Western Pacific Teachers’ Perceptions of Implementing Technology in the Classroom

Roque Indalecio1, Sunddip Panesar-Aguilar2, Debra Tyrrell3

1,3Walden University, Minneapolis, MN
2University of St. Augustine for Health Sciences, St. Augustine, FL

ABSTRACT: At a Western Pacific Region school district with six public high schools, district administrators implemented an educational technology training program (ETTP) to improve technology integration in the classroom as measured by the Effective Learning Environments Observation Tool, but there was no follow-up to determine how the teachers perceived the ETTP and to identify the experiences of teachers related to instructional technology after taking the district training. This basic qualitative study, guided by the technology acceptance model, addressed this problem in the district by exploring how the teachers perceived the technology professional development program provided by the district and the teachers’ experiences related to instructional technology after taking the district training. The purposeful sample included 13 Western Pacific Region high school teachers who were interviewed via Zoom. Data were analyzed using thematic analysis to create codes, categories, and themes. The participants perceived the ETTP as helpful because they learned new tools and increased their confidence in using technology in their classrooms. Results showed that after completing the ETTP, teachers still needed content-specific technology training and continuous professional development. High school teachers expressed the need for these trainings to continue integrating technology using up-to-date technology tools. Rethinking science professional development is one potential form of social change.

KEYWORDS- Technology, technology acceptance model, online learning, online blended curriculum, technology training, Technology implementation, teaching and learning.

1. INTRODUCTION
Technology has become ubiquitous in all job areas, including education. People are living in an era where technology is rapidly changing, and new forms of information and communication technologies are being introduced; technology has now influenced the education system, making it essential for schools to adapt to the digital world1. In 2012, a public school district in the Western Pacific Region created a 5-week educational technology training program (ETTP) for teachers that has continued to grow, with the ninth cohort of teachers starting in November 2020. The district also showed an upward trend in the use of technology in the classroom by teachers and learners as measured by the Effective Learning Environments Observation Tool. The problem is that the district administrators implemented the ETTP to improve technology integration in the classroom as measured by the ELEOT, but there was no follow up to determine how the teachers perceived the technology professional development program provided by the district and the experiences of teachers related to instructional technology after taking the district training. According to the technology director, data from the ETTP for teachers included users’ comments about the informal impact of the program and completion data after completing the course. From these data, it is unknown whether the ETTP for teachers is achieving its goal of helping teachers to integrate and incorporate technology and digital tools to enhance teaching and learning.

Additionally, according to a schoolwide announcement in October 2020, the program was put in place to “bridge the gap between teachers’ knowledge and the current skills that are essential for 21st-century teaching and learning”. The training program provided educators with access to high-quality digital tools to implement in the classroom to enhance learning. Furthermore, the courses were meant to help teachers use different digital tools in their classrooms. In addition to gaining access to digital tools, teachers were trained to use and implement technology to enhance their lessons.

According to a professional development announcement from the district, the ETTP for teachers offers five hybrid courses (online and face-to-face requirements) to complete the program. Each class runs for a total of 45 hours. The courses offered to teachers are Classroom Instruction that Works with Technology, Advanced Computer Applications, Google Apps for Education, Student Tech Products, and Digital Citizenship in Schools. Additional requirements include an educational technology
Western Pacific Teachers’ Perceptions of Implementing Technology in the Classroom

professional development in-service, integration of educational technology in regular lesson planning, and teachers attending face-to-face sessions once a week. Since 2012, 784 teachers participated in the 5-week technology training program, and 163 were high school teachers.

Literature has emphasized that it is the schools’ responsibility to incorporate technology into the classroom to equip students with 21st-century skills to be college and career ready. A global economy is a competitive place where technology is an important skill needed in the workplace. Students who are more likely to be equipped with technological skills have a higher chance of landing a job and excelling in it. Additionally, a study conducted found that higher use and integration of mobile technology in the classroom resulted in a positive correlation with student achievement. Therefore, teachers must incorporate technology into the curriculum to allow students to hone such skills to be self-sufficient and productive citizens in the global economy. Furthermore, technology can help students acquire essential skills such as evaluating, producing, presenting, and exchanging information. Because such skills are important for the global economy, technology is also a necessary tool for learning, accessing information, and supporting content.

