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Teacher Perceptions On Digital Personal Learning Networks For Professional Development

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Teacher Perceptions On Digital Personal Learning Networks For Professional Development

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Leadership Education Department: Leadership Education

In Partial Fulfillment of the Masters of Science Degree - Master's Capstone

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Chapter 1: Introduction

Technology has altered how we live, communicate and learn over the past twenty years (Siemens, 2013). Due to this reorganization, technology is shaping the way education occurs. Education is moving from an approach that is formal to a more informal approach. Informal learning enhances the learning experience significantly for the individual. Informal learning is replacing formal education as a means of gaining knowledge. The ways in which an individual is learning can occur in a variety of ways. Learning is occurring through groups of practice, personal networks, and the way in which work-related tasks are completed (Siemens, 2013).

The combination of informal learning as well as technology has created an outlet for teachers to use when it pertains to professional development: Personal Learning Networks (PLNs). PLN's predominantly occur online through a variety of programs and social networks where educators share resources, provide support, introduce and discuss ideas, and applaud learning. Educators who participate in these networks have seen them become more than just an online space, but more of a professional family. This professional family provides educators a commonwealth of knowledge and support (Hewson, 2005).

Digital PLN's are becoming more abundant as technology advances. Teachers are slowly making the transition from traditional methods of networking to digital PLN's. The opportunities provided by digital PLNs for connection through the web now brings the assumption in which school districts will start seeing the power they hold. In order to support this assumption, we now have two billion potential teachers who access the Internet frequently. When we have many educators who could be connected to the internet, imagine all of the knowledge and ideas that could be shared through connecting with one another (Richardson, 2011). The variety of professional development opportunities available to teachers is expanding. Teachers need to use

the free resources available, the Internet, in order to obtain the amount of knowledge accessible to them thus improving their own teaching practice.

Problem Statement

Traditionally, schools have provided teachers with professional development opportunities to enhance a teacher's professional growth. However, this model of professional development is a one-size fit all, typically offered as a one-day course with little to no follow through. Educators are known to enter the field because of their love of learning and their motivation to become life-long learners. Learning opportunities for professional growth have been described as one-size fits all, which can deter the motivation of educators and their willingness to grow (Bosch, 2015). Little is known about how teachers perceive the use of digital PLN's for their own professional development.

Problem Background

Before the technology age, networking was accomplished in person or over the phone. The ways in which people connect, communicate and exchange information is called networking (Rainie & Wellman, 2014). People would connect with one another at the workplace or attend professional development conferences. It can be overwhelming for educators when they are presented with new opportunities to network, especially if it has to do with technology. It is difficult for some educators to expand beyond conferences, telephone calls, and email as a means to connect (Casas, Whittaker, Zoul, 2015). Educators who are still networking with the traditional means are lacking the wide array of information that is currently being shared by other educators around the world. Educators who network using web-based technologies are gaining information from educators across the globe without even having to travel. These educators are known as connected educators. Connected educators are continuously trying to get

better at what they do by personalizing their learning and tending to their own needs as well as the needs of their students. (Casas, Whittaker, Zoul, 2015, 17) Creating the autonomy and independence of PLN's within teacher practice will only further professional development thus improving teacher practice.

Purpose of the Study

The purpose of this study is to explore digital networking practices for teacher professional development purposes. This study will specifically seek to explore teacher's perspectives in Southeast Minnesota's on the use of a digital personal learning network as a professional development practice versus traditional professional development practices.

Research Questions

The following research questions guide this study:

RQ1. How do grade 6-12 school teachers personalize their professional development using digital tools?

RQ2. What are specific actions grade 6-12 school teachers take in order to access relevant professional development?

RQ3. How do grade 6-12 school teachers connect with other educators to create a network of professionals to further their professional development practices?

Definition of Terms

The following definitions are provided to confirm consistency and understanding of these terms throughout the study.

6-12 Teacher: an individual that instructs grade levels 6th through 12th grade in a secondary school setting.

Professional development: a wide variety of specialized training, formal education, or advanced professional learning intended to help administrators, teachers, and other educators improve their professional knowledge, competence, skill, and effectiveness (Abbott, 2014).

Personal learning network (PLN): a group of people and sometimes organizations a person connects with in order to learn from their ideas, questions, reflections and references. It is not limited to online interactions, however, most are because of the want to hear from others worldwide. It's personal because you choose who is a part of that group, and these people are connected to others thus creating a network. Each person chooses what they want to learn which influences who a person follows and connects with online (Lalande, 2012).

Personal Learning Environment: is a collection of resources created independently by building and connecting content sources from the Web, including creating content through blogs, podcasts, Slideshares, etc. (Morrison, 2013).

Networking: the ways in which people connect, communicate and exchange information (Rainie & Wellman, 2014, 8).

