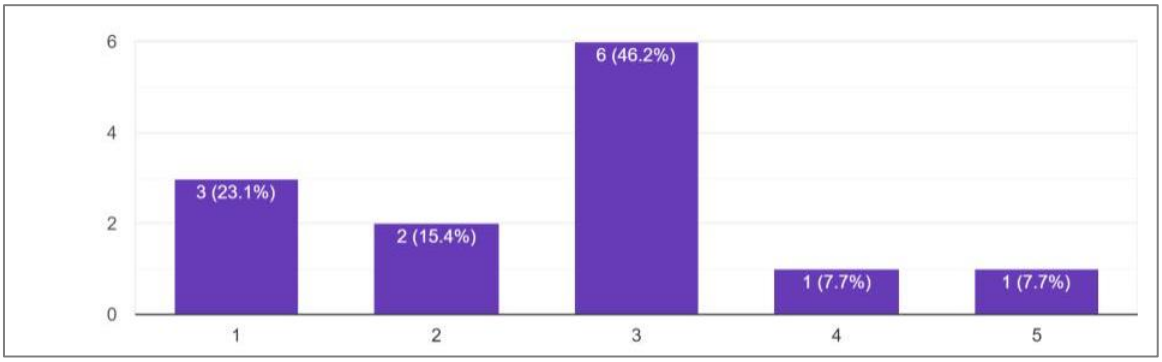
9. Please indicate how often you integrate technology in your administrative tasks (e.g., Sycamore, Email Communication).



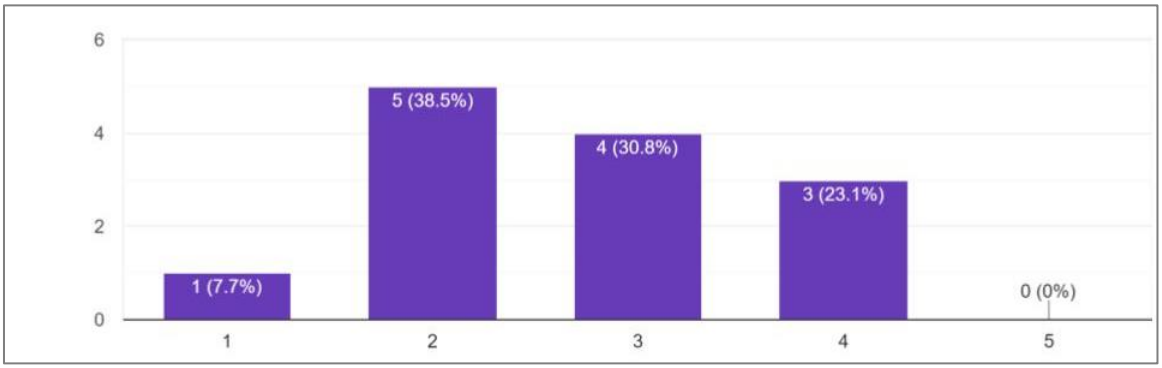
10. I feel I have adequate availability to technology in order to benefit my students' education.



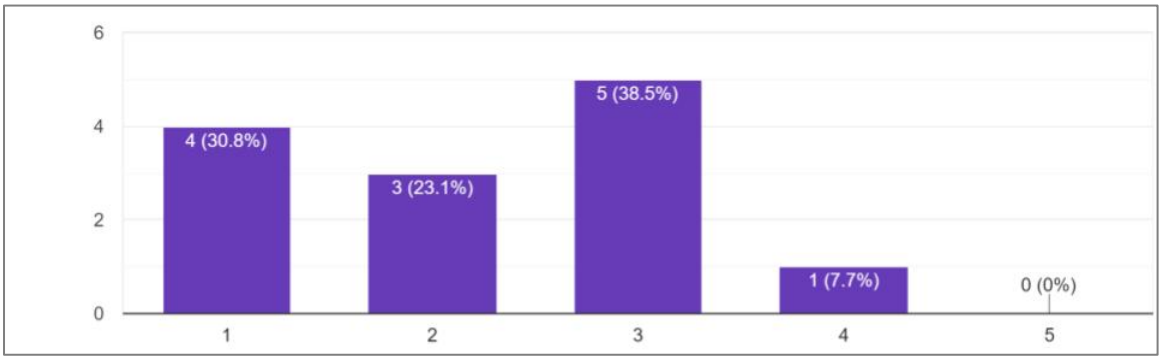
11. My students use the internet safely and wisely and have been taught cyber safety lessons.



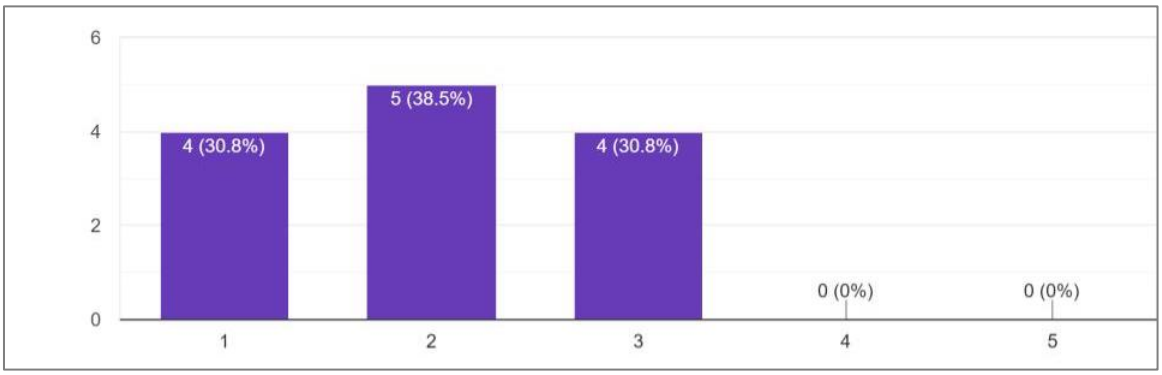
12. I use technology to foster my students critical thinking skills.



13. I am knowledgeable about problem based learning and utilize this teaching/learning method within my classroom?



14. I engage my students in real world lessons using digital tools.



15. Please give examples for the answer above.

In our math series, in every chapter there is a 3 act math modeling lesson. There are online videos that the students watch that lead them to solve a real world problem.

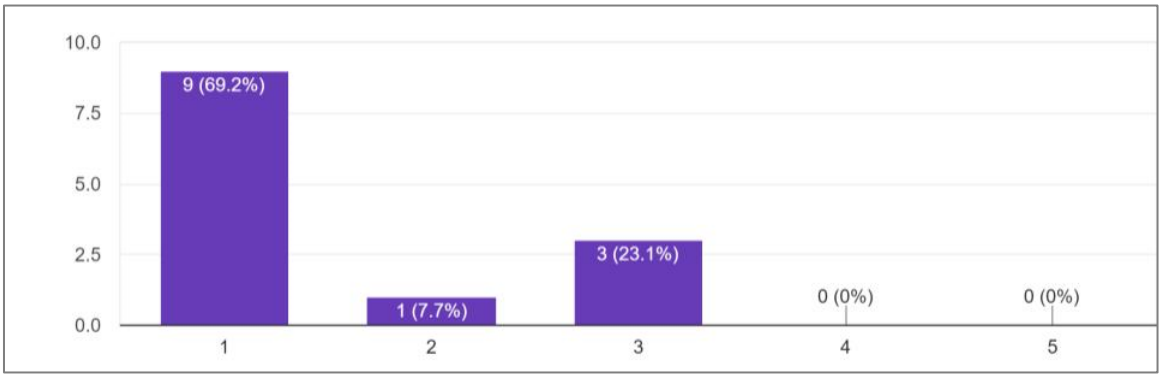
Making a news broadcast, drawing, doing animation, writing

Our "Let's Find Out" magazines have online - read to you - texts and videos to compliment the lesson.

Books are used weekly to listen or watch.

I allow my students to express their learning using new and innovative web 2.0 tools. Ex. blogs, Seesaw, slideshows, Flipgrid, video, audio, etc.

16. I allow my students to express their learning using new and innovative web 2.0 tools. Ex. blogs, Seesaw, slideshows, Flipgrid, video, audio, etc.



17. Please give examples for the answer above.

Flipgrid

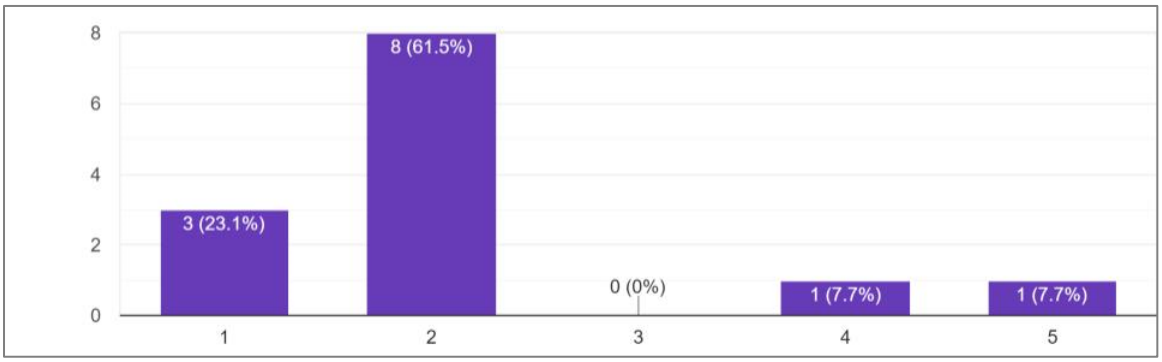
I use Seesaw and Flipgrid the most.

Read & Write with Google Chrome, PowerPoint, SketchUp, Scratch, videos, edited photos, animations

I have used Flipgrid a handful of times. I really do like how it allows the kids to be so original. I struggle with assessing them.

I am knowledgeable about assistive technology and look to incorporate these tools for my students at risk.

