VETERAN TEACHERS' RESISTANCE FACTORS TO TECHNOLOGY USAGE IN THE FACE OF CHANGE IN THE SECONDARY CLASSROOM IN NORTHWEST ALABAMA

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Abstract

Technology has inserted itself into everyday life. This includes the classroom and instructional practices; however, veteran teachers face unique circumstances with technology. Veteran teachers are looking for leadership in the face of current technological changes. Using a descriptive qualitative approach, we examined the current use of technology in veteran teachers' classrooms in rural Northwest Alabama. Forty veteran teachers answered an online survey about their perceptions of technology in daily instruction, and 12 were selected via purposeful sampling to complete an interview to expound on the survey responses. Findings revealed that these veteran teachers wanted more administrative support, copious yet practical professional development sessions, and removing as many barriers as possible.

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Introduction

In this article, we present findings from a qualitative study to explore the resistance factors that veteran teachers face when implementing technology into their instructional planning and practices. We surveyed and then conducted semi-structured interviews with 12 veteran teachers to determine what they perceived to be barriers to technology and planning in their classrooms. As a result of our findings, we present ideas and methods for veteran teachers to overcome the implementation barriers.

Purpose of the Study

Despite researchers' findings on technology implementation and teachers, there has been a lack of information about veteran teachers, especially those teaching in rural communities. Therefore, the purpose of this descriptive study was to describe resistances that prevent or delay veteran teachers in rural Alabama from integrating technology into their instructional design and planning processes. These resistances included potential physical or psychological barriers when implementing technological components to their pedagogical practices.

Research Question

The overall guiding qualitative question for this study was as follows:

What resistances do veteran teachers have to prevent appropriate and usable technology integration into the secondary content classroom?

Background to the Study

The use of technology has been a paradigm shift in education today and has been more than a passing trend. It has become a mainstay in today's ever-changing world. It has also been an essential function of today's educational umbrella. This specific need for classroom technology has made appropriate and proper technology implementation key to positive technological success, such as learning management systems and file-sharing programs.

Today's students have been identified as daily consumers and patrons of technology. They need to be treated as such by teachers prepared to complete the task of putting a quality lesson before the students. In recent years, many students could access various technological opportunities. In contrast, teachers may not be as up-to-date on the technological changes. Smith stated, "Today's students are early adopters of new technology, creating new uses for many technology products to meet their sophisticated needs. They serve as technology trendsetters for their peers, and increasingly for their parents and teachers" (2015, p. 349).

Kormos (2018) stated a disparity between students, novice teachers, and veteran teachers' use of technology, which can cause a separation of academic goals. This disparity was due to an age gap between younger students and older teachers. The students are digital natives who were "born or brought up during the age of digital technology and, therefore, familiar with computers and the internet from an early age" (Nikou et al., 2020, p. 2). Prensky coined the term digital native in 2001, and the moniker has stuck. The digital natives are considered more tech-savvy than their teachers; however, that should not hinder the classroom's technological movement or pedagogical practices (Gu et al., 2013).

Many of today's veteran teachers have been identified as digital immigrants, people born or brought up before the widespread use of digital technology. They must attempt to learn on the

go and apply them to their subject area (Nikou et al., 2020). This change was considered daunting for veteran teachers who may not be as familiar or willing to become familiar with the technological modality of teaching and student engagement. This paradigm shifted as digital immigrant teachers retired and the digital natives became the teacher, creating other research problems.

Kormos (2018) stated that the main difference in technology use is that teachers use it more for educational purposes, including educational videos and WebQuests, while students use technology to connect via social applications, such as Instagram, Twitter, and YouTube. However, Ertmer and Ottenbreit-Leftwich (2013) contradict Kormos's findings. With the changing of technology's techniques and purposes, it was important to merge these two thought paradigms to create more opportunities for appropriate usage with veteran teachers and students. Barriers should be removed to help with the paradigm change, and professional development must be provided to ensure proper teacher development.

Framework and Literature Review

This descriptive, qualitative study used the Technological Pedagogical Content Knowledge (TPACK) framework to guide and support this study. Within this context, three key forms of knowledge were recognized: content, pedagogical, and technological (Mishra & Koehler, 2006). The framework proposal has shown a model that may allow teachers to reflect on how their content, pedagogical, and technological knowledge domains intersect to efficiently teach and involve students with technology for appropriate academic engagement.