Technology: refers to digital electronic technology in the form of computers, iPads and iPhones, wireless communication, and the applications that can be downloaded or purchased to enhance these devices

Procedures

This study will use a mixed methods research design to examine teacher perspectives surrounding their professional development practices. This study will seek to explore teacher perspectives surrounding digital personal learning networks (DPL) as a means of professional development practice. The method the researcher used for this inquiry is phenomenological. This phenomenological inquiry's focus is to capture the experiences of eight teachers who have

experienced or are currently experiencing the DPL phenomenon. Phenomenological research has strong philosophical underpinning and typically involves conducting interviews (Creswell, 2014). Qualitative research is a means of “identifying a culture-sharing group and studying how it develops shared patterns of behavior over time” (Creswell, 2014, p. 25). The process of research will include data collection through interviews in the teacher’s setting and the researcher making interpretations of the meaning of the data. In addition, the process of research will include a second form of data collection through a survey generated by the researcher.

Significance of the Study

This study may be significant to a number of stakeholders. Specifically, the outcomes of this investigation may benefit school district leaders, school principals, college preparatory programs for teachers, and the school district in this study. By exploring teachers’ perspectives on the use of digital personal learning networks for professional development the study may provide essential reforms for how professional development is accessed by and administered for educators. This study may be of benefit to school districts in assisting and encouraging staff members to improve the practices of networking in order to develop new outlets for professional development.

Limitations of the Study

Limitations that may arise during the course of this study include the honesty of the responses of the participants, the experience the researcher possesses while analyzing the data, and the openness of the participants to share willingly in the study. The participants will be voluntary in nature and can withdraw from the study at any time. The number of participants who will finish the study might not truthfully represent the population. The researcher cannot control all of the information participants are willing to share pertaining to their experiences in

order to gain honest perspectives of the participants. During the time of the collection of data, participants are preparing for state-wide testing, therefore they may be unavailable or unwilling to participate due to extra classroom expectations. Participants may choose to not answer interview questions based upon feelings of fear of what might be revealed of what they do or not do as a professional. Participants will be made comfortable in order to share their perspectives by having the choice of a convenient interview time as well as to confirm their identity will be protected in order to address this limitation.

Delimitations of the Study

This study is delimited to one school district in Southeast Minnesota. Participation in this inquiry was delimited to 6-12 teachers who have at least one year of teaching experience. The participants within the study are teachers currently in the classroom, not college preparatory students or recent graduates not in the field. Including teachers with several years of classroom experience was seen as a way to ensure the participants had had exposure to multiple professional development opportunities. The data used in this study were collected from participant interviews and surveys.

Assumptions

The assumption of this research, is teachers within the Boustone School District have above average access to up-to-date digital technology having had pertinent training in its use and application to instruction. This particular school district has a one-to-one initiative for technology. This one-to-one initiative has provided all students grade six through twelve with an iPad for school use. Teachers at all grade levels receive the same iPad plus a laptop computer. Also, there are classrooms that contain a SMART board, a digital projector, and a document camera, etc.

Chapter Summary

There are five chapters that will comprise this study. The first chapter has provided the background of the inquiry. The research problem the study will pursue is set, the reasons for selecting the problem were illustrated, and the research questions that seek to address the problem composed. Chapter one also expresses the significance of the study to different stakeholders and outlines the entire process this inquiry would like to place into action. The second chapter, the literature review, will identify, discuss, and incorporate pertinent studies to the current research. These studies will assist in guiding the development of the methodology of the inquiry and will contribute in determining gaps in the literature addressed by current research. The literature review includes the existing awareness of the subject discussed in chapter one and will provide its contributions to the proposed inquiry. The third chapter is the methodology, in which the choice of research method is described as well as the explanation behind choosing the method. Chapter three will also explain the steps the researcher took in selecting participants, gathering and analyzing data. The methodology in chapter three will also provide how the research will be managed, set the delimitations, identify the limitations of the study, and addresses ethical considerations. Chapter four discusses the results of the data collected in addition to the analysis. Lastly, chapter five will review all results of the study, which will include the explanation of the findings, relationships to the theoretical framework and literature, suggestions for practice, recommendations for future research, challenges of the study and the conclusions.

Chapter 2: Literature Review

This literature review identifies the themes, conclusions, and connections surrounding current research on the study of teacher perspective's on a digital personal learning network impacting their professional development. A variety of sources will be reviewed in order to develop the themes surrounding this topic. The sources that will be presented in this literature review include books, academic journals, and previous studies. This literature review will be organized into three sections: section one will provide a historical perspective on educator professional development; section two will examine adult learning theory or andragogy; section three will provide an explanation of Connectivism.