18. I am knowledgeable about assistive technology and look to incorporate these tools for my students at risk.



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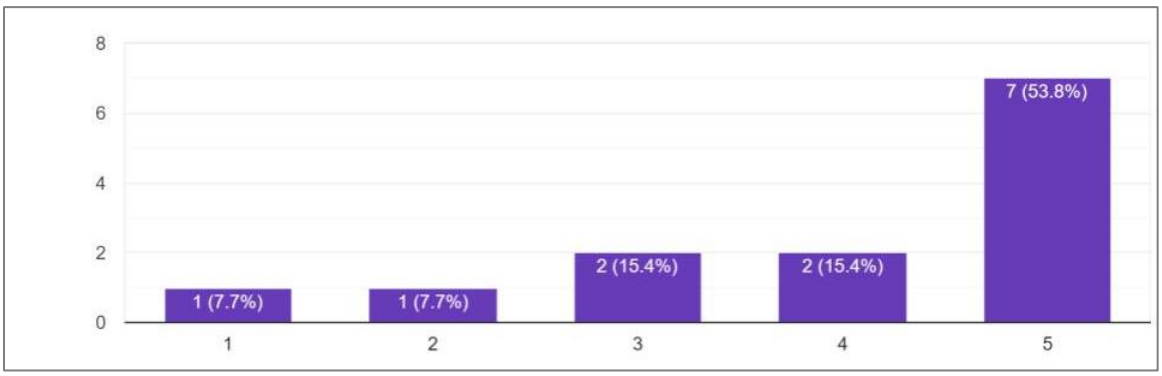
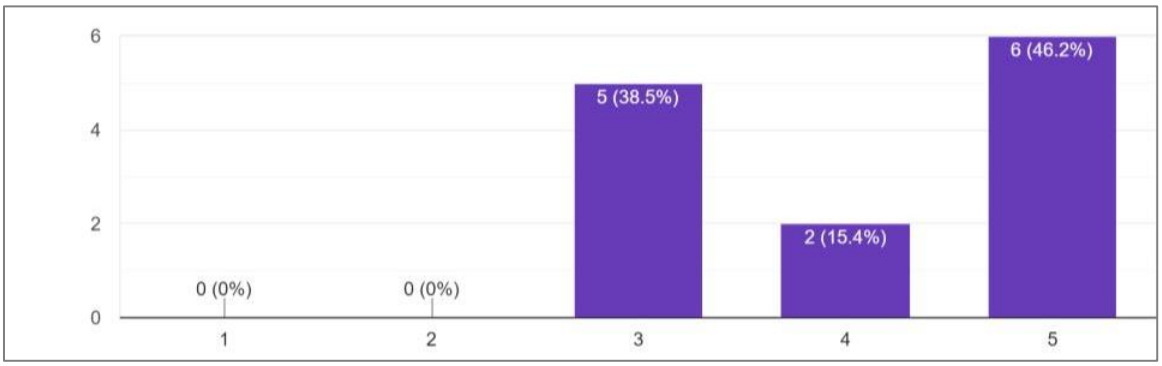


20. I use web based tools in order to communicate with students and parents. Ex. Email, Remind.



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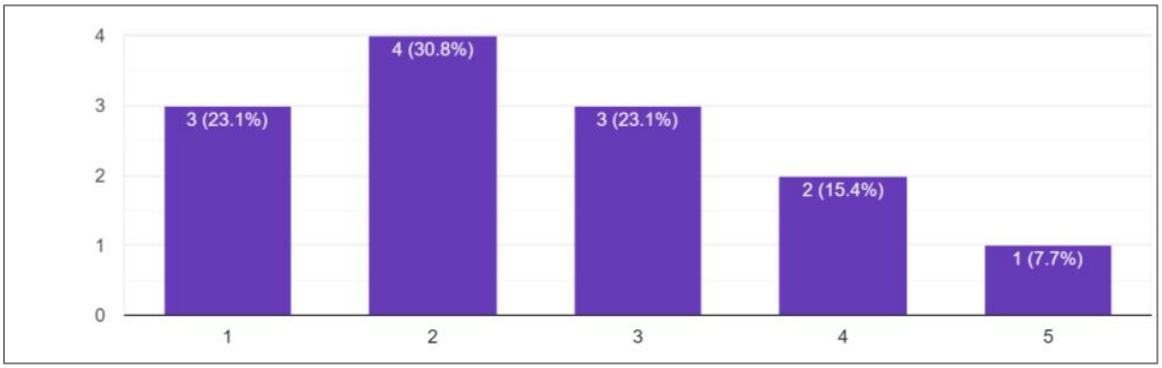


22. Feel free to list any educational technology advantages or concerns you have had within your classroom.

Trying to get workable Grammarly on computers and find other writing helps

I have not been able to stay connected to the internet for my daily math using the promethean board or using my Gmail and taking attendance ever since we installed a new server for the school. Days?

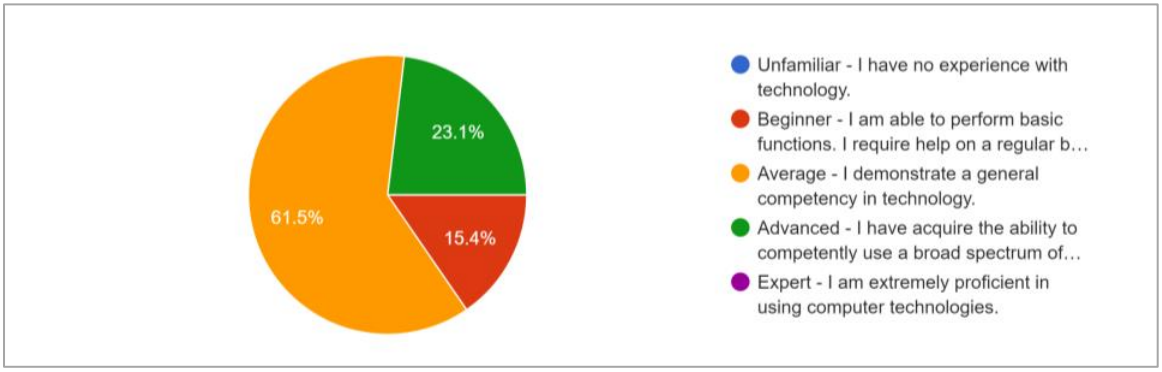
My biggest concern is that it seems the upper grade students do NOT use the Chromebooks for their intended purposes. I am constantly reminding students of any grade (6-8) that they are for educational purposes only, to do school-related tasks. I know some teachers allow games, etc. What is your take on that? I feel like I'm on my own enforcing it in my hallway.

I never set up remind with my families.

Appendix E: Technology Needs Assessment Survey 3 Results

The results of the quantitative questions are represented in the written answers and graphs, showing the number of teachers that gave each rating. When rating 1-5, 1 is not at all, and 5 is absolutely.

1. How would you rate your overall ability with technology?



2. Please rate your skill level for each of the following:

	Not Familiar	Beginner	Average	Advanced	Expert
Google Docs			8	5	
Google Sheets	1	4	8		
Google Slides		3	6	4	
Google Forms	1	6	3	3	
Google Sites	1	6	5	1	
Google Classroom		5	4	4	
Promethean Board	2	4	6	1	
Classroom Website	2	4	7		
Sycamore		3	7	3	
PlanbookEdu		1	10	2	
Multimedia Presentations	4	3	4	2	
Screencasting	4	5	3	1	
Video Editing	7	5		1	
Problem Based Learning	3	5	4	1	
Assistive Technology	5	3	4	1	
Podcasting		9	4		
E Portfolios	7	4	2		
Internet Searches		1	6	5	1
Personal Learning Network	2	8	3		
Twitter	6	3	3		1
Flipped Classroom	6	4	3		
Building Webquests	9	2	2		

Assessment with Technology	2	5	4	2	
Kahoot	2	4	3	4	
Quizizz	4	6	3		
Quizlet	3	4	4	1	1
Flipgrid	3	5	3	2	
SeeSaw	5	6	1	1	

3. What Professional Development topics do you feel you would benefit from?

I could always use refreshing on something I can use immediately. The last 4 above are familiar terms but since i didn't use them, I don't know them and would have to follow a tutorial before trying.

My classroom page on the school's website.

I could use help in understanding ow to use Google Forms or the Quiz programs. I could use help in keeping the classroom website up-to-date or in how to correctly update it.

Using technology for assessments.

Student interaction

Anything out there.

More info on E Portfolios and on setting up brand new Google sheets (I can use them well once they're set up.)

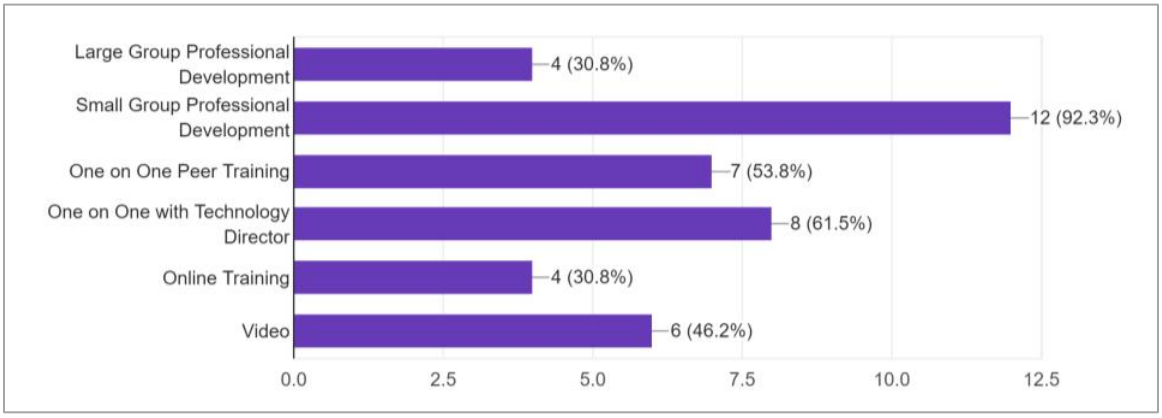
Google Slides

Video editing, e-portfolios, research project tools

How to use especially google forms to send out surveys to get feedback from parents

Student access to tech in preschool

4. I like to learn new ways to use technology in my teaching practice through:



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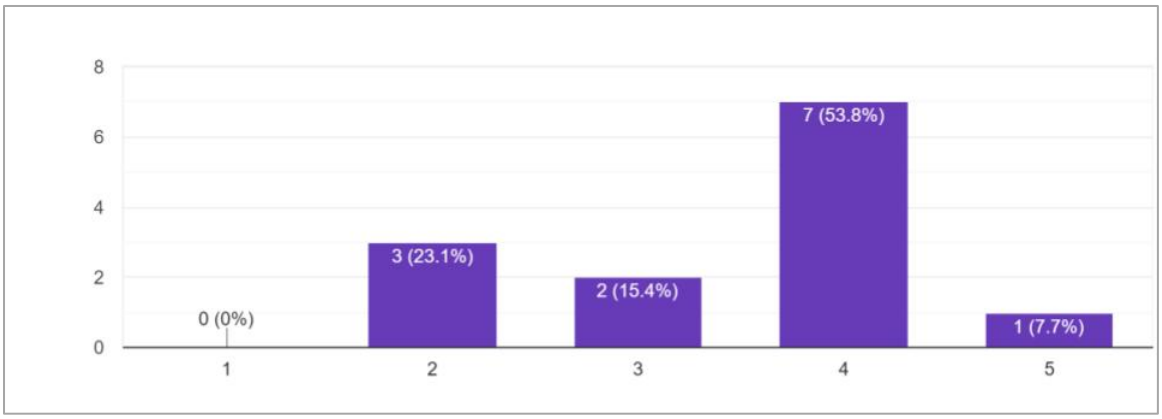
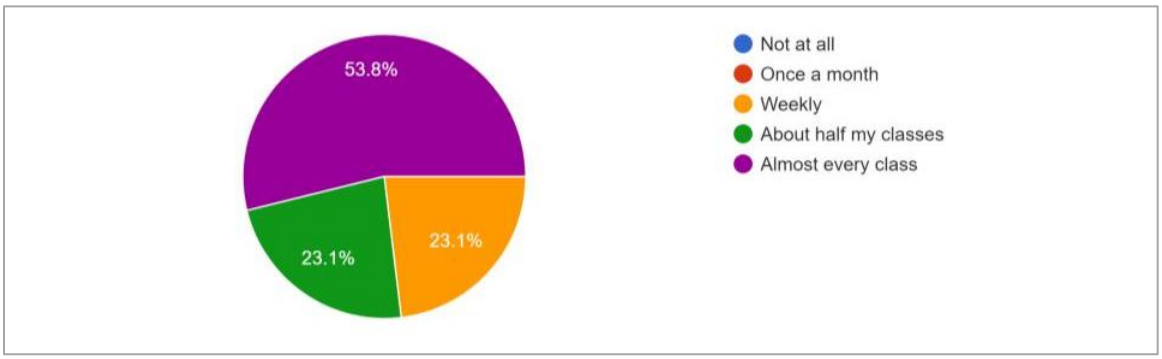