While other frameworks guide educators and their understanding of technology, the researcher found the TPACK to be the most credible, with citations and evidence in over 600 journals and professional development sessions (Koehler et al., 2013). The TPACK framework in Figure 1 visually illustrates the framework, including its components and overlapping concepts.

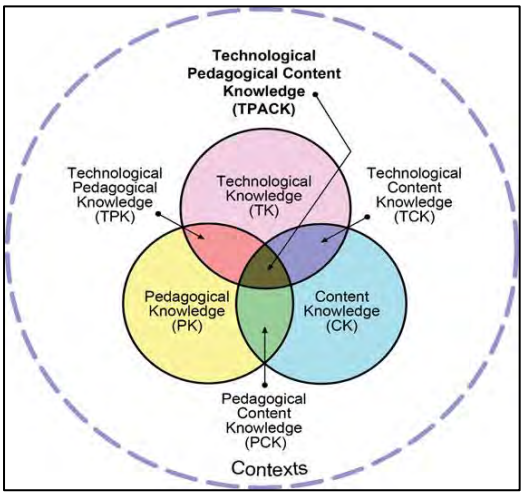
The TPACK framework contains three core concepts, which can be combined into three additional concepts by overlapping theories, culminating into one central summative concept. The TPACK framework was designed to incorporate content, pedagogy, and technology into how teachers can produce lessons with the best student outcome. In simpler terms, the what can now equal the why and provide an enhanced classroom product.

Mishra and Koehler (2006) produced a seminal work based on Shulman's previous work with educational technology and teachers. This work was created after years of research among teachers, schools, and professional development sessions. Mishra and Koehler (2006) found that many researchers focused on what technology was, not how it was used in their work. Padmavathi (2017) also provided evidence of a shift in content transactions, meaning how students receive information may be contrary to how the teacher presents the material.

Mishra and Koehler (2006) worked and found that "understanding that teaching is a highly complex activity that draws on many kinds of knowledge and occurs in an ill-structured, dynamic environment" (p. 1020). From this research, they created a framework for what

Figure 1

TPACK MODEL



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teachers needed to know about content and curriculum and how to merge them into a working product. The seven components of their new framework included technology knowledge (TK), content knowledge (CK), pedagogical knowledge (PK), pedagogical content knowledge (PCK), technological content knowledge (TCK), technological pedagogical knowledge (TPK), and technological pedagogical content knowledge (TPACK).

The culmination of the seven components was one centrally based idea — TPACK. Technological, Pedagogical and Content Knowledge refers to the "knowledge required by the teacher to integrate technology in the respective content areas" (Padmavathi, 2017, p. 4). With an understanding of the interaction between the basic components of knowledge of content in the subject area and the knowledge of pedagogy, Padmavathi contends that teachers use appropriate technologies to deliver the content.

A thorough literature review on veteran teachers and resistance to technology factors revealed several emerging themes related to rural veteran teachers and technology integration. These themes were grouped into five broad categories: rural education, veteran teachers, technology implementation, barriers, and professional development.

Rural Education

The face of rural education has changed over the past several decades. The economy has changed its focus from an agrarian society to a technological society. Communication and transportation have shortened the distance from "the country to the city" (Connors et al., 2020, p. 156). Even with the economic shifts toward urbanization, the economic decline of rural America has taken a toll on the educational systems of rural areas (Tieken & Montgomery, 2021).

Approximately 50% of America's schools are rural, with 52 out of 67 (77.6%) Alabama counties considered rural (Dulgerian, 2016). The study used the definition based on 50 or fewer people per square mile as well as the National Center for Education Statistics definition of rural/remote, which is census defined as more than 25 miles from an urban area and 10 miles

away from any urban cluster (Levalley, 2018; United States Census Bureau, 2020). While rural does not necessarily mean poor, it was noteworthy to look at the poverty levels of schools deemed rural because up to 25% of students in rural schools are considered impoverished compared to 20% of urban children (Dulgerian, 2016; Levalley, 2018).

Dulgerian (2016) stated that six major issues facing rural schools are "administrative constraints due to lack of staff, disproportionate funding formulas, adequate teacher retention, teacher certification quality, low student enrollment, and lack of access to technology" (p. 114).