Historical Perspective on Educator Professional Development

Educator professional development has had several different intentions over the years. The early 1900's brought about schooling for those individuals interested in teaching; these candidates would now attend college in order to prepare for a career in the teaching field. Women who wanted to become a teacher attended college courses in a specific sequence. Once the sequence was complete, they were sent into the workforce. Once in the classroom the content of a teacher's instruction was organized by a curriculum package. Instructions on how to use the curriculum packages came from the accompanying teachers' manuals. If these early classroom teachers wanted to acquire any other knowledge above and beyond the curriculum packages they were on their own (Darling-Hammond, 2006). Therefore, formal professional development of teachers was not practiced by schools in the early 1900's.

Professional development for educators has acquired various names since the 1930's. In the early 1930's professional development was known as in-service education. The purpose of in-service was to provide the teachers within the common schools additional education since

they were thought to be poorly educated, superficially trained, and immature. Therefore, teachers were to attend these educational institutes to correct their deficiencies (Corey, 1957). In the late 1930's in-service education began to evolve by including workshops as a means to have teachers work on their instructional issues with each other. Examples of instructional issues included classroom management and how to present a piece of curriculum, etc. The belief was teachers would work cooperatively to learn from one another so the issues would dissolve (Corey, 1957). As time went on the belief in in-service education for teachers only grew stronger. Corey summarized continuous in-service education as the need to keep educators aware of the new knowledge and to embrace their creativity. (13)

In the late 1960's, Rubin (1969) conducted a study surrounding in-service education through training teachers in one specific format. Rubin was looking to maintain a balance for in-service education in order to meet all needs of individual teachers. Training must incorporate teacher knowledge of subject areas, knowledge of teaching methods, and knowledge of the student's needs in order to be meaningful to an educator's mind (p. 11). Rubin found when teacher's understood the objectives of the in-service education and these objectives were not just drawn from the administration, but from classroom needs, they were more likely to be fully engaged (p. 13). Overall, Rubin's study proved teachers, like students, learn at different rates, through different experiences, and in different ways. The way to reach an educator through in-service education is to find ways to personalize the training and meet the needs of each educator. Educators' needs can be different depending on what they are currently looking to develop (p. 16).

Professional development moves further still when in the mid-1990's a new concept of Professional Development Schools was started. Professional Development Schools were formed

as a collaborative effort between universities and school districts to bring educators entering the field a learning experience through mentorship. The idea behind the Professional Development Schools was to establish a culture where student teacher, mentor teacher, and university faculty would be co-equal and their knowledge mutually constructed (Stanulis, 1995). This model of schooling's ideal purpose was to foster a common culture where teachers share their knowledge amongst each other in order to grow from one another instead of being isolated (p. 332). The role of the mentor teacher was to help guide the student teacher through the everyday operations of leading a classroom. The mentor teacher therefore not only learns with the student teacher but also has opportunities for further growth through the university faculty member (p. 333). Consequently, the whole idea of a Professional Development School was everyone: teachers, administrators, student teachers, and university faculty was receiving an opportunity to grow throughout the day.

Moving into the late 1990's, the US Department of Education administered the Schools and Staffing Survey (SASS) to teachers in order to gain awareness of professional development practices within schools. There was a push to test different forms of professional development in the mid-1990's in order to have teachers work collaboratively to understand teaching practice and the effects it has on student learning (Bugarin, Chen, Choy, 1999). The survey results suggested most school districts were still participating in the one-shot workshops which consisted of little to no follow-up on an initial one-day focused staff development presentation. In addition, the survey revealed most teachers felt the content being covered was not linked to any of their needs or subject matter (Bugarin, Chen, Choy, 1999). The Dwight D. Eisenhower Professional Development Program was used to provide support for schools to undertake projects in order to help teacher's instructional practices. The SASS survey uncovered

nationwide that of the teachers under the support of this program, only twenty-three percent of them experimented with different professional development practices other than workshops and conferences (Bugarin, Chen, Choy, 1999). Overall, the survey administered by the US Department of Education revealed teachers in the late 1990's were still under the same in-service forms of professional development with only a fraction of educators willing to try other ways of learning.

Most recently, professional development moved into the Web 2.0 phase in the 2000's with a movement towards Personal Learning Environments (PLEs). Personal Learning Environments are a means of storing connected content through web-based applications in order to gain knowledge from such content (Morrison, 2013). PLEs have been utilized at the college level to assist students taking learning into their own hands. Utilizing the PLE the content that is being collected for learning purposes is being organized to personalize the learning experience for each student (Martindale, 2009). As college students graduate and enter the workforce, they are taking the concept of the PLE and using it as a means to continue their learning. PLEs are slowly moving into the phase of Personal Learning Networks (PLNs), where the original concept of the PLE still exists, however, with outlets to social media there is room to share and discuss the resources within a person's PLE. This generates a network of like-minded individuals to discuss resources and share ideas across the globe (Martindale, 2009). This networking opportunity is a new outlet for educators to use in order to gain knowledge from other individuals for their own professional growth.