6. Please indicate how often you integrate technology in your teaching activities.



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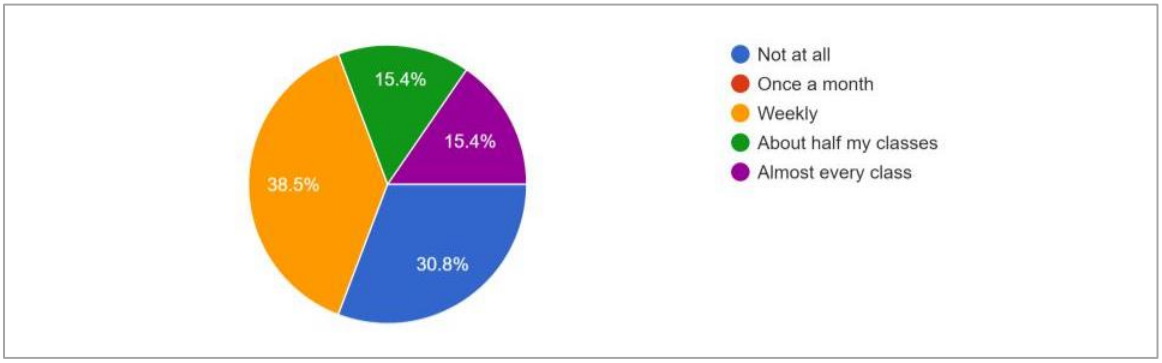

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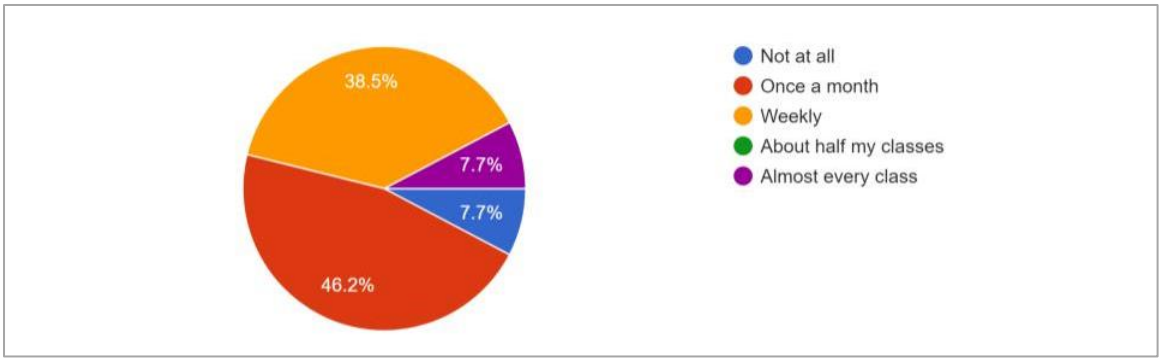

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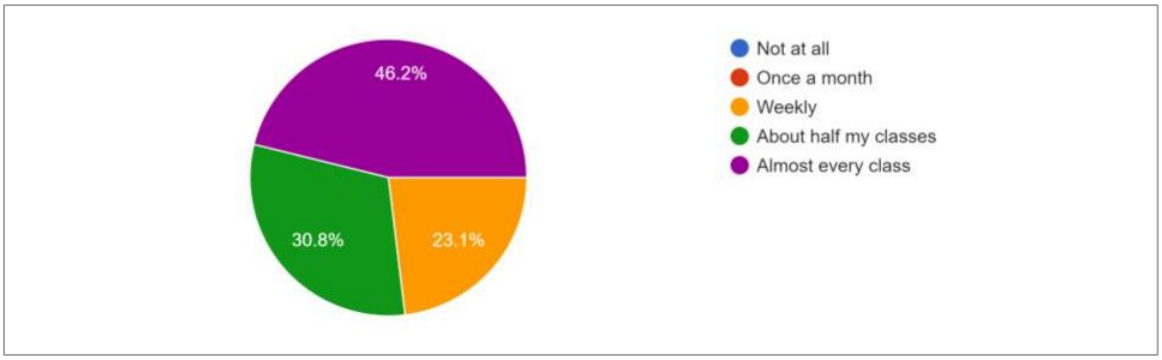

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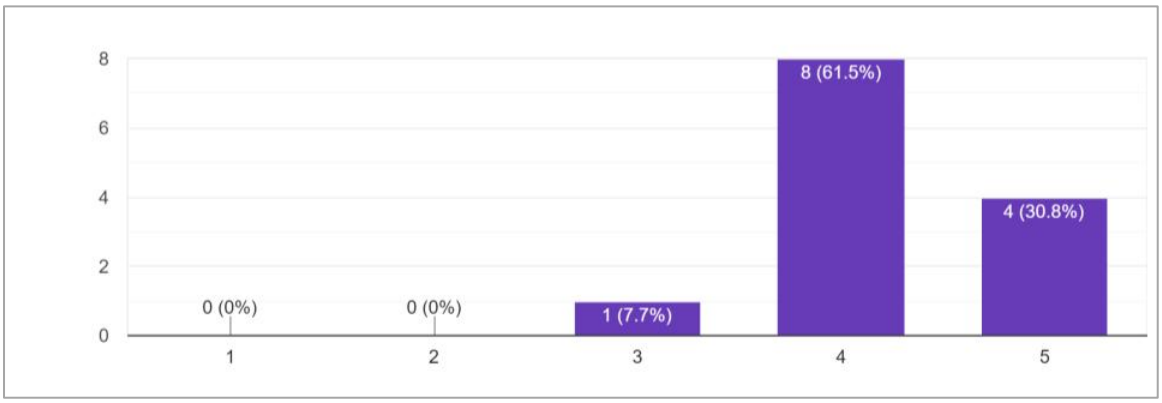

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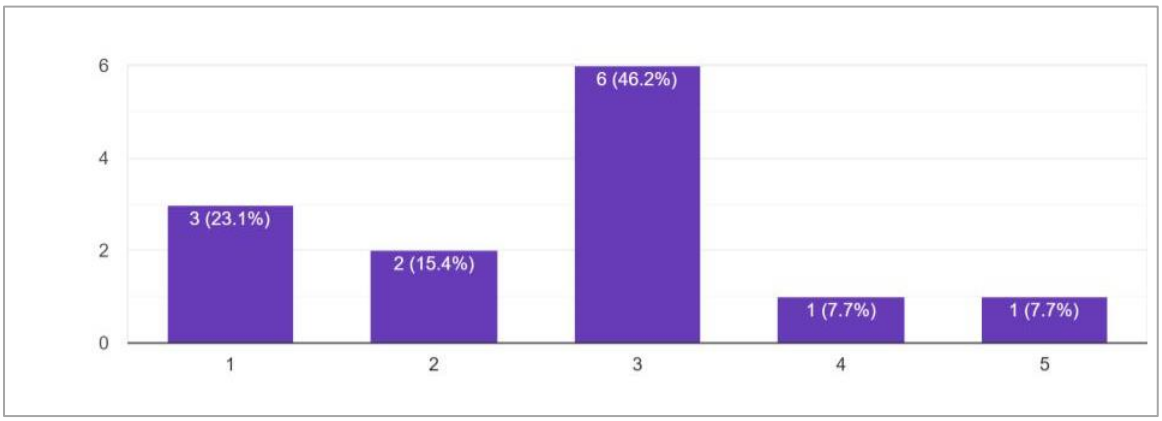

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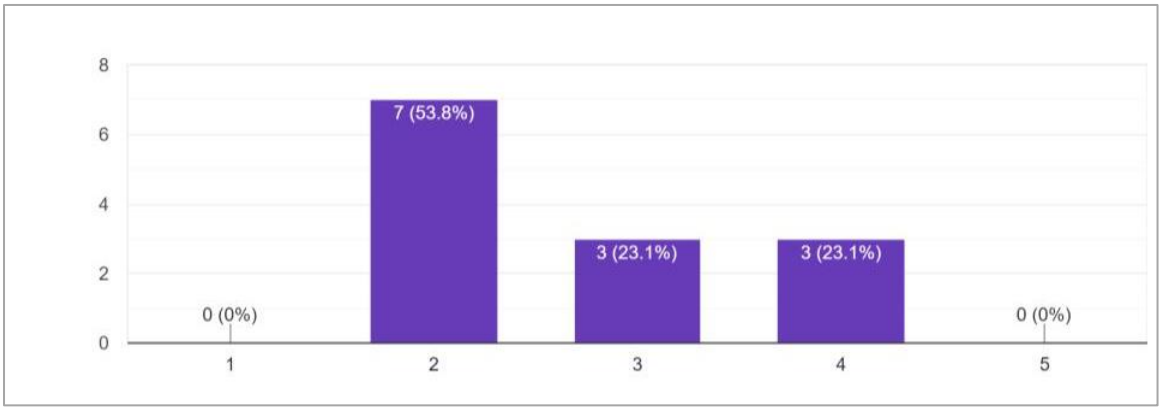

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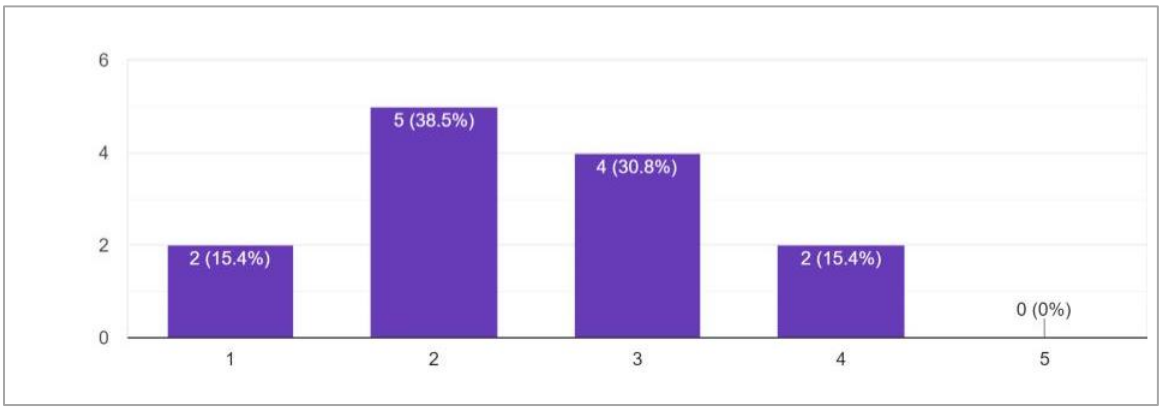
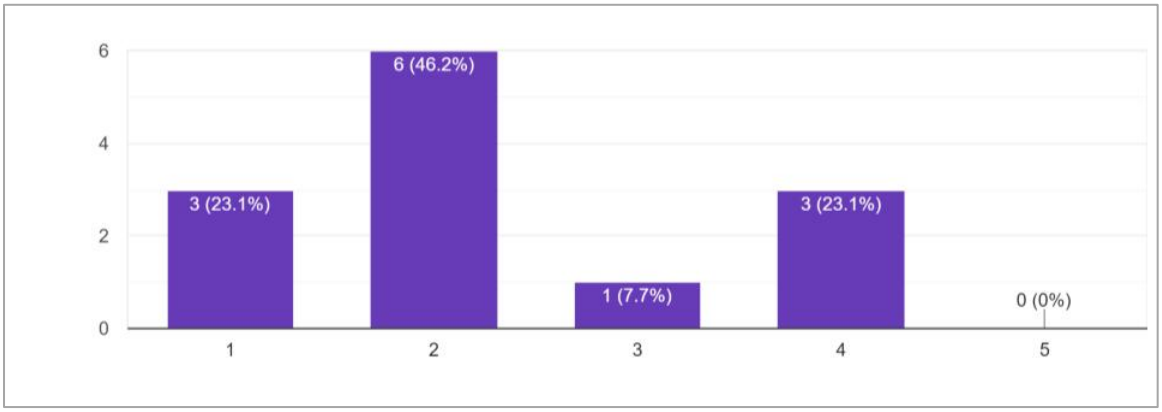


14. I engage my students in real real world lessons using digital tools.



15. Please give examples for the answer above.

I show Mystery Doug, my online "Let's Find Out" magazines and videos.