II. RESEARCH PURPOSE

The purpose of this basic qualitative study was to explore how the teachers perceived the technology professional development program provided by the district and the experiences of teachers related to instructional technology after taking the district training. Teachers are encouraged to complete the technology training program, but little is known about how teachers perceived the usefulness of the program. The program prepares teachers with the technological skills needed to instruct 21st-century learners. The ETTP was funded by the Territories and Freely Associated States Education Grant Program (T&FASEG). The program goals were to:
- strengthen instructional technology by recruiting teachers and administrative leaders to complete the program,
- improve student achievement by training teachers to implement high-quality digital tools in their classrooms effectively, and
- ensure that all participants would demonstrate at least 50% of the instructional technology applications in their workplace as measured by the Power Walkthrough Assessment.

Because there were no other data to show application, and it was unknown whether the program was achieving its goals, this research explored teacher perceptions of the ETTP. There was a need for an increased understanding of how teachers implemented technology after completing the training program because teachers must prepare learners for the 21st-century workforce. Furthermore, an understanding can be used by the office of instructional technology to evaluate whether its program is preparing teachers to integrate technology in their classroom and to understand how teachers perceived the effectiveness of the courses offered.

The research questions that guided this basic qualitative study were the following:

RQ1: How do teachers perceive the technology professional development program provided by the district?

RQ2: What are the experiences of teachers related to instructional technology after taking the district training?

III. LITERATURE REVIEW

Technology Acceptance Model

The conceptual framework for this study was the technology acceptance model (TAM). According to Davis, the TAM focuses on two constructs, perceived usefulness and perceived ease of use. These two constructs are the foundation of determining system use. The theory may be used to predict the likelihood of an individual or organization adopting technology successfully. Many variables influence the use of technology. One variable is the belief that the application or technology will help users perform better at their jobs. This is called perceived usefulness. The second variable is perceived ease of use. Though the user may see the technology or application as useful or beneficial, if the technology or application is complicated, or more effort is needed to learn how to use it, the user is more than likely to reject the technology or application. Perceived usefulness and perceived ease of use are two factors that influence the user’s behavior and attitude.

Technology Integration

The world’s economy has become a competitive arena in which employees need to be productive to improve the economy, which eventually leads to improving the well-being of others. For a nation to be competitive in a global economy, its human capital (workers) must be trained and educated to develop its natural resources and improve productivity and technology. It is crucial to prepare students today and in the future with the skills, knowledge, and tools demanded with globalization and technological advancement. When students enter the real world, they need to be equipped with the knowledge and skills to be productive employees. Additionally, they are expected to possess the skills to collaborate, solve problems, be creative and innovative thinkers, and use information and communication technology to be effective.
Western Pacific Teachers’ Perceptions of Implementing Technology in the Classroom

To become productive employees, students need to hone such skills at an early age. This is where schools come into play. Schools must integrate these skills into the curriculum. One of the most effective ways of teaching 21st-century skills is through the use of technology. The use of technology allows students to find effective ways to solve problems. It can enable students to work collaboratively to find solutions. It can allow students to be more innovative and find newer ways to solve problems.

Improving Student Performance Through Technology

When technology is implemented in the classroom in tandem with appropriate instructional methods, learning processes can be improved and increased. Technology integration is more than just teaching students how to use the basics of technology. It allows students to take risks to learn and be resourceful and construct their knowledge through experiences. Additionally, technology can promote active learning, engagement and participation, and interaction and collaboration.