Overall, professional development for educators has been fairly consistent over the years. The findings from various studies have all determined professional development continues to cycle back to one-shot workshops and conferences. In addition, the findings also show educators

are looking for more meaning and personalization in their professional development. The relevance of what an educator learns determines how engaged they will be with the learning. As education moves into this technological age, educators will need more professional development options. Providing educators with the autonomy to self-direct their learning as well as connect with other professionals would address the issues of relevance and engagement surrounding professional development practices.

Andragogy Theory

According to Knowles (2015) and his Andragogy theory, the adult learner has five characteristics. The adult learner has an objective self-concept and is able to direct his or her own learning. This type of learner is able to use life experiences as a resource for their learning. In addition, the adult has an awareness of their learning needs and how changing social roles are impacted by those needs. Another characteristic of the adult learner is they are problem-centered and interested in immediately applying the knowledge they gain in order to see solutions. Lastly, the adult learner is characterized by their motivation to learn by an internal force rather than external factors. (Pappas, 2013) These characteristics prove to be of utmost importance when considering how to best educate adults.

Characteristics or traits of adult learners help in determining how most adults learn best. The first characteristic is based upon the notion of self-concept. Each adult has a self-concept about themselves and is driven to focus their learning in a predetermined or intentional direction. This is a psychological need for adults. Adults want to be seen by others as capable in choosing a path for their learning by directing it where it needs to go (Holton, Knowles, Swanson, 2015). The second characteristic identifies experiences as key for learners. Using one's own life experiences in learning allows connections to be made between the material being

learned and the experience which in turn develops a deeper meaning about the learning for the adult. Establishing a meaningful connection allows the adult learner to truly understand what is happening and the importance of the learning (Holton, Knowles, Swanson, 2015).

Likewise, the third characteristic acknowledges the adult learner as solution oriented, therefore the learning must be beneficial in assisting with a problem. This particular characteristic brings the notion that adult learners need to know the why behind the content being taught. If adult learners understand this why or can connect to the why of the content, the learning will happen more freely (Holton, Knowles, Swanson, 2015). Lastly, motivation is the driving factor of all learning, whether this motivation comes from an extrinsic or intrinsic place. For the adult learner intrinsic motivation is key. The adult learner needs to be perceived as being a critical piece of the enhancement and structure of themselves. Thus, highlighting the internal motive to continue learning new content (Holton, Knowles, Swanson, 2015).

In conclusion, the adult learner as defined by Knowles' Andragogy theory is an intrinsically, experience-oriented individual looking for learning opportunities to connect personally on some level. This type of learner does not function well in conventional and rigid institutional learning opportunities (Holton, Knowles, Swanson, 2015). The key to success in growing adults is seen by the joyous and delightful new experiences presented. This new experience needs to contain more gratification than the previous experiences (Maslow, 1972). Adults are wanting more independence with their learning, however, they are being denied this opportunity, thus stunting the growing they could be undergoing.

Self-Directed Learning

Those who lead their own learning are said to have a passion for the knowledge they are acquiring. This concept is known as self-directed learning. Knowles (2015) describes self-

directed learning as a method where individuals are resourceful, with or without guidance from others, in establishing their learning needs, creating their learning goals, identifying the resources to utilize in their learning, selecting and applying appropriate strategies, and assessing learning outcomes (Smith, 2002). Self-directed learning in simple terms is where a learner is capable of taking control of his or her own learning of a particular subject, then uses the mechanics and techniques to teach themselves said subject (Holton, Knowles, Swanson, 2015). Self-directed learning can also include autonomy. Autonomy in learning is where the learner takes full control of the purpose and goals they have set to assume ownership over learning content (Holton, Knowles, Swanson, 2015). Autonomy and self-directed learning are similar because they both allow learners to take more responsibility for their learning decisions (Rothwell, Sensenig, 1999).

Adults are more drawn to this self-directed learning model due to their need for autonomy. Adults take pride in being able to choose the direction they most see themselves going. Therefore, autonomy, having the freedom to choose the learning strategy that best suits their needs is critical more so than the self-directed concept (Holton, Knowles, Swanson, 2015). It is through this freedom that adults make personalized connections and understand the true meaning behind what they are learning and why they are learning it.

Self-directed learning has many benefits to those who pursue this route. Instead of being a reactive learner and waiting to be taught, those who choose self-direction are proactive learners and take initiative. Proactive learners are said to learn more and better due to their greater motivation. Proactive learners are more likely to retain the information they seek, put their learning to good use, and continue to learn longer than reactive learners. (Smith, 2002) Adults are the ones who are seen using this self-directed learning model more so than children.