Scholastic News

I do use a current events website to give them examples of things that are going on in the world right now. I do have them practice their typing skills using the correct hand placement and finger position.

Last quarter of school. I am having to use a lot more digital tools than ever before. Google Classroom, Flipgrid, Screencasting.

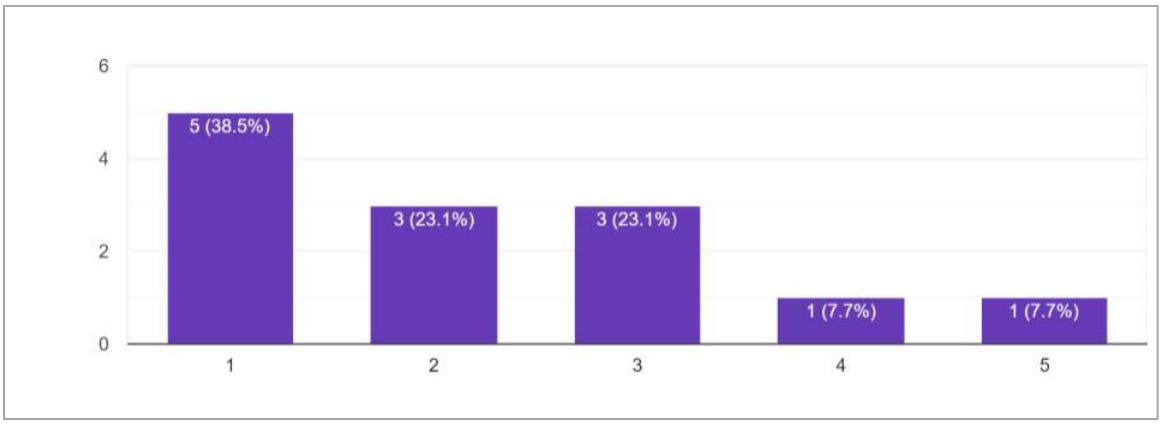
I do this mostly with the gifted kids--making newscasts, videos, editing photos, making presentations, writing stories, solving mysteries, etc., all on technology.

Research papers, event anniversaries/current events

Apple TV movement song and learning videos

We use the 3 act modeling videos within Pearson math to show real life problems that students need to solve. In the videos, there is usually something the students get wrong, which the video intends. This makes them think about why their answer was wrong.

16. I allow my students to express their learning using new and innovative web 2.0 tools. Ex. blogs, Seesaw, slideshows, Flipgrid, video, audio, etc.



17. Please give examples for the answer above.

My students, with parental support, are now sending pics of their finished work and videos of reading sight words, flashcards and parts of stories. I have 1 student using online Reading Eggs program to help with weak phonetic skills; whereas, I have 5 students who were reading above average and are now using Reading Eggs Press to strengthen reading comprehension at a higher level.

I don't have any.

Flip Grid - Answer questions and give an example.

I am doing a novel and I have the students post on Flipgrid after every 5 chapters a picture that sums up those chapters.

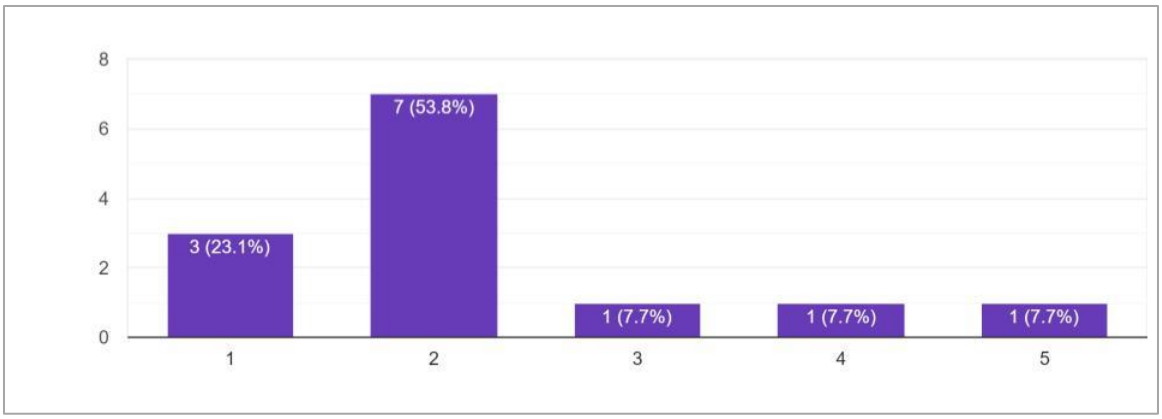
My students with language and writing disabilities dictate answers into Google and use the tools of Grammarly and Read and Write with Google Chrome to share what they know. Some progress monitoring is done on computer as well. The gifted students use technology to express their learning the vast majority of the time as well.

Slideshows, Flipgrid

Flipgrid response to history questions

My students can use flip grid to ask me questions and communicate with their classmates.

18. I am knowledgeable about assistive technology and look to incorporate these tools for my students at risk.



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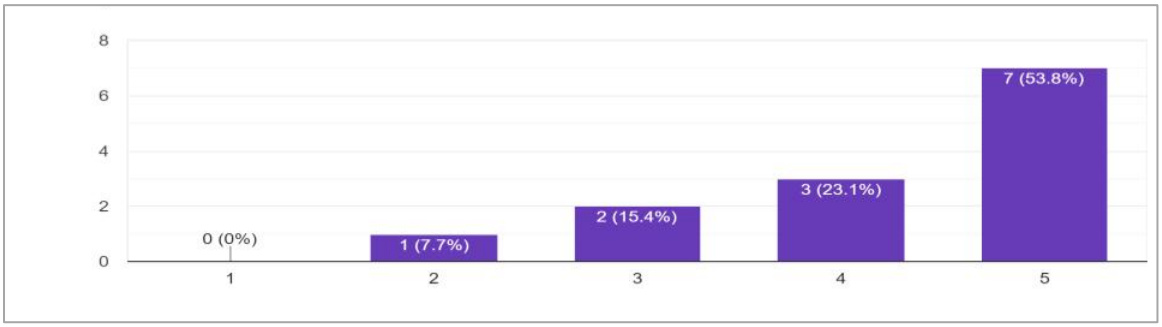
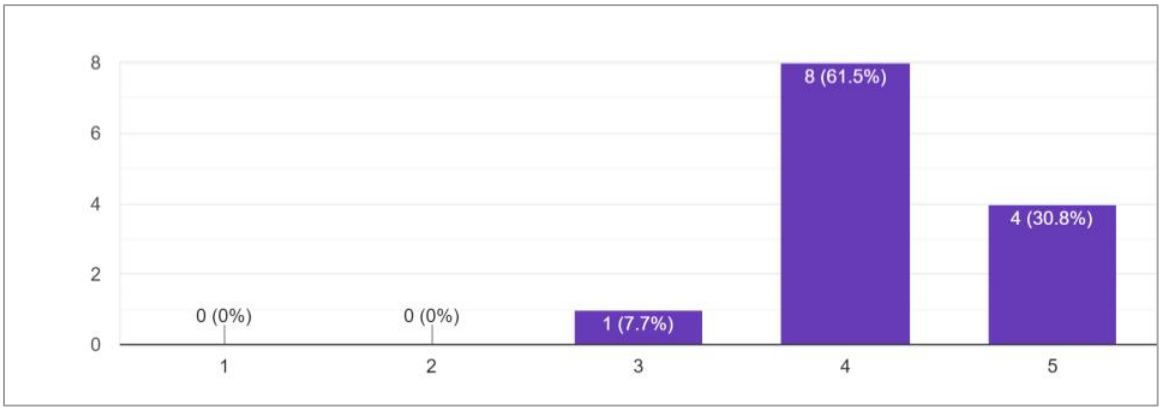
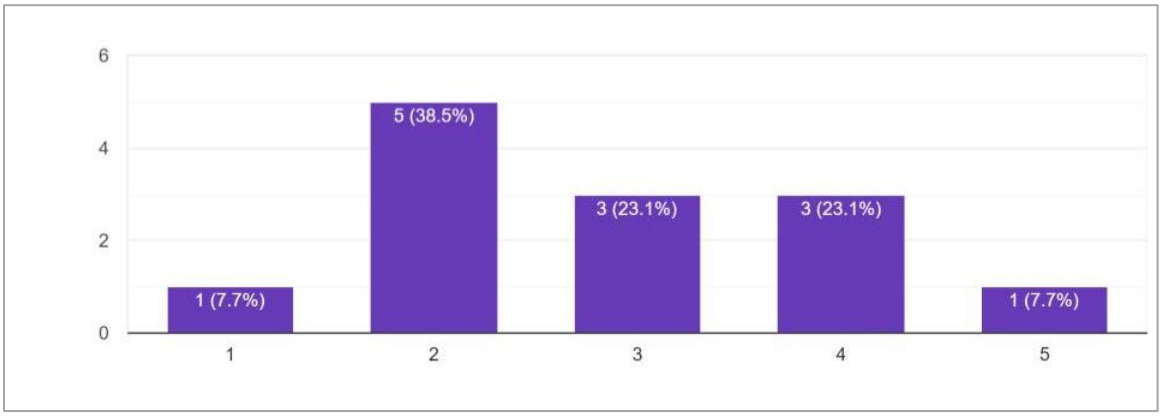


20. I use web based tools in order to communicate with students and parents. Ex. Email, Remind.



21. I collaborate with educators both locally and globally in order to enhance my professional learning. Ex. Twitter, Personal Learning Network, Organizations, Facebook.



22. Feel free to list any educational technology advantages or concerns you have had within your classroom.

I hope I can be able to use zoom for a PLC meeting tomorrow. I needed help for my first zoom meeting, so I pray I'll be able to participate tomorrow.