Many educators use technology to support student learning. There are various forms of technology available that can be used to motivate students to participate fully in the learning process. In a study, the authors focused on KeyPad, which is a response system. In their research, the use of KeyPads was associated with levels of student engagement. Technology in the classroom should not just be an add-on to the lesson, and it should be carefully aligned to the course objectives. Also, the inclusion of technology within the curriculum supports students through collaboration and building relationships. The use of technology in the classroom can promote student engagement and learning. As teachers, proper planning is crucial when integrating technology. It must be intentional, ensuring that it is relevant to the lesson and connects with the learning objectives.

It is evident how technology has become common in the classroom, and it is important to understand how technology affects interactions within the classroom. Interaction and collaboration are essential skills students must learn to develop as they venture out into the real world. To promote collaboration, inquiry, and interaction, teachers must consider the design of their learning spaces. Furthermore, how students interact and what tools are used are important factors determining how students interact. One tool that can promote collaboration and student interaction is the use of technology in the classroom. With various types of technology, students can easily collaborate to solve problems and provide critical feedback to one another.

Technology Training and Professional Development

Teachers need to be trained to use new technologies, and they need to be prepared to effectively integrate them into the curriculum to meet the diverse and changing needs of students. There is a need for new professional development to model effective ways to help teachers become comfortable using technology. As a result of all these changes school districts are facing, it is imperative that leaders are preparing teachers by offering continuous support in the form of professional development or teacher training which will enable them to stay abreast with the new forms of technology. According to Saydam, there has been an increase in interest in professional development over the last two decades. Teachers are seeking opportunities for professional development to increase the professionalization of teaching. More importantly, these pieces of training will help teachers effectively plan their lessons and improve their pedagogies. Powell and Bodur also stressed the importance of professional development in promoting student learning outcomes.

Within a given school year, teachers participate in professional development mandated by their administrators; however, most of the training does not offer the support teachers need to incorporate technology. Instead, teachers can seek support and create a mentorship program from their peers. Teachers and administrators often do not agree on which professional development topics are essential. Jones and Dexter also mentioned that school administrators disregard the importance of innovations and teacher learning opportunities. Because of this, teachers spend time working alone instead of getting the support they need to implement educational technologies in their classrooms. Teachers need to be encouraged, followed by support through pieces of training for technology to be integrated effectively.

IV. METHODOLOGY

A basic qualitative design was used to understand the phenomena related to technology integration in the classroom. This is a flexible approach to understanding individuals; in this case, classroom teacher’s experience and perception of the technology training program that they had completed. The data collection method in qualitative research design is iterative and not chronological, which is a crucial aspect to understand the problem presented. This means that the collection method is recursive in the sense that participants who share their experience can also add information later on, and nothing is set in stone. Because qualitative research is iterative and inductive, it allows new information to unfold and emerge, eventually gathering more important data relating to the study. Using a basic qualitative study approach therefore allowed me to gather teachers’ experiences regarding integrating technology in the classroom.
Western Pacific Teachers’ Perceptions of Implementing Technology in the Classroom

A. Participants
The ETTP for teachers started its first cohort in 2012. There was a total of 784 participants who enrolled and completed the program as of 2019. Of the total, 163 were high school teachers. The setting of this study was four high schools in the Western Pacific Region. The four high schools together serve 3,830 students. There are two other high schools under the district; however, they are located on different islands, so they were not included in this study due to geographic locations and funding. These sites were chosen because they were directly related to the participants of this study and the goal was to understand high school teachers’ perceptions and experiences. Because this study was a basic qualitative study, the selection of participants did not require probability sampling but rather purposive sampling. Purposive sampling was used; therefore, a total of 13 teachers were sought as participants for this study. High school teachers were selected because high school students are of the critical transitional age for college and the workforce. High school teachers are responsible for ensuring that students are prepared with the skills needed for the real world.

B. Data Collection
Because the research design of this research study is a basic qualitative study, and the research questions were based on teacher perceptions, the best method to collect data was to interview teachers to understand their experience firsthand. Moser and Korstjens underscored that interviews aim to articulate meanings based on the participants’ experiences. Interviews involve the interviewer asking the participants questions and can be done face-to-face, over the phone, or online via emails. The main goal for interviewing is to contextualize and create meaning of what the participants say.