The use of Personal Learning Networks by educators for professional development is a form of self-directed learning. Educators who participate in PLNs learn about curriculum, classroom management practices, school or system level changes. Therefore, educators must take the initiative found in self-directed learning, not only for themselves but to model for students as well. If teachers are not taking charge to participate in outlets where resources can be found, then nothing will change. (Richardson, 2011). Personal Learning Networks are not administration driven by school districts which signify that these learning networks are driven by the individuals interested in gaining new knowledge. In addition to gaining new knowledge, these networks are also flexible depending upon how each individual creates the system in which it will work best for them (Richardson, 2011). When creating this system each individual has many decisions to make regarding the types of technologies, connections amongst others, and the content they choose to gather. These decisions require the ability to be focused and organized, hence being able to be autonomous (Richardson, 2011).

Connectivism

Decision making is a crucial piece to the learning process. Information is constantly being absorbed by individuals on a daily basis. This information can be difficult to sort through in terms of importance. Each individual has their own personal knowledge base and a method for sorting through information. It is when this knowledge is shared that networking can truly begin to connect one another. Connectivism all begins with the individual. The individual's personal knowledge involves a network, which carries into organizations and institutions, which cycle back into the network, and then continue to provide content to the individual thus more learning. Through this cycle of knowledge growth, the learner can remain current in their field through the various connections they have developed. (Siemens, 2013) Unlike the traditional modes of

learning by experience, connectivism explores the notion of learning through a variety of modes and with various individuals.

Connectivism does not just explore connecting ideas to one another in different fields of study, but it explores the decision-making process that accompanies learning. Individuals learn through the process of decision making. Deciding what to learn, how best to learn it and then determining the meaning of the content is all done through the decision-making process. Due to how quickly society is changing and the means by which content is distributed, the decision-making process becomes different every day depending on the individual. (Siemens, 2013) Therefore, educators have the ability to decide the how, what, when to learn and acquire new information to improve their practices.

Connections are becoming more transparent due to technology. Connections allow individuals to craft an identity by creating and distributing their own materials based on their knowledge where-ever and whenever. These materials can then be remade or combined with other knowledge to make something completely different thanks to connections made online (Siemens, 2006). Personal Learning Networks can encompass all of this for educators. The connections made through your PLN are more about how much knowledge can you access (Richardson, 2011). The connections being made are mainly for growth, however, there is a social piece which proves helpful as well.

Networking

There has always been communication between individuals, not just neighborly communication but long distance communication for example, the Egyptians would help feed the people of Rome. In order for them to be able to feed another city, they had to have a means of

communication (Rainie, Wellman, 2012). These civilizations created a tool of discussion, decision making, and sharing of resources, they created a network.

The means of connecting with one another carried on through the nineteenth century. People now interact with one another through neighborhood activities, bowling leagues, or local events. As time went on, women started working outside of the home and people stayed home to watch television instead (Rainie, Wellman, 2012). As technology evolved so did many forms of networking. For instance, social media is an internet based technology in which people build and maintain relationships. However, contrary to common belief, technology facilitates the easy connection of people more thus creating stronger networks. The more individuals are utilizing the internet to connect, the more friends they accumulate, hence creating robust networks of individuals. These types of networks allow people to receive social support, ask for help, and exchange information (Rainie, Wellman, 2012).

Networking through digital means has opened many opportunities for others to connect on a much more professional level. Technology is at our fingertips making networking an easily accessible way to communicate with others, either locally or globally. These connections allow individuals to learn through the interactions they experience within the networks they establish (Rothwell, Sensenig, 1999). Establishing a community of like-minded individuals who are there to support, share ideas and experiences is important for each individual to experience. Technology is making this much easier every day because social ties are more abundant than they were in the past (Rainie, Wellman, 2012). The creation of digital networks is an opportunity for individuals that needs further exploring.

Digital Personal Learning Network

How people-establish-relationships has been changing over time; digital networking has added a whole new quality to these relationships. Networking has made professional connections personal by adding connections that are made with strangers who share similar passions in order to foster new relationships and to learn from one another (Richardson, 2011). Learning is an ongoing process in which we can now take ownership by connecting with others to gain knowledge and support. We have the means to accomplish this type of learning, connecting, and networking in order to help ourselves and others grow in a simple manner by using the Internet (Richardson, 2011).

A digital personal learning network can be for personal use based on an individual's passions, or it can also be used as a means for professional growth. Those who pursue this form of networking in the education field are often referred to as connected educators. These educators are going beyond their organization's professional colleagues and developing meaningful relationships with others around the world in order to help the educator progress therefore, better serving their students, parents, and colleagues (Casas, Whitaker, Zoul, 2015). Accessing digital tools to create a community of like-minded individuals in order to progress within their careers, so that growth can be spread amongst those closest to the educator is a way of expanding their network even more.