Veteran Teachers

There has been much research about novice teachers and the issues they face. However, research about the veteran teacher must often be more understood and noticed. Veteran teachers have gained vast knowledge and experience that can only be achieved by daily working and experiencing daily practices and situations (Beck et al., 2020; Lowe et al., 2019).

While Snyder (2017) and Beck (2020) agreed that length of time is a critical issue in defining a veteran teacher, there has been much debate about what other factors define a veteran teacher. Carrillo and Flores (2018) stated that veteran teachers could also be defined by a commitment to professional development to the degree of knowledge, the ability to reflect upon a career, and use that experience to enhance their profession. Research from Beck et al. (2020) supported Carrillo and Flores's research.

According to the National Center for Education Statistics (2020), only 23% of teachers today have over twenty years of experience. This is a 9% decrease from 20 years ago. While the purpose of this dissertation is not to look at the declining numbers of veteran teachers, it is essential to note that the research discussed in this literature has contributed to the attrition rate of veteran teachers. In a qualitative study by Snyder (2017) and Orlando (2014), each researcher found that the new "technology fatigue" caused many veteran teachers to become overwhelmed due to the number of implementations and lack of professional development to help smooth the transition.

Implementation of Technology

Technology integration is "the effective implementation of educational technology to accomplish intended learning outcomes" (Davies & West, 2014, p. 841). Having technology is not near enough to warrant a successful implementation plan; the user must have a defined use and purpose. In a study by Hartman et al. (2019), the authors stated that the number of technology devices has increased by 363% in the past seven years; however, the methods used have not modernized. This study, along with Harrell and Bynum (2018), showed that more is not necessarily better and that the purpose should be visible. The traditional idea of school is no longer applicable, which means pedagogical and technical skills must be continually updated. Schools now have a social responsibility to prepare students to enter the workforce or attend college (Harrell & Bynum, 2018).

The technology integration national plans of 2004, 2010, 2016, and 2017 (Office of Educational Technology, 2017) required school districts to develop a plan of action to enhance teachers' classrooms to benefit student use. Due to tremendous growth and academic focus, technology created a society demanding adequate ability in this area (Davies & West, 2014; Ghavifekr & Rosdy, 2015; Harrell & Bynum, 2018). A meta-analysis provided by Delgado et al. (2015) offers several methods of integration. The research group looked at literature from 1986-

2014, focusing on technology. These methods favor all stakeholders and can be scaffolded not to overwhelm any one party. The first method was to provide research-based instructional strategies for the involved stakeholders. The second was allowing students to bring their own devices (BYOD). The BYOD method provided a functional comfort level for the teachers and students. Flipped classrooms also provide an implementation that can give the teachers autonomy with the new techniques (Davies & West, 2014).

Barriers

Technology was and has always been a part of society. There was and is no way around how much of an impact technology has on daily life. Today's students are deemed digital natives, people born after the analog age and during the digital age (Coklar, 2021). Due to the nature of the student's upbringing, it is now the school's responsibility to "integrate technology into teaching and learning while preparing the students for 21st-century skills and jobs" (Harrell & Bynum, 2018, p. 12).

Studies from Borup et al. (2019), Tondeur et al. (2017), and Turley and Graham (2019) stated that while technology usage is expanding in many school systems, many barriers still exist and prohibit total acceptance and immersion. Durff and Carter (2019) stated that up to 40% of educators have failed to implement technological means into their classrooms yet can put a positive spin on technology in the classroom. The research also stated that while 40% have failed to implement, they wanted to use the concept of many barriers as a justification that prevents successful outcomes. Obstacles were evident at all societal levels and have always been present in some form or fashion. Barriers must be addressed in education. Proper and equitable education must be provided to all students in all settings. However, to address the variety of educational technology barriers, administrators and teachers need to have the barriers identified, how the barriers developed, and what can be done to overcome them.

Professional Development

With the surge of online teaching, teachers have often felt nervous and unprepared for the newest teaching challenge (Baran & Correia, 2014). Many are prepared to teach face-to-face because their teacher preparation programs provide skills. However, many face-to-face abilities have not necessarily translated into the needed skills to offer online instruction (Reeves & Pedulla, 2013). Online instruction and technology implementation have had different, yet needed; skill sets to be attainable, equitable, and prosperous. This skill set included online pedagogical skills, online psychology theories, and content knowledge (Roy & Boboc, 2016). The key to this challenge was implementing ongoing and relevant professional development. To help digital immigrants overcome as many barriers as possible, professional development sessions should be relevant and purposeful to the new changes (Baran & Correia, 2014; Reeves & Pedulla, 2013; Roy & Boboc, 2016).