V. DATA ANALYSIS AND RESULTS
A. Analysis
For this study, interviews were used as the primary source of data collection. During the interview process, it was important for the researcher to identify truths and untruths to collect accurate data. During the interview process, the participants’ responses were recorded. This technique helped me transcribe and analyze the interviews to ensure that the data collected was rich in meaningful information that answered the research questions.

Data collected from the interview process were analyzed to help develop emerging themes. To make the transcription process smooth and efficient, the Otter.ai’s speech-to-text feature was used. The audio portion of the Zoom interview session was used. Additionally, the voice typing feature in Otter.ai to ensure that the transcription was verbatim was utilized.

To simplify this process, data was analyzed and patterns such as repetitive words or phrases were identified. To distinguish codes from one another, a color-coding system was used to differentiate between words or phrases to organize the data. Any terms or phrases that were unusual or did not fit within the codes were set aside for further exploration. After analyzing the data, four themes emerged. Table 1 lists the four themes and describes each theme.

Summary of Themes

<table>
<thead>
<tr>
<th>#</th>
<th>Theme</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Content-specific technology training</td>
<td>The need for technology training on content-specific or domain-specific tools for high school teachers.</td>
</tr>
<tr>
<td>2</td>
<td>Ongoing technology training/professional development</td>
<td>The need for periodic and continuous technology training for teachers to continue integrating technology with up-to-date technology tools.</td>
</tr>
<tr>
<td>3</td>
<td>Technology professional development increases teacher confidence</td>
<td>The ETTP increased user confidence in integrating technology in the classroom.</td>
</tr>
<tr>
<td>4</td>
<td>Teachers learn new tools</td>
<td>Teachers learn about new tools when technology specialists demonstrate new tools that they might consider using in their classroom.</td>
</tr>
</tbody>
</table>

Theme 1: Content-specific Technology Training
The first major theme that emerged during data analysis was labeled Content-Specific Technology Training. This theme covered a variety of codes relating to content-specific technology training. The codes related to this theme include technology integration, time, not content-specific, irrelevant, general, elementary level, common apps, and content-specific. All these patterns led to the development of this theme. During the interview, many of the participants revealed the need for content-specific technology training. Although all participants used devices provided by the school to utilize technology in the classroom, teachers also utilized various technology tools to assess and engage students and enhance the content. Technology tools are used through
Western Pacific Teachers’ Perceptions of Implementing Technology in the Classroom

various content areas and are considered a crucial tool to help students succeed. All participants used desktops, TOWs, printers, a projector, ELMO document camera, TV, and iPads to deliver their lessons in the classroom. Regarding technology tools, all participants integrated the following: Google applications, web-based learning tools, graphic design platforms, BlackBoard Ultra, Achieve 3000, and game-based learning tools into their lessons to assess and engage students.

Participants believed that technology is an integral part of the classroom and has been for many years. When the participants were asked, “Do you think you still need support in regards to technology integration? Do you feel the need for additional support in regards to technology integration specific to your course content?” many of them expressed that they needed content-specific professional development. T5 stated, “Absolutely. I wish we had more PDs about it…I actually addressed that to them [school administrators] that we should have more PDs related to our content.” T7 felt that more technology should be integrated into social studies. At the same time, T8 expressed that they wanted more applications and content in the science content area because English and math received more domain-specific technology training support. T8 elaborated that science teachers were unaware of domain-specific applications. T9 wanted to learn more about strategies for integrating technology in essay writing and reading stories. T10 remarked that they looked forward to learning about tech tools in their content area. T11 supported the expression of the previously mentioned teacher and stated, “I would really appreciate if the ed tech program for science is purely for science like use technology that we can actually use for the lab.” T12 shared not having enough skills relating to programs such as Achieve 3000 and Renaissance and would like training on the new features because there have been some changes.