A digital personal learning network of educators is a means for professional growth. Teachers can use these DPLN's as a way for professional development that is easily accessible, and driven by the teacher's choices. This allows the teacher to take ownership of their learning because it meets the needs of the individual, thus becoming personalized (Bosch, 2015). This professional development then becomes more meaningful due to the autonomy and choice factor based on the educator's needs and interests. The teacher can spend as much time as they want

within their network to meet their needs (Richardson, 2011). This type of learning not only becomes more passion-driven but more focused; each PLN is thus unique no one-size fits all.

Summary of Literature Review

In this review of literature, the research is limited to the area of personal learning networks for professional development for educators. Although research exists as stated in this chapter lending guidance in the ways in which it would be a benefit for instance: adult learning theory, past professional development practices, and networking. Therefore, more research is needed to explore the impact a digital personal learning network could have on educator professional development practices. This paper's inquiry will add to the ongoing research of professional development practices for educators. Chapter three outlines the methodology that will be used to conduct this qualitative study with a mixed methods data collection approach.

Chapter 3: Research Methodology

This qualitative study using a mixed methods approach, explored teacher's perceptions of a digital personal learning network as a mode of professional development. Chapter three will be organized as follows: Section one presents the research methods, Section two presents the rationale for research design, Section three presents the research questions, Section four presents the setting, Section five presents the sampling and the selection of participants. Chapter three will also include details on the role of the researcher, instrumentation, data collection, data processing and analysis, and ethical considerations.

Research Design

This research design selected for this qualitative inquiry with a mixed methods approach, used interviews of 6-12 teachers in order to gain their perspectives on the impact of professional development using a digital personal learning network. The research design is looking to explore the lived experiences of 6-12 teachers on their professional development practices. A qualitative study was selected for various reasons. "Qualitative researchers tend to collect data in the field at the site where participants experience the issue or problem under study" (Creswell, 2014, p. 30). This inquiry took place within a school district in two different school buildings. The researcher in this study collected the data by interviewing teachers, therefore the researcher is the key instrument in this study (Creswell, 2014). Lastly, qualitative research design was selected because of reflexivity. "In qualitative research, the inquirer reflects on how their role in the study and their personal background, culture, and experiences hold potential for shaping their interpretations, such as the themes they advance and the meaning they ascribe to the data"

(Creswell, 2014, p. 32). Reflexivity allows the researcher to utilize their background in order to potentially shape the direction of the study (Creswell, 2014).

The researcher has selected to administer a survey as a part of the research design. Creswell (2014) explains, “A survey design provides a quantitative or numeric description of trends, attitudes, or opinions of a population by studying a sample of that population” (p. 155). The inquirer would like to gain another data point in order to draw conclusions about this sample population in addition to the interview responses. The researcher looks to gather additional or similar themes from the survey as well as from the qualitative interviews.

Research Setting

The setting for this study is in a Southeastern Minnesota city named Boustone (fictitious name used for this report). The United States Census Bureau reports Boustone as a city with an approximate population of 5,328, with 96% of this population being Caucasian. The remaining four percent of the population in Boustone is comprised of Asians, Hispanics, African Americans and Native Americans. In the city of Boustone, there are 1,690 households. Boustone houses one school district which encompasses four schools: a primary school, intermediate school, middle school and high school. The Boustone School District employs 134 teachers. Of those 134 teachers, around 51 percent hold a Bachelor’s degree, while around 49 percent have obtained a Master’s degree. Fifty eight percent of the 134 teachers have been teaching within the district more than ten years. Thirty five percent for three to ten years, and six percent for less than three years (MDE).

The Director of Financial Services from the Boustone School District has provided the researcher with the following data about the district. Boustone School District serves approximately 2009 students, with an average class size of 25. Class sizes start in Kindergarten

with 20 students and increase to 35 students in grades nine through twelve. It is estimated that Boustone School District spends an average of \$9,188 per student. This estimated amount includes everything from salaries and benefits, curriculum, transportation, building and grounds, staff development, health and safety, and capital expenditures. According to the Minnesota Department of Education, Boustone Public School district students test roughly ten percent above the state average on standardized state assessments. Approximately 96 percent of students graduate from Boustone High School each year.

Sample and Selection of Participants

The sample for this study consisted of current grades 6-12 school teachers with at least one year of teaching experience. One year of teaching experience assured exposure to district staff professional development practices and some classroom experiences. When looking for participants for the inquiry, the researcher included teachers from various grade levels in order to gain different perspectives regarding their professional development experiences. In addition, opening this study to teachers 6-12 allowed the researcher more opportunities to gain participants for this study.

The researcher recruited 6-12 teachers for this study in a number of ways. The researcher gained permission from building principals to discuss the study with teachers face-to-face. Once the researcher gained permission, she presented the idea at a faculty meeting at each building. Lastly, the researcher sent out an email to all teachers within the district with the permission from building principals. All of these recruitment methods included a full description of the purpose and background of the study at hand, provided teachers with the affirmation their identities would not be known, as well as the option to withdraw from the study at any time.