It would benefit me to show someone what I currently do in my classroom and how student learning would benefit from more technology use.

I am not sure how accessible technology is to students at home. It is tough when you assign something to be done with a computer, and that computer is not working or not available.

Cyber bulling and Cyber bombing. This has not occurred in my classroom, but it is my fear that things like this can happen and do go on.

The laptops are very helpful to all types of students. I'm concerned that some of them don't work with headphones. I get frustrated when tech doesn't work correctly during gifted program classes and I have no way to get help.

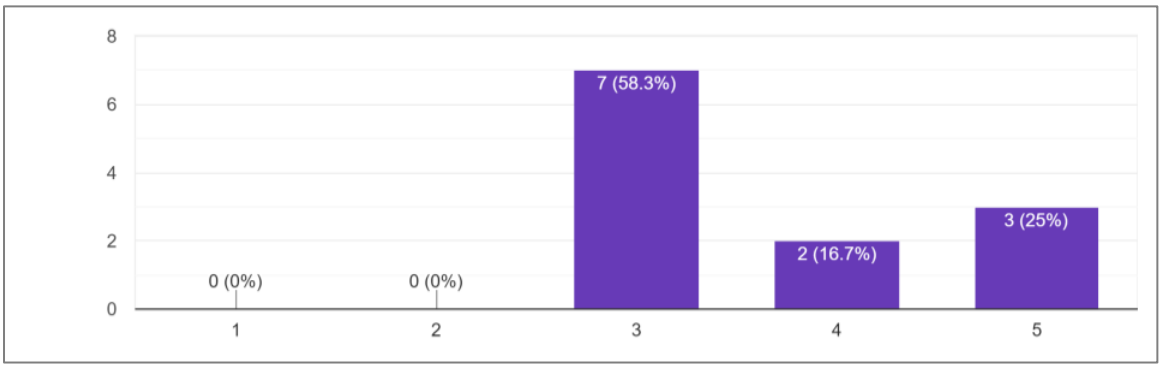
None

Glad we have a screen but want ways to use it more interactively than just students watching songs or videos.

Appendix F: Leadership & Scheduling Survey 1 Results

The results of the quantitative questions are represented in the written answers and graphs, showing the number of teachers that gave each rating. When rating 1-5, 1 is not at all, and 5 is absolutely.

1. Is the principal providing technology leadership for the school?



2. How could the principal be more effective in technology leadership?

Holding some of the staff more accountable for using technology more and understanding the purpose of it.

Updating the pictures on our website.
Some of us could use more help with some of the basics.

He could look into funding options to keep our technology up-to-date. He could look at time options to provide additional training for new programs.

List and description of websites to use, why to use them, and how to use them instead of saying them verbally.

Be further educated in technology.

I can' think of anything to help him be more effective except giving him more time.

I'm not sure--his plate is probably full with other things. He might be able to help find or generate money for technology needs.

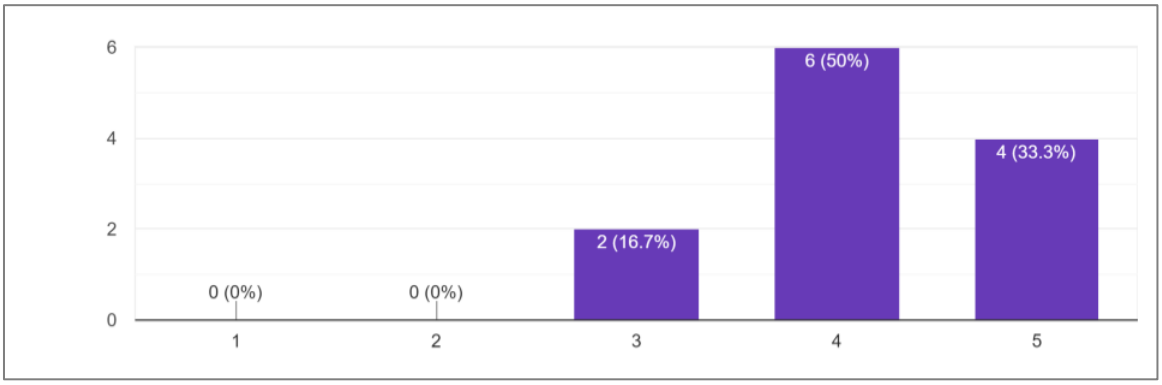
Use Remind to inform us of things to remember.

Since our Principal is new this year I do not know where his interests lie in technology.

Giving the technology director more time to attend to technical issues, program/app research, etc.

Maybe making us aware of technology training opportunities.

3. Is the technology director providing technology leadership for the school?



4. How could the technology director be more effective in technology leadership?

I think having a wide variety of tools at our disposal is great, but especially at the younger end I feel focusing on one or two great resources and utilizing it well is better.

Just diving in deeper into a couple of things we could use well.

I know there is a lot going on with new things with our technology but I don't even have the basics of learning most of the things we use at school: planbook, emailing parents, how to set up remind

Sometimes our tech meetings are about learning something that does not apply to lower grades. I feel lower grade teachers need more help in some of the basics.

Thank you for all you do.

Printed guide on the topic being addressed. Verbally can only go so far.

Have more time to be able to do all the things that he needs to do. Then he would be better equipped, he would better understand, and have more time to help and teach us in the ways of technology.

He needs more time. I feel there is probably enough work to keep the tech director busy at least half the day. The tech director should teach only half day.

I'm not sure.

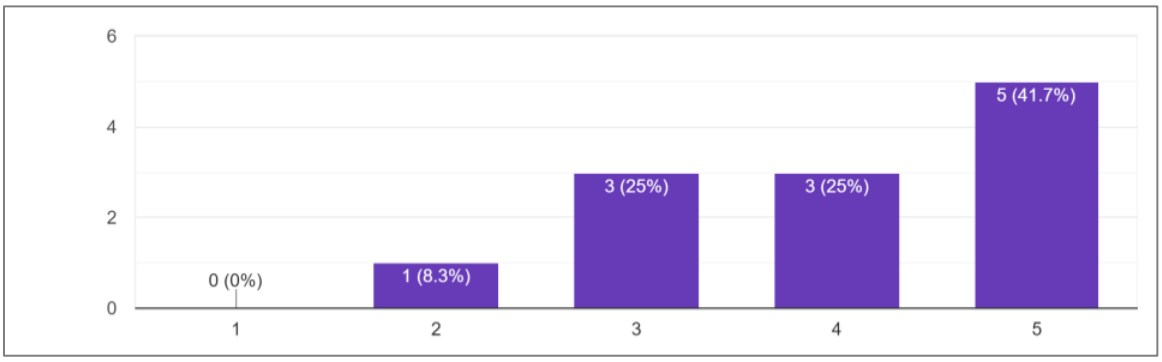
Do Technical things for me so I understand things better :)

The technology director has given me a lot to think about and has given me insight on how to use technology in my classroom.

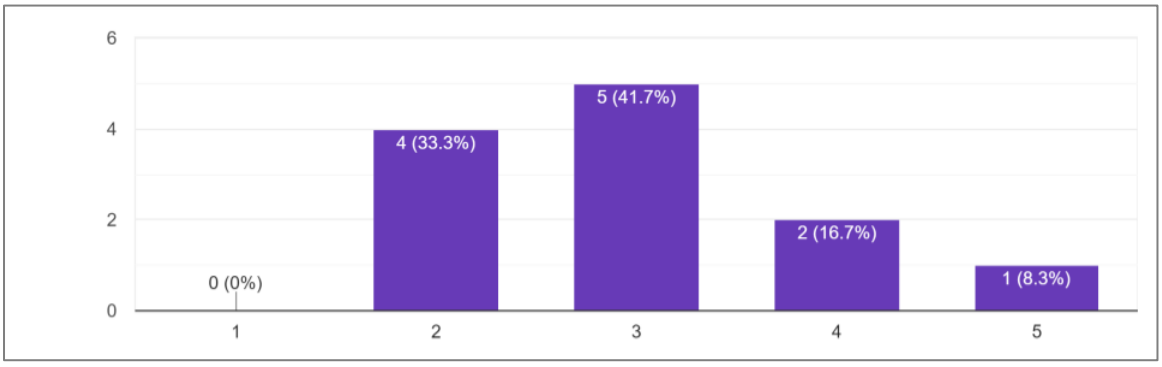
Honestly, I believe if he was given more time that he could devote specifically to technology, he could be more effective in technology leadership.

Having release time to do more one-on-one training with teachers

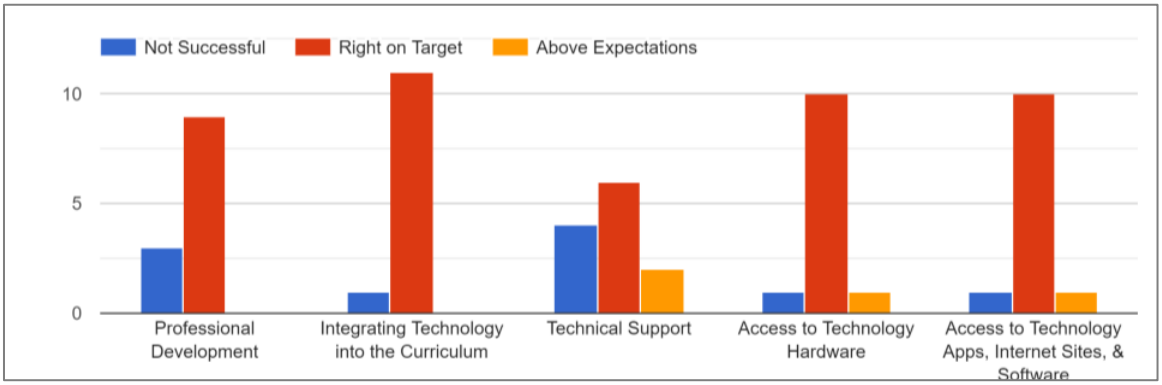
5. Is the technology director able to assist with your technology needs promptly?



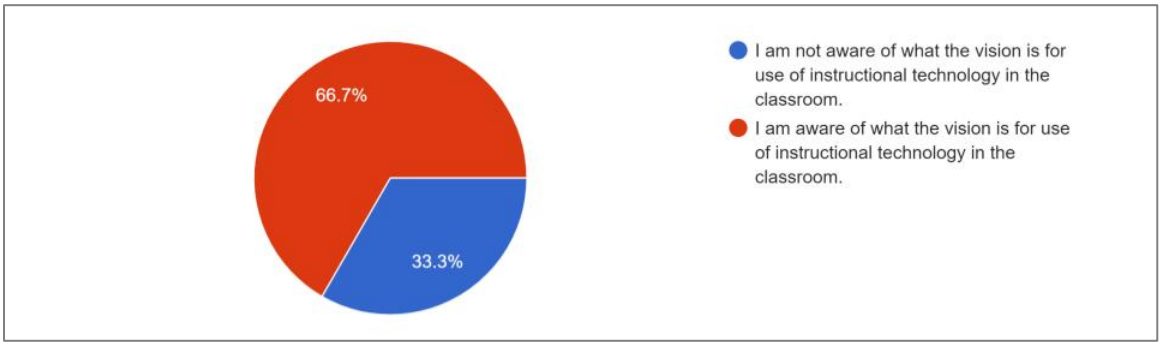
6. Is the technology director provided enough time to assist staff with technical support and instructional technology?