Teacher professional development has conventionally been the key to the constant growth of teachers and their classroom practices, and some level of accountability keeps them current on current pedagogical issues (White, 2020). Professional development was defined as "a variety of educational experiences related to an individual's work and is designed to improve practice and outcomes" (Patton et al., 2015, p. 3). District and building-level administrators must focus on cultivating robust and usable teacher experiences via professional development sessions (Sterrett & Richardson, 2020). By providing functional professional development, administrators

have aligned education and leadership practices with research and authentic best practices (Merchie et al., 2018; Patton et al., 2015; Schmidt-Crawford et al., 2020).

While teachers are ultimately responsible for their professional development, building-level administrators should provide ample and relevant professional development sessions. As global society changes, teachers must maintain a continual growth pattern to enhance the students' learning experiences (Gore & Rosser, 2020; Hemmeter et al., 2015; Merchie et al., 2018; Roy & Boboc, 2016; Tuli, 2017; Whitworth & Chiu, 2015).

Methods

This descriptive qualitative study examined the resistance factors that veteran teachers in rural northwest Alabama faced when integrating technology into their instructional design and planning process.

Sample Selection

The researchers aimed to identify a sample of current educational practitioners with over twenty years of experience. The setting of this study was in secondary schools in rural northwest Alabama. According to the Economic Research Service of the United States Department of Agriculture (2019), rural has a variety of governmental definitions. However, the definition used for this study will be based on square mileage. As of 2019, the site counties had a population of 39, 42, and 49 people per square mile, qualifying it as a rural area (United States Census Bureau, 2020).

The researchers emailed principals a link for a Qualtrics survey applicable to all subject area teachers. In the beginning, A filtering question asked if the potential participant has 20 or more years of experience and is over 40. If so, the participant could continue the survey. If the participant did not meet study parameters, no other items were asked as the individual did not meet study eligibility.

Participants were asked questions about their usage of technology in their daily content area and their perceived ability to use it. They were asked specific probes based on the TPACK questions to ensure participants were given a fair and equitable interview. Participants were also asked about being a veteran teacher, what technology implementation means to them, barriers to technology implementation, and professional development for veteran teachers about technology integration.

The research asked expounding probes based on the TPACK framework and asked open-ended questions to draw out participants' responses in greater detail through interview protocol. At the beginning of each interview, the researchers took a few minutes to brief the interview participants and explain the audio recording system. After the interview, participants were allowed to make additional comments and clarifications if needed.

Data Analysis

The authors drew from professionally transcribed interviews, as well as anecdotal notes. The participants could see their respective transcripts to ensure the interviews were sound (Creswell, 2015). Several rounds of coding took place, including open coding and descriptive coding. Once the coding was finished and coding became apparent, the researchers reread the transcripts to ensure saturation of the codes.

The analysis sought to summarize and explain the potentially vast amount of data into manageable chunks of understandable information (Creswell & Creswell, 2015). Qualitative (coding and thematic) analysis was used. Participants were analyzed. Creswell and Creswell (2015) advised starting qualitative data analysis with a basic exploratory analysis to understand the data and generate codes. The data analysis approach was designed to get the maximum data from each participant. To understand the dialogues and record early thoughts, the researcher immersed and "active" in the transcripts (Braun & Clarke, 2006). Preliminary codes were the second step (Braun & Clarke, 2006). Coding "identifies features of the data that pertain to your study questions" (Braun & Clarke, 2013, p. 206). Participant data was better analyzed with this coding. After explanatory analysis, the researchers classified codes by similarities and differences or themes. This transcript "refocus" (Braun & Clarke, 2006, p. 89). After grouping the codes, the researcher reviewed the data until no new themes or details of existing themes emerged. The themes described the primary occurrence of participants' descriptions (Mills & Gay, 2019). After an initial explanatory analysis, the researchers classified codes by similarities and differences or themes. "Refocusing" the transcripts (Braun & Clarke, 2006, p. 89). After grouping the codes, the researcher evaluated the data to discover all relevant topics until saturation, when no new themes or details emerged. To describe the primary occurrence of participants' descriptions, themes were established (Mills & Gay, 2019). Fourth, check the topics for coding. Themes helped the researcher identify trends and outliers. So, the researcher examined level one and two reviews. Level one examined themes individually; level two examined themes across the transcript (Braun & Clarke, 2006). Thematic maps from step four were used to define and name topics in step five. Braun and Clarke (2006) explained how to match data to themes. Step five clarified the concepts. This enabled data analysis and visualization. Triangulation compared segment results. Interview and outlier responses were compared to better understand the research questions. To verify the project, open-ended interview responses were constantly compared. The technique, as a whole, revealed how veteran teachers employ technology in their daily lessons.