The participants included within this inquiry are employees of the researcher's school district. The researcher is employed at one of the two schools in the Boustone School District and therefore works alongside some of the participants that took part in this inquiry. The fact the researcher works alongside some of the participants can be a potential conflict of interest to this inquiry. To minimize conflicts, the researcher stayed on topic and followed the procedures set in place to conduct the interviews. The researcher recorded the interviews to have an accurate transcript of each interview.

Ten participants took place in this inquiry. In addition, the researcher had all participants fall under a specific criterion. Participants were educators with a minimum of a Bachelor's degree, no other faculty members within the Boustone School District were accepted for this study. The researcher screened possible teachers for a minimum of one educator with a Master's degree or above. The participants had at least one full year of teaching experience within the Boustone School District. The researcher required a minimum of three teachers to have tenure status within the district. Educators who taught grades 6-12 must also be of full-time status and teach a minimum of three classes per day with a class size of at least 20 students. The investigator had both schools represented within this inquiry, which would include at least three educators from each building. Lastly, the investigator had at least three males participate in the study.

Role of the Researcher

This inquiry is qualitative in design; the researcher is the primary instrument through which all data that will be collected. In qualitative research, the researcher collects the data themselves through a number of sources: examining documents, observing behavior, or interviewing participants. The researcher will not be utilizing instruments developed by outside

researchers (Creswell, 2014). Once the researcher collected the data, it is then the researcher's role changes to organizing and categorizing the responses into themes to determine what has been learned (Creswell, 2014). While conducting the research and organizing the data the researcher must be focused on interpreting the meaning the participants are trying to convey about the problem. The researcher must be cautious to not bring the meaning from themselves or the literature (Creswell, 2014).

The researcher administered a survey designed specifically for this study. The researcher's role in developing the survey is to ask questions not included in interviews and email the survey to participants. However, before administering the survey the researcher pilot tested the survey as Creswell (2014) suggests to improve questions and format.

Instrumentation

Data was collected by the key instrument of this inquiry: the researcher. Data was collected through three modes: individual teacher interviews, interview with the facilitator, and a survey of teachers. In order to add to the validity of this inquiry, the inquirer chose the process of triangulation. Triangulation uses data from three sources to increase the accuracy of the themes (Creswell, 2014).

The researcher sought approval from the Boustone School District to collect the data at the two school buildings (see Appendix A for email from Superintendent). Once all permissions were granted, the inquirer began seeking participants for the data collection process. The data collection occurred in three stages: individual teacher interviews, an interview with the facilitator, and a survey administered to teaching faculty members within the district.

Individual Teacher Interviews

The first data collection method was teacher interviews. Interviewees were presented with the following possible formats: face-to-face, a web based contact program, or telephone. In these qualitative interviews with the participants, the researcher involved a few open-ended questions in order to elicit the views and opinions of the participants (See Appendix D). (Creswell, 2014). The individual teacher interviews were approximately twenty minutes in length. The researcher recorded all face-to-face and web-based interviews, as well as transcribed. For the telephone interviews, the researcher would have transcribed if telephone interviews were conducted. All interviews were face-to-face (web-based on phone interviews were not needed) and took place at the teacher's school building in a classroom or conference room. The interview process was chosen based upon its usefulness since the participants cannot be directly observed while utilizing a digital platform for professional development (Creswell, 2014).

Interview with the Facilitator

The second method of data collection was an interview with the facilitator. The facilitator at the Boustone School District, in this case, was the Director of Technology. The interview with the facilitator contained a separate set of interview questions than the individual teacher interviews (See Appendix D). These questions encouraged open-ended responses. This interview looked to gain a leadership and historical perspective of digital personal learning networks for teacher professional development. The facilitator was living the experience of providing professional development for teachers encouraging PLNs. This interview was thirty minutes in length and took place in the facilitator's office.

Survey

The last method of data collection conducted was a survey of distributed to all 6-12 teachers in the district. The survey (see Appendix E) asked teachers questions not addressed in

the interview. The survey gathered demographic information, time spent on professional development outside district requirements, and their general knowledge of digital practices. The survey was conducted using Google Forms; Boustone School District is currently utilizing Google Apps for Education and all participants are familiar with the design. Before the survey was administered the researcher piloted the survey with a sample of teachers not participating in the study. The researcher prefaced to this specific sample; they were to look at improving the quality of the survey as well as testing to ensure the answers were recorded properly. The survey was administered through email communication. The email included a timeline of when the survey must be completed. The survey took participants approximately fifteen minutes.