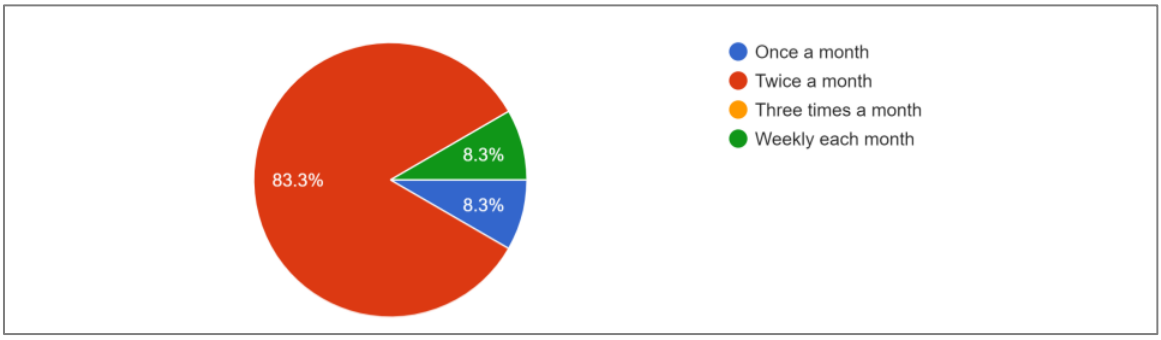
7. As of today, rate the degree of success St. Mark's technology has had in implementing the following.



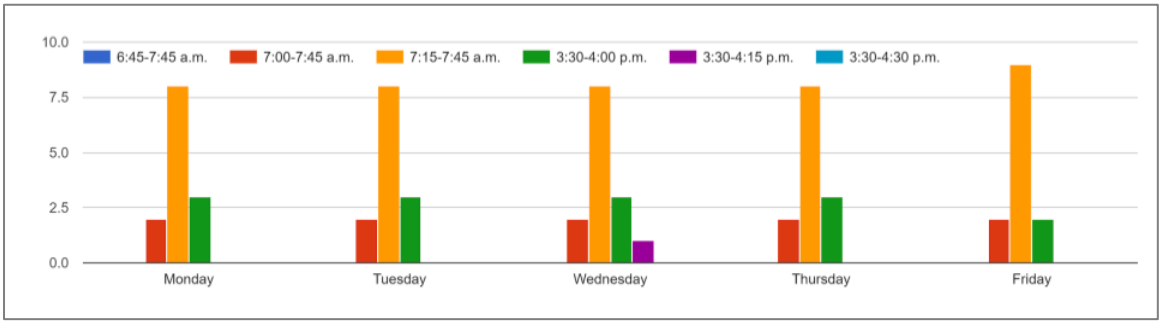
8. How aware are you of St. Mark's technology vision for the use of instructional technology in the classroom?



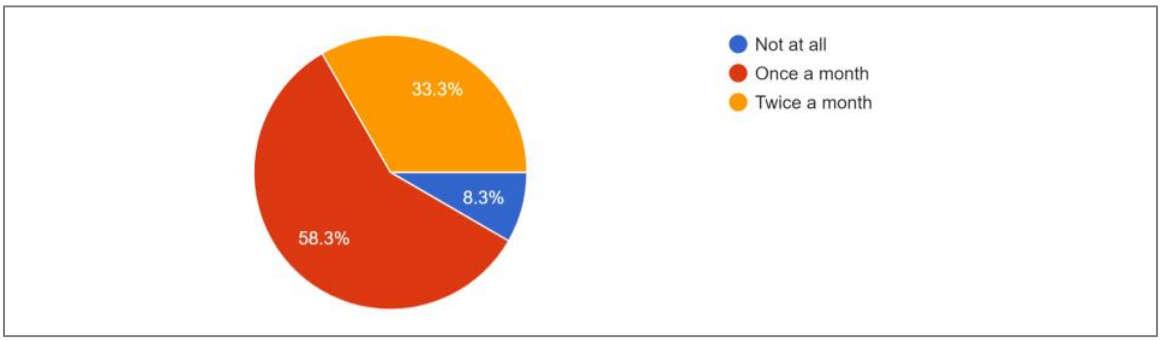
9. How often are you willing to meet each month during the school year for technology professional development? Please take a look at #10 in conjunction with this question.



10. Which technology training times are best during the school year?



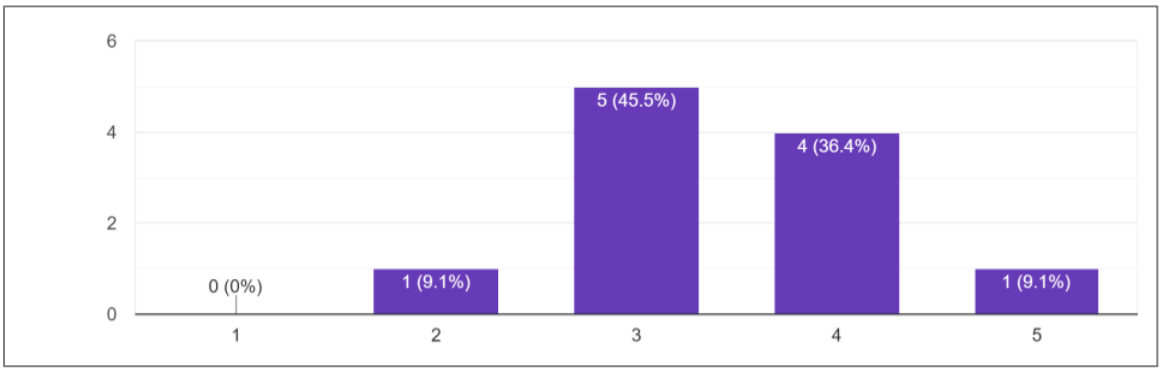
11. How often are you willing to meet each month during summer for technology professional development?



Appendix G: Leadership & Scheduling Survey 2 Results

The results of the quantitative questions are represented in the written answers and graphs, showing the number of teachers that gave each rating. When rating 1-5, 1 is not at all, and 5 is absolutely.

1. Is the principal providing technology leadership for the school?



2. How could the principal be more effective in technology leadership?

Does it count that he allows for/provides time for tech meetings?

I think the principal is still learning what all his duties are, he may not have time to implement everything.

Summer workshops

He already provides twice a month before school times for tech training. Perhaps adding a bit of time or review of a topic during our already long faculty meetings. I think he helps individuals as needed when he can. Not sure how he could be more effective!

Use In-service to show how teachers can incorporate technology in our lessons.

Talk to the teachers and see how I can better support them. I have other teachers with technology.

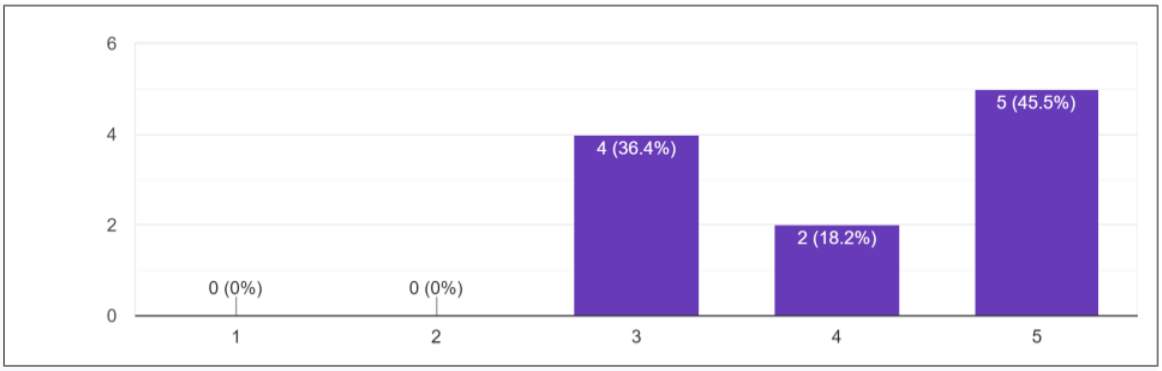
More time allotted

I don't know how he does.

He could require that certain tasks were done.

Help me with the tech requirements for the SNSP.

3. Is the technology director providing technology leadership for the school?



4. How could the technology director be more effective in technology leadership?

Given more release time! I truly appreciate your willingness to always help me. I do feel that you are prompt even when I know there are other issues to attend to.

I feel that the technology director is more than effective. He has given me many avenues to try with my students.

More time to teach and train.

He utilizes all the times provided by the principal for large group teaching. He needs extra time to help individuals like me.

Use In-service to show how teachers can incorporate technology in our lessons.

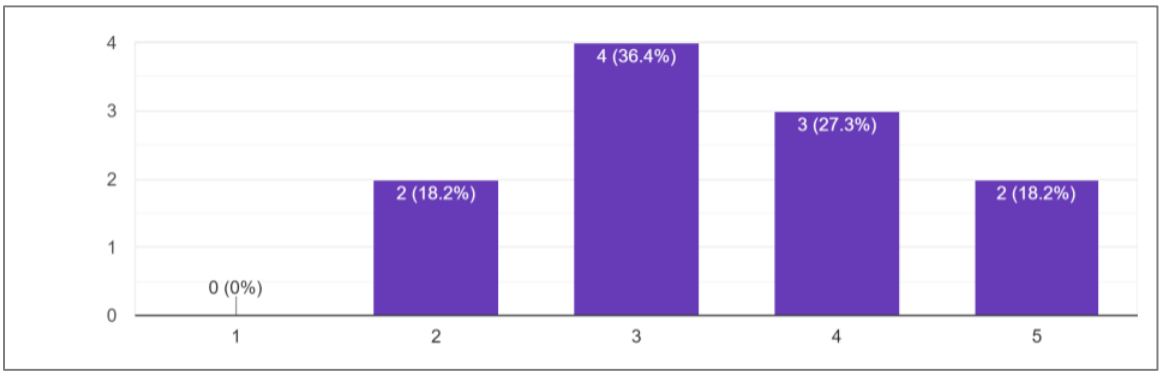
Have more time to do it.

More time helping coworkers.

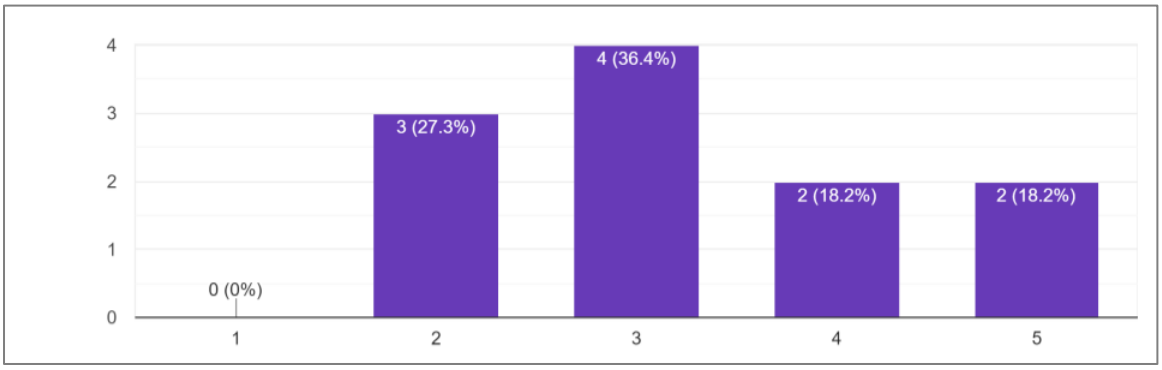
Helping Riverside figure out ways to communicate better with parents of the school but also potential students. Help with ideas on promoting Riverside to the other sites on what we have to offer. I do not know how to get our name out there.
I do not feel that all of our tech time requirements are meant for first grade. Maybe we could differentiate.