Table 1

Data Analysis Preliminary Codes (N = 12)

Initial codes formed during Step 2 of the thematic analysis (alphabetic list)	*n* of participants contributing	*n* of transcript excerpts included
Analog	12	17
Change	12	27
Chromebooks	10	6
Confidence with content	12	20
Daily usage	12	6
Frustration	12	28
Google Classroom	8	8
Lack of access	6	18
Lack of technology knowledge	12	24
Low socioeconomic status (SES)	12	18
Open minded	10	15
Schoology/PowerSchool	12	19
Willingness to change	10	23

Results

This section begins with the setting of the study and a description of the 12 participants and what defines them as veteran teachers. Self-identified demographic information is also included in the table. Next, the major themes and the coding processes used were presented. The last section discusses the presentation of findings and themes.

Participants

A survey was sent out to the four-county area. From this survey, participants self-identified that they met the parameters of the study. If a valid email was provided, that was considered consent to make contact about the potential participation in the semi-structured interview. Once all surveys were in, the researchers selected the first 12 participants for the interview process. Semi-structured interviews were conducted via in-person and the videoconference platform of Zoom. While this is less than ideal, this was the only way to achieve interview protocol and saturation in the current global health pandemic. Each interview lasted between 30 and 45 minutes.

For this research, a veteran teacher was defined as a teacher with over 20 years of experience and over 40 years old. In the table below, the researchers present data regarding the 12 participants who met Lowe's definition of a veteran teacher. As a form of protecting the identity of each participant, P# was used to ensure anonymity. The participants self-identified with the demographic data. The ages of the participants ranged from 40-64, with teaching experience ranging from 20-34 years. 58% of the participants self-identified as male. 92% identified as white. The school size varied for each teacher as well as the content area.

The survey was the TPACK survey and had qualifying questions to determine the sample population that was required to complete this study. The survey instrument was divided into general technology knowledge, content knowledge, pedagogical knowledge, pedagogical content knowledge, technological content knowledge, technological pedagogical knowledge, and technological pedagogical content knowledge. The participants used a Likert-type scale from strongly agree to strongly.

Table 2

Participants' Demographic and Experience Information

Participant Code	Age Group	Teaching Experience	Race/Ethnicity	Gender
P1	60-64	30-34	White	Male
P2	50-54	25-29	White	Male
P3	40-44	20-24	White	Female
P4	50-54	25-29	White	Female
P5	55-59	30-34	Black	Male
P6	45-49	20-24	White	Male
P7	40-44	20-24	White	Male
P8	45-49	25-29	White	Female
P9	50-54	30-34	White	Female
P10	60-64	35-39	White	Male
P11	40-44	20-24	White	Male
P12	55-59	30-34	White	Female

Note. Each participant self-identified in each of the listed categories.

Survey Results

The 33-question Likert survey was electronically administered. Once the time frame for survey submissions was closed, the researcher began to look at the results. 100% of the participants stated that they each needed more professional development with new technology, while only 67% said they could choose technologies that enhanced the content for a lesson. 25% of the participants revealed they could help colleagues with technology implementation, but 100% said they were comfortable with each content area.

As noted in the themes, all the participants finished an undergraduate degree in the late 1900s to early 2000s. Teacher preparation programs looked much different then as they currently do. All the participants made mention of their skeptical attitudes and the needed change to implement any technology into their content.

Open Coding and Emergent Themes

After the interviews were transcribed and checked for accuracy, the initial coding process began using a line-by-line process, finding over 500 codes in the transcripts. Similar codes were considered one code for the sake of brevity in the process.

All 12 participants began the interview by stating that instructional planning technology had "thrown them for a curve." When pressed about this thought, many stated that their teacher preparation programs did not have any or many technology-based instructional planning classes. This is due to the time frame in which all finished—all 12 finished their undergraduate work at 21-23, which would put them graduating in the late 1900s to early 2000s.