Based on the interviews, content-specific technology training is something high school teachers look forward to moving their content forward. The results from Theme 1 agreed with Fernandes et al.24, which stated that content-specific technology training helped teachers familiarize themselves with new methods for their content. Additionally, teachers use different technology tools to meet the needs of a diverse student population24. Likewise, professional development informed teachers about knowledge and skills relating to technology tools25. Professional development allowed them to make decisions relating to inquiry-based lessons to meet the diverse learners in the classroom26.

The participants shared that they attended various professional development or training relating to technology; however, many teachers felt that professional development was not specific to their content. Many participants relied on their own experiences to find tools or applications relating to their content. The participants believed that technology is an integral part of learning and teaching. However, a few reported having access to content-specific training to properly equip them to use specialized technology tools or applications relating to their content. Kalonde26 had similar findings where for teachers to use content-specific tools adequately, teachers must receive training.

**Theme 2: Ongoing Technology Training/Professional Development**

The second theme that emerged after the data analysis was labeled ongoing technology training/professional development. This theme covers a variety of codes relating to ongoing technology training/professional development. The codes related to this theme were support, involve the teachers, listen, needs, survey, more training on science tools, inform teacher, and continue to provide professional development/training. All these patterns led to the development of this theme. Teachers expressed the need for follow-up or continuous technology training or professional development to integrate technology with up-to-date digital tools. The participants shared that the district leaders can continue supporting teachers by offering continuous technology training to update them with the latest tools and best practices.

Furthermore, the participants shared that even after completing the ETTP and various technology professional development, they still need additional support. T2 expressed that district leaders need to support teachers by listening to what teachers say about technology professional development. In the classroom, the one size fits all model does not work. To meet the needs of the different learners, T2 stressed, “I think administration and key management needs to keep listening and seeing what are the needs of the teachers...If that be in the form of a piece of technology or a subscription or training, whatever it is that’s necessary.” T3, on the other hand, shared that district leaders need to provide more opportunities for teachers to be exposed to different conferences relating to technology. T3 went on to say, “I think we need to expose teachers to more of these conferences, so that we can learn the up-and-coming technologies and programs and apps and that stuff.”

T5 shared that the school district needs “to provide more professional development to teachers, and probably hire someone who’s actually proficient in explaining a specific application or a tech tool so we would benefit from it.” T6 shared that the other teachers who are knowledgeable in technology can support other teachers by sharing tools they use successfully in the classroom. For T7, there is a need for more professional development relating to U.S. history and technology integration for social studies and teachers in general. T7 went on and added that there are free and simple technology tools out there that are effective; however, no training or professional development is being offered to teachers. T9 shared her experience about the shift in teaching from face-to-face to virtual. The teachers received a month-long training for BlackBoard Ultra, the learning management system adopted by the school district. Even with the training provided, T9 reported that teachers still had a hard time learning the ins and
Western Pacific Teachers’ Perceptions of Implementing Technology in the Classroom

outs of the learning management system. T11 shared the importance of lab-based technology in the classroom. T11 also emphasized the need to train teachers to properly use and integrate tools for science, especially in a lab setting.

Additionally, T11 has many devices and sensors but does not know how to use them. Hence, the participants believed that continuous and ongoing training or professional development for content-specific technology use is essential for teachers to integrate and enhance the content effectively. Finally, T12 shared that district leaders need to keep teachers updated, especially when changes within the ELA programs.

Continuing professional development or ongoing professional development supports teachers by ensuring that they enhance their skills and competencies in their domain. Foschi explained that continuous professional development has become a crucial part of educational policies as it improves the quality of education in schools around the world. Teachers have perceived continuous professional development as a need to stay abreast of their content. Professional development serves as a foundation for improving teachers’ beliefs, competencies, and technology practices. Moreover, prior studies have shown that for technology professional development to be effective, extended or continuous professional development is needed. Additionally, access to technology, opportunities for teachers to actively engage, and time to address individual needs and collaboration with peers are needed to be effective.