Help more directly with Quest and Explore STEM lessons.

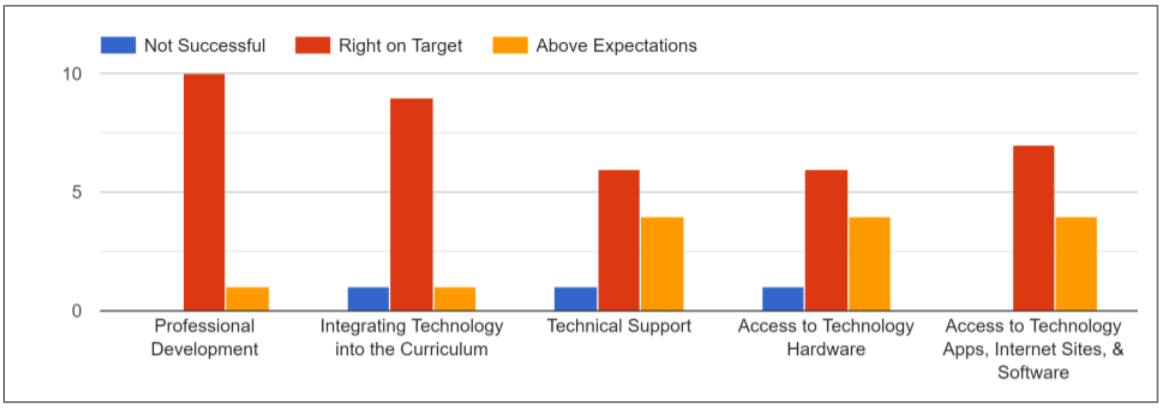
5. Is the technology director able to assist with your technology needs promptly?



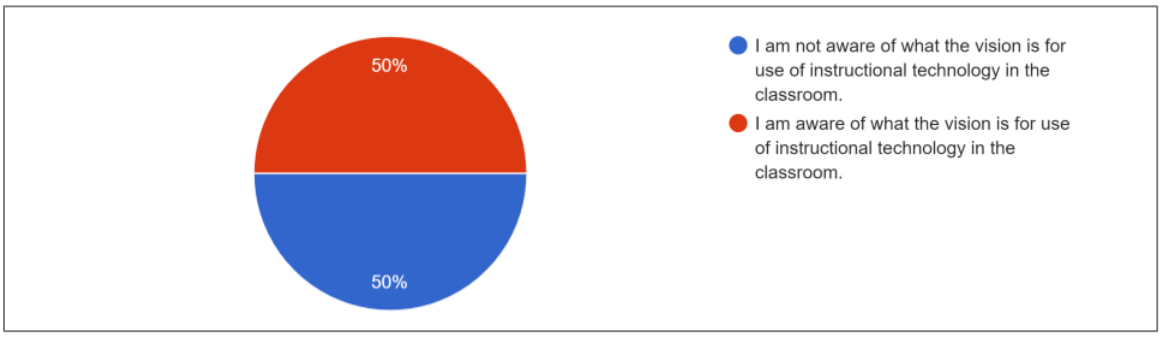
6. Is the technology director provided enough time to assist staff with technical support and instructional technology?



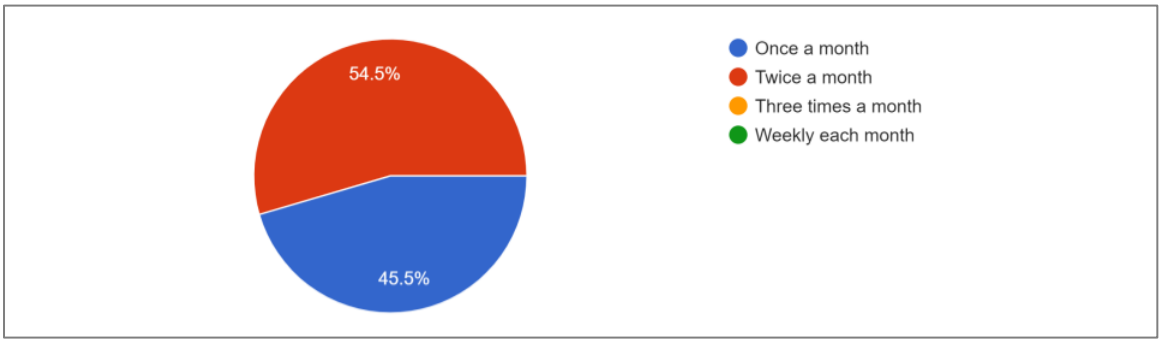
7. As of today, rate the degree of success St. Mark's technology has had in implementing the following.



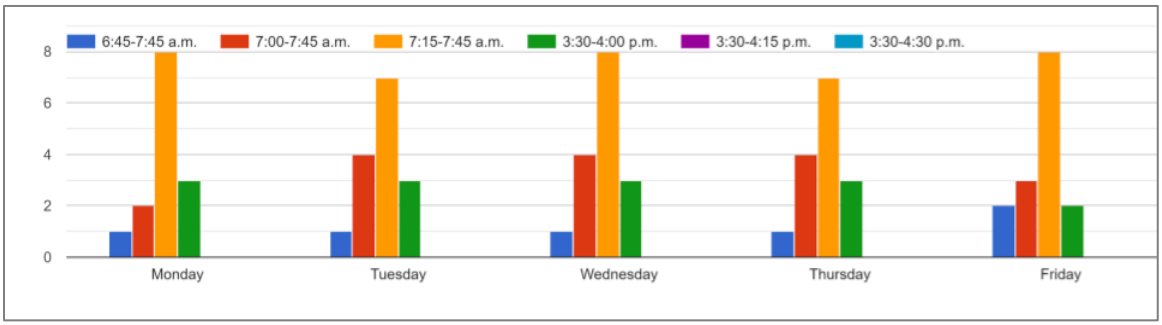
8. How aware are you of St. Mark's technology vision for the use of instructional technology in the classroom?



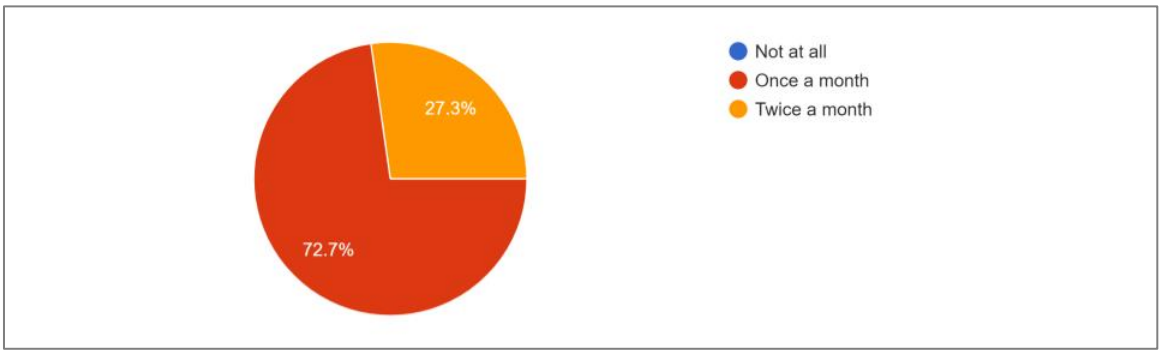
9. How often are you willing to meet each month during the school year for technology professional development? Please take a look at #10 in conjunction with this question.



10. Which technology training times are best during the school year?



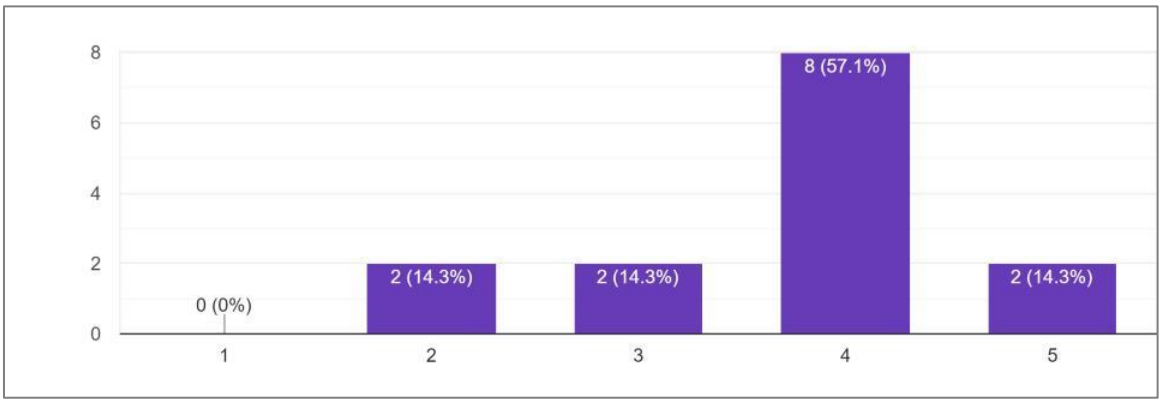
11. How often are you willing to meet each month during summer for technology professional development?



Appendix H: Leadership & Scheduling Survey 3 Results

The results of the quantitative questions are represented in the written answers and graphs, showing the number of teachers that gave each rating. When rating 1-5, 1 is not at all, and 5 is absolutely.

1. Is the principal providing technology leadership for the school?



2. How could the principal be more effective in technology leadership?

He trains along with the staff so he can assist. He provides some time in faculty schedule for tech training and the future looks good for more time available for tech assistance.

I could also be asking teachers where they struggle, assisting them, and communicating better with the tech director.

More time allowed

Sharing what he is doing while teaching

None at this time.

When we changed our Math to Pearson, it would have been beneficial for training on using the technology that was available with this curriculum.

Honestly, I'm not really sure.

I’m not sure.

He would have to take more classes in how to use technology.

He can hold people more personally accountable to lack of use or ignorance as to what different platforms are.