The presentation of the research findings was organized by theme. As discussed in the previous section, the theme name was delineated by segments related to the research. The research question was how veteran teachers describe their instructional practices using technology. The three themes identified during the data analysis process were: (Theme 1) veteran teacher attitudes play a large role in technology usage in daily practices, (Theme 2) barriers play a large role in teacher attitudes in daily technological use, and (Theme 3) professional development is needed to ensure best practices of technology usage in the classroom.

Theme 1--Attitude

All 12 participants reported that their attitude played a large role in the daily use of technology. The participants acknowledged that change was a key part of their negative attitude, but each also said they were willing to learn to make their content areas more enriching and engaging. P3 said, "I feel like my content area is great, but the technology is not, which is frustrating." All other 11 participants stated something very similar. Participant 4 went as far as saying, "Technology outgrew me. I could do it right out of college, but now not so much." That statement reflected a few participants, including P3, P7, P8, and P12. The other participants never were prepped as much for technology use during their limited teacher prep program.

Another factor the participants associated with their attitude was the willingness to change and learn. All 12 participants stated that if shown, all would be willing to incorporate more technological usage in their content and pedagogical practices. The common word that kept being revealed was willing. All stated that they were openly willing, without administrative pressure, to change their way of instruction for the benefit of their students. P2 said, "As I get older, I see a need for technology, but I understand why some teachers don't use it." P6 said,

"Technology still throws a curve at me, but I am willing to try and hit that curve to help my students." P6 also expressed disdain for barriers not controllable by teachers by stating, "If I'm going to use it, it needs to work." P9 contradicted this statement: "I'll keep trying to make it work and call for help if needed. I won't just not use it."

P11 refers to being able to figure issues out without any technical assistance. "If you need something done, it is usually up to you to figure it out or wait a while." This is congruent with the second career participants, P5 and P12. However, the other 10 participants, traditionally educated teachers, disagreed with those sentiments and stated that technical assistance was needed. P3 replied, "It's difficult to understand...I always go back to the Stone Age of paper and pencil notes." Many respondents felt that paper and pencil were a safe alternative to the inability to fix technical issues.

Theme 2—Barriers

Studies from Borup et al. (2019), Tondeur et al. (2017), and Turley and Graham (2019) stated that while technology usage is expanding in many school systems, many barriers still exist and prohibit total acceptance and immersion. All 12 participants were very vocal about the barriers that impede their instructional use and used frustration or some variance to describe the barriers that often impeded them. No participant provided any data that would dispute this theme. Participants stated that barriers caused them to question their ability to provide adequate and engaging lessons to their students. P7 stated, "When you go to work to make an awesome lesson and the Internet or whatever is down, it is very disheartening, especially if you've been pumping the lesson up for a few days."

P7 expressed exasperation and frustration with barriers because of the hindrance they caused with planning and implementation. "How am I supposed to be a good teacher, master classroom manager, and tech-savvy person if things I need don't work? It's so frustrating to have something not work! We might as well not have it if it doesn't work."

Some barriers are considered instructional flaws that neither the teacher nor the district can control. These are barriers that are often with the hardware or software programs. Barriers like this often need a specialist on a programming level to solve. P2 stated that a barrier to his instruction was the online math program his district had purchased:

> Big Idea is a math setup, and we didn't have access to it. So, for two weeks math teachers were spinning their wheels. We had to adapt every day because we had planned to do a lesson through the Big Ideas program, but we couldn't because it wasn't accessible.

P2 referred to this as a power struggle over who knew what was best for the students—the designers or the teachers. P2 remained committed to the Big Ideas math program because it was what the district-mandated and aligned with the Alabama state curriculum, which has been revamped to become more rigorous. P4 does not share the same power struggle because the online math program and implementation in the respective district has been a smoother transition with fewer barriers.

Theme 3—Professional Development

All 12 participants specified that more technological professional development was needed. The participants believe providing adequate and relevant professional development would change attitudes and barriers. The participants also commented on the quality of the needed professional development. P1 stated, "Professional development is needed, and I want to

learn, but when it is just a sit and get, without any interaction, I get lost." A similar statement was made by P9, who stated that "I have to have something to do in the sessions we go to. I get bored too easily if it is just a speaker droning on and on." P10 indicated, "While I know I need professional development, I don't want professional development because so many times it is catered to the younger crowd of teachers, and I feel left out." Evidence from the literature supported the participants' need for adequate professional development.