Theme 3: Technology Professional Development Increases Teacher Confidence

The third central theme that emerged after the data collection was that technology professional development increases teacher confidence. During the interview, teachers were asked to share their confidence in integrating technology before completing the ETTP. The codes that helped develop this theme included: confidence (before), not so confident, fairly confident, challenge, and little assistance. A follow-up question was later asked about their confidence after completing the ETTP. The codes related to this theme were confidence (after), increased, learned new technology tools, eye-opening experience, confidence increased, and more confident. All these patterns led to the development of this theme.

Before completing the ETTP, the participants’ confidence levels varied concerning integrating technology in the classroom. When asked, “How confident were you in integrating technology before completing the program?” some teachers shared that they were not confident. In contrast, others shared that they were confident. I asked a follow-up question, “How confident were you in integrating technology after completing the program?” Some participants’ confidence levels remained the same after completing the ETTP.

Before the ETTP, T2 shared that she was pretty confident using technology in the classroom. She also considered herself a risk-taker. She is willing to try new things to improve her teaching and student learning. After completing the ETTP, T2 shared that her confidence increased because she is now part of the ETTP team. T3 shared that before completing the ETTP, it was her first year teaching. She was not confident integrating technology, but after the ETTP, her confidence grew. She managed to take what she learned and apply it to her teaching. T5 and T6 were competent in using and integrating technology in their classroom before the ETTP. For T5, the courses were more of a refresher but managed to learn new technology tools. T6, on the other hand, mentioned that her confidence grew a bit more after completing the ETTP because she was already teaching online before completing the ETTP. T7, T8, T9, and T10 shared that they were fairly confident using technology before the ETTP. After the ETTP, they all felt that their confidence level increased to some degree. T12 and T13 both shared that they were not confident with technology entering the ETTP. However, after completing the ETTP, they both felt comfortable using technology in the classroom.

Technology professional development/training has an impact on teachers’ confidence in integrating technology in the classroom. Professional development can assist teachers in promoting 21st-century learning in the classroom through a technological, pedagogical, and content framework. The ETTP provides a rigorous framework that focuses on technology and other instructional strategies that can improve teachers’ pedagogies and knowledge in the classroom. Professional development increases teachers’ confidence levels in creating lessons integrating technology that reflect 21st-century skills and increasing teachers’ confidence utilizing information and communications technology. Participants shared that technology training can positively influence teacher attitudes and experiences integrating technology in the classroom. Additionally, after completing the ETTP, my participants’ confidence and perceived ease of use increased. Flavell et al. discussed that technology training can increase teachers’ confidence and usability of digital tools in the classroom.

Previous studies justified the importance of teachers’ technology training and professional development; the studies claimed that technology professional development could increase teachers’ confidence, usability, and the frequency of integrating digital tools in the classroom to promote 21st-century skills. As technology evolves, it is crucial to keep teachers informed about best practices for integrating technology. Furthermore, up-to-date tools could increase student outcomes and prepare them for real-life. Continuous technology training and professional development will allow teachers to remain informed to serve their students better.
Theme 4: Teachers Learn New Tools

The fourth major theme that emerged after the data collection was technology teachers learn new tools. During the interview, teachers were asked to describe their experiences when they completed the ETTP. The codes that helped develop this theme included: learned new technology tools, advanced computer applications, relevant, useful, technology integration, useful and pragmatic, practice, and excited to learn and integrate. Additionally, teachers were asked if the courses offered were relevant to their line of work as a teacher and if the courses offered were relevant to their content area. The codes created were relevant, instructional strategies, Google apps, student engagement, and digital citizenship. Finally, teachers were asked about the benefits of completing the ETTP and was completing the ETTP beneficial to them as a teacher. The codes related to this question included: provided tools, exposure, comfortable, tech tools, enhanced content, stay abreast, awareness, teaches how to navigate and utilize technology and tools, and efficiency.