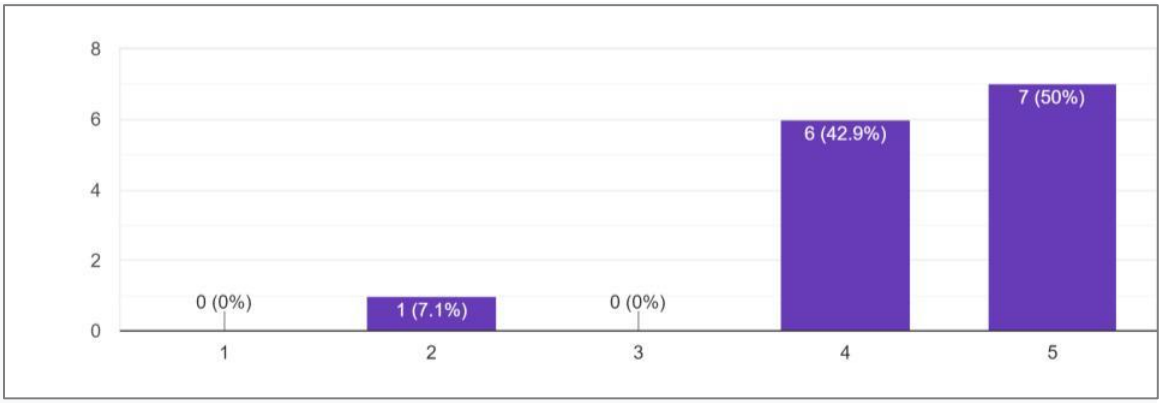
Not sure at this time.

Using tech during faculty meetings?

Not sure

Promote, provide, and encourage more training.

3. Is the technology director providing technology leadership for the school?



4. How could the technology director be more effective in technology leadership?

He is doing his best and is assisting in new tech ventures because of virtual learning. He is excellent at supporting our staff, technologically!

I love how he asks us for feedback and give a variety of lessons. He teaches the basics to those who need it and gives more advanced lessons to others so that we are all learning on our own levels. This will be even better when he has more time allowed.

Keep being available

None at this time.

When we changed our Math to Pearson, it would have been beneficial for training on using the technology that was available with this curriculum.

Maybe set up different meetings for those of different levels of technological capabilities?

I'm not sure?

He is doing a great job. Thank you!

I think there can be more cohesiveness as to what is used school wide. We have a good stock pile of different tools, but have so many different tools can be overwhelming for

some. Sticking to a select few and utilizing those few tools to their potential and well will build for confidence with staff and students. A less is more mindset.

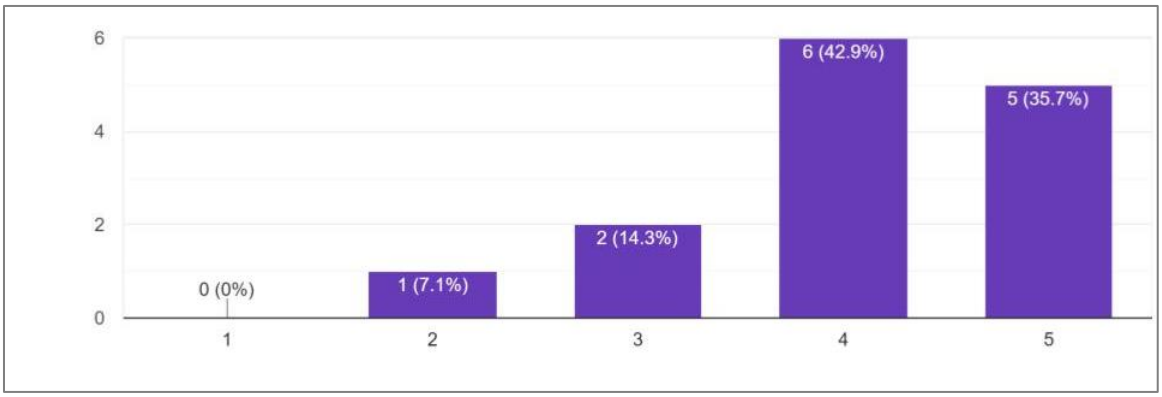
Since we have had to move to online teaching. I am forced to figure out a lot by myself. Not sure what he could do at this time. He answers questions I have. I could ask him step by step how to set things up, but that takes time also.

More in-depth on certain topics like google apps?

Be able to trouble-shoot or help set things up more quickly

More time in one-on-one training and educating.

5. Is the technology director able to assist with your technology needs promptly?



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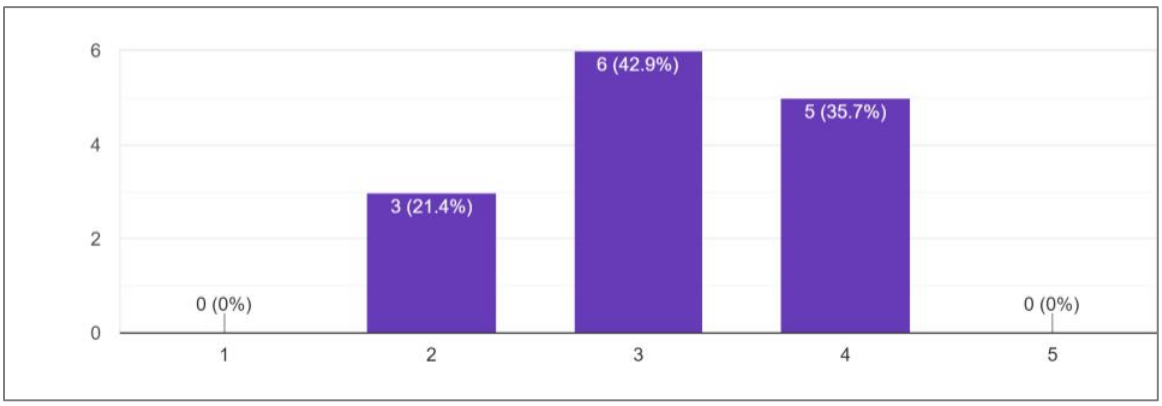

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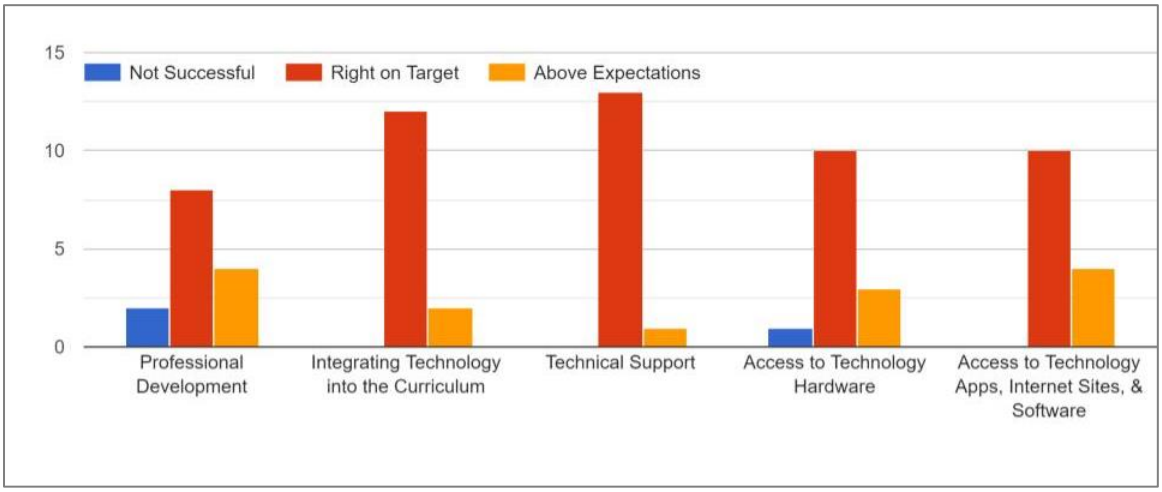

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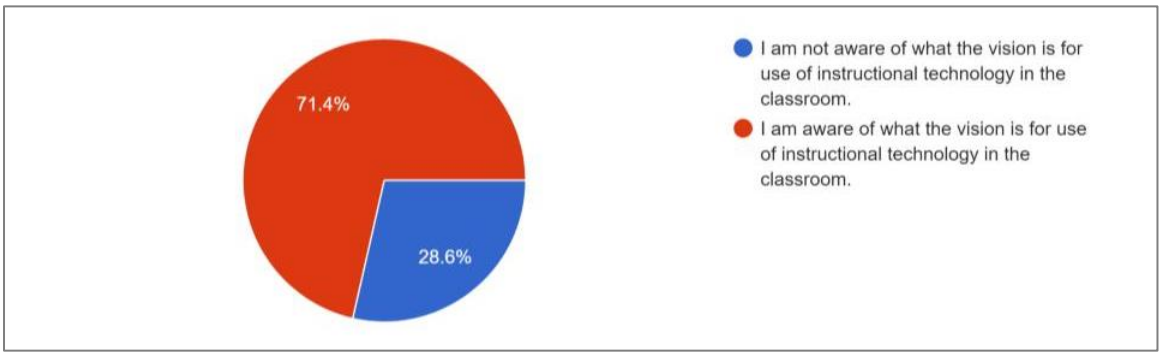

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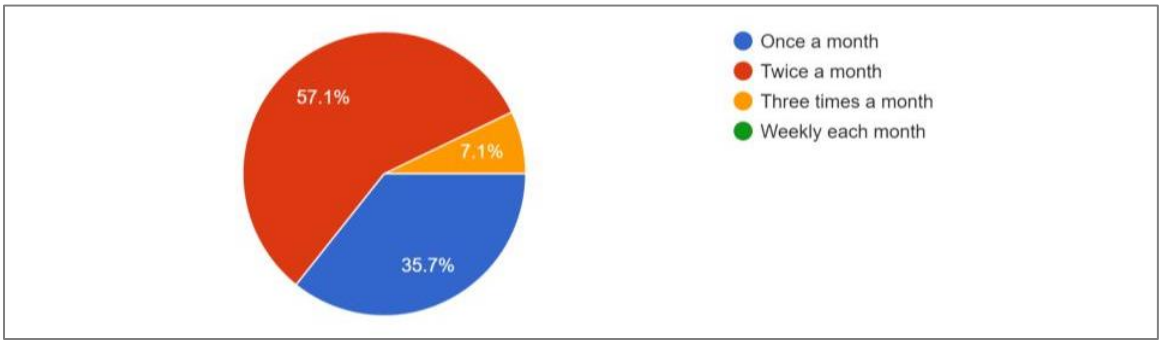

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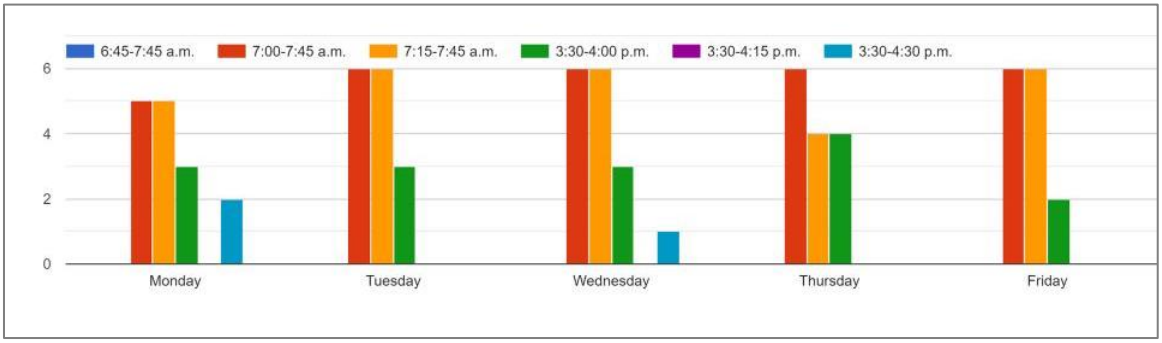

11. How often are you willing to meet each month during summer for technology professional development?