Discussion

The purpose of the descriptive study was to research and listen to veteran teachers describe what they felt were barriers to their technology use within their instructional planning. The outcomes of this study presented some potential answers to some pressing issues that veteran teachers are currently facing. The research showed that many veteran teachers could identify the technological issues facing instructional planning but needed to know how to solve them. From the interviews, all 12 participants said they are willing to learn how to overcome the barriers and learn new ways to enhance their students' educational experience.

Limitations and Delimitations

Due to this study's descriptive nature, the researchers was bound by the survey and interviews collected from the participants, field notes, and reflexive journals. The sample size presented an issue due to the narrow focus of the study. Also, with the global pandemic of COVID-19, many teachers were under extreme amounts of additional stress. The interviews could be done over the phone or via Zoom or Google Meets. Braun and Clarke (2013) called these types of interviews virtual and regarded them as a poor substitute for face-to-face interview protocol. Due to these potential constraints, it was possible that the answers given in the interviews may not necessarily be the ones provided under normal circumstances. This potential bias was noted in all interviews and the researchers' reflexive journals. This study was delimited to a rural four-county area in northwest Alabama. The researchers delimited participants who are veteran teachers with twenty or more years of experience and over 40 years of age. This delimitation was set to gauge teachers' perceptions of technology use and its impact on daily instructional practices. The researchers recognized that the survey and interview(s) would be conducted freely and may not express other content areas or subject area colleagues' descriptions.

Implications and Recommendations

While finding implications for future research, it is equally important to have applicable and practical recommendations for future practice to encourage the reader to think and expand. The three recommendations for future practice would be more administrative support, adequate and relevant professional development, and removing as many barriers as possible.

Administrative support is the key to teacher success. This could include recognizing the veteran teacher for all the value brought to the campus or allowing them to take a leadership role to help novice teachers if wanted. Administrators should also strive for unity and a peaceful workplace. Providing these things allows veteran teachers to see still the value and worth of their participation in the school climate and culture. Participant 4 stated, "I want to know that my years of experience are valuable to my students and school."

Second, the researchers recommend that administrators listen and provide adequate and relevant professional development. By meeting the professional needs of teachers, the

administrator is attempting to lessen the stress teachers face. These professional needs include monitoring classes for an extra break, allowing dress-down days, providing professional development on the appropriate level, and providing a safe place to express concerns (Bailey et al., 2013; Beck et al., 2020; Carillo & Flores, 2018; & Korthagen, 2017). Some veteran teachers have seen many changes over the course of a lengthy career, and it can be very disheartening to feel alone and unsupported. Having an administrator who can listen and provide professional needs, it eased the burden of "change fatigue" and "technology fatigue." Professional development should be provided in frequent increments and allow cross-curricular/grade-level planning to allow all teachers to collaborate and create a solid flow of information and technology. This could also include having veteran voices in the adoption practices of curriculum and technology and the hiring practices that impact their content area.

Thirdly, the removal of as many barriers as possible to ensure veteran teacher success. While the removal of all barriers is next to impossible, it is possible for veteran teachers to receive support by having many barriers removed. Having a balance of what can be done at the building level and what cannot be done at the building level can provide some relief and comfort, knowing that veteran teachers' voices are heard and valued. Valuing their voices and recognizing that some problems can be fixed as needed and not put aside ensures communication and trust between all stakeholders. This ensures veteran voices are heard and valued at the site and classroom.

Summary

The discussion and conclusions confirm the research study. As expressed by various researchers' veteran teachers need a lot of support, such as administrative support, instructional coaching, the removal of barriers, and professional development. Findings in this study can be extended among the previous literature by suggesting that veteran teachers should be given special consideration when new software and hardware programs are implemented into a district. Future research was recommended to measure the transferability of these findings to other occupational settings. Future quantitative research is recommended to confirm or disprove the generalizability of the findings. In making practical recommendations, it is acknowledged that not all methods will be fulfilling for all veteran teachers. However, several recommendations were made for increasing veteran teacher technology usage, including administrative support, professional development, and removing barriers. An important finding of this study was that all 12 participants stated they were all willing to change and put in the work to make all possible efforts to improve themselves for their students.

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