After completing the ETTP, teachers learn about new tools when technology specialists demonstrate new tools they might consider using in their classroom. The ETTP developed a framework to allow participants to participate in rigorous coursework. The ETTP offers five courses that allow the participants to gain new technological skills to enhance their practices in the classroom. Courses such as Google Apps for Education offer teachers the skills to foster 21st-century learning skills in the classroom. Teachers will also learn to work with the various Google apps, including Gmail, Docs, Sheets, Slides, Sites, and Blogger. Student Tech Products is another course offered by the ETTP designed to provide teachers with digital tools to engage students in the classroom. Classroom Instruction That Works (CITW) focuses on best instructional practices using technology. It allows teachers to explore various tools that they can implement in the classroom.

The ETTP has made teachers aware of how effective technology can be in the classroom. Additionally, the ETTP introduced different technology tools that can be integrated into the classroom. T2 shared that the ETTP has helped with "opening my eyes to the fact that there's stuff out there." T3 expressed that the ETTP did not only teach about applications and technology tools but introduced various strategies to implement in the classroom. T5 shared, "I just learned a bunch of stuff from that training that I incorporated in the classroom." Additionally, T5 mentioned that "It was more of a refresher on my part and also learning new things.”

T6 found the ETTP to be relevant to their job as a classroom teacher. T6 said, "when I took the EdTech Cohort, it just opened up a lot of resources that I can use that I found…relevant to my course, that could make learning fun and engaging." T9 also supported the previous teacher and expressed that the ETTP supplied her with more tools to integrate further within her content. T7 shared that he took away valuable things from the ETTP that he could incorporate into his classroom, eventually becoming a part of his teaching. T8 shared that it was an "eye-opening experience.” T8 learned different strategies and shortcuts from the ETTP.

Additionally, she shared that she did learn an assortment of digital tools, Prezi being one of them. T8 and T9 both encourage other teachers who have not completed the ETTP to sign up because it is an excellent opportunity to learn new things that can be helpful in the classroom. For T9, although some of the things that were taught were more of a refresher, she still learned new technology tools. T9 modeled the strategies her instructors used in the program and saw that they had profoundly impacted her teaching. T10 was already comfortable using mainstream technology tools. However, the ETTP provided him with additional technology resources and tools that he had never used before. T11 shared that she was more aware of the different tools out there. T11 grew to love using Adobe because of the ETTP and continues to use it today. T12 continued to integrate different strategies that she learned from the Digital Citizenship course. T12 continued using game-based learning to assess her students as well as other graphic design platforms that are free. Her experience with technology has changed after completing the ETTP. The integration of technology made her job as a teacher more efficient. T12 expressed that her students enjoyed it when technology was integrated into the lesson. Finally, T13 shared, “I'm still thankful that I learned some tools from the EdTech Program, and I use them in my classroom. So that's the positive side of it.”

VI. CONCLUSIONS

The problem is that district administrators implemented the ETTP to improve technology integration in the classroom as measured by the ELEOT. However, there was no follow-up to determine how the teachers perceived the district’s technology professional development program and the teachers’ experiences related to instructional technology after taking the district training. Through interviews, important information about the problem was unraveled. The participants shared that the ETTP had equipped them with tools; however, there is a need for content-specific and continuous professional development to integrate technology relevant to their content.

Through the data collection and analysis, many high school teachers expressed their appreciation of the ETTP for allowing them to learn new teaching strategies and technology tools to incorporate in their classrooms. Although they can add more tools to their toolbox of technology tools, the findings revealed a dearth of content-specific technology tools and professional development.
Western Pacific Teachers’ Perceptions of Implementing Technology in the Classroom

REFERENCES


https://doi.org/10.1111/bjet.12700


https://doi.org/10.1080/14623943.2019.1569508


https://doi.org/10.28945/3724


https://doi.org/10.14742/ajet.3518


https://doi.org/10.17263/jlls.759264


https://doi.org/10.1080/00940771.2019.1603801


https://doi.org/10.1007/s11251-019-09486-1


https://doi.org/10.1111/bjet.12490


https://doi.org/10.1002/bmb.21242


https://doi.org/10.1016/j.tate.2018.09.004

Western Pacific Teachers’ Perceptions of Implementing Technology in the Classroom