Procedures

The procedures for this inquiry happened in the following order:

1. Sought permission from Superintendent and building principals to interview and survey participants.
2. Upon approval to interview and survey participants, communicated information in staff meetings and via email regarding the study in order to obtain participants.
3. Delivered consent letters, and an outline of the procedure to all participants.
4. Scheduled individual and facilitator interviews.
5. Conducted and recorded individual and facilitator interviews.
6. Analyzed the responses from the individual interviews and facilitator interview and coded into themes.
7. Followed up with all participants by distributing the survey through email.
8. Presented the findings of this study to stakeholders involved.

Data Processing and Analysis

Creswell (2014) suggests a six-step approach to analyzing data within a qualitative research study. The researcher used this six-step approach in order to analyze the participants' views from the interviews. The inquirer first organized and sorted all transcribed data collected from the interviews. Next, the researcher reviewed and reflected on the interview responses. The researcher looked for themes and coded the collected data by themes. Coding is a method of organizing the data into segments and composing a word which represents a category. (Creswell, 2014) Following the initial coding of the data, the researcher used these codes to generate a description and themes for analysis. "Description involved a detailed rendering of information about people, places, or events in a setting" (Creswell, 2014, p.62). The researcher used these generated themes and description in order to determine and explain major findings from this study. Lastly, the inquirer made an interpretation of the findings from the data. The inquirer will be examining the lessons learned from this study based on the understandings brought to the study from personal context (Creswell, 2014).

Creswell (2014) also suggests a six-step method for data analysis in quantitative measures. In the case of this particular study, the researcher followed this process as well because of the survey the researcher administered. However, for this particular study the researcher completed only five of the six steps. First, the inquirer reported in a table, how many participants completed or did not complete the survey. Secondly, the researcher determined a method of checking for response bias. Response bias is important because the survey results could potentially be affected by the nonresponses received (Creswell, 2014). The next step in the data analysis process is for the inquirer to develop a plan to provide a descriptive analysis of the data. Following descriptive analysis, the researcher sorts through the data collected from the survey and determines if any inferences can be drawn from the sample. Once, the researcher has

determined if any inferences can be drawn, the researcher provides a rationale as well as assumptions based on the findings (Creswell, 2014). Lastly, the inquirer presents the results from the data in a table or other figure as a means to draw conclusions for the research questions that guide the study.

The researcher has developed the following research questions that will undergo the analyzation process suggested by Creswell (2014).

RQ1. How do 6-12 teachers personalize their professional development using digital tools? This particular research question will be analyzed using responses from interview and survey questions participants will be answering. The researcher will examine the answers to these questions in order to understand the tools educators are utilizing to obtain a personalized professional development experience. By looking for patterns among answers, an analysis will be generated of common digital tools being utilized for educator professional development practices.

RQ2. What are specific actions 6-12 school teachers take in order to access relevant professional development? This research question is answered using the responses from interview and survey questions. The inquirer will analyze responses and look for commonalities between participants' answers to develop an analysis based upon which steps educators are currently using to access professional development that is not being provided for them.

RQ3. How do 6-12 school teachers connect with other educators to create a network of professionals to further professional development practices? This question is answered using the responses from interview and survey questions. The researcher will be observing the patterns between participants' answers in order to understand how teachers are currently connecting with others outside of their own school district.

Ethical Considerations

According to Creswell (2014), considering the ethics that may be involved in an inquiry is of the utmost importance. A researcher must protect participants that will be included in the study in a number of different ways. The inquirer develops a trust with the participants, actively promote the integrity of the research that will be conducted, is willing to guard against any misconduct and indecency that may harm the organization that will be involved and have coping strategies ready for any new or challenging problems that may arise during the study. (Creswell, 2014) The researcher will respect all human participants' rights and private information. All interview and survey responses will remain anonymous for confidentiality purposes.

Chapter Summary

Chapter three has provided the methodology for this inquiry. This qualitative approach with a mixed methodology will be used to examine teachers' perspectives on utilizing a digital personal learning network for professional development. This chapter has also provided the background information on Boustone School District, the research questions, and how the inquirer plans to collect the data during the inquiry. In addition, this chapter presented a full procedure, data analysis, assumptions the researcher is anticipating, and finally the manner to guarantee ethical and confidentiality processes. Chapter four will present the findings based upon the research questions that are guiding this inquiry.

Chapter 4: Results

The purpose of this study was to explore digital networking practices for teacher professional development purposes. This study specifically sought to discover teacher's perspectives in Southeast Minnesota using a digital personal learning network as a professional development practice compared to traditional professional development practices.

The sample for this study consisted of eight 6-12 school teachers each with at least one year of teaching experience. The teachers equally represented both the middle school and high school faculty.

The researcher interviewed four middle school teachers; two males and two females. Between these four teachers all three middle grades (6th to 8th grade) were covered as well as a mixture between core subject areas and specialty areas. The researcher also interviewed four high school teachers, covering the four high school grade levels, core subjects taught, and specialty areas taught. All teachers interviewed had at least five years of experience within the education field.

The researcher also interviewed Boustone School District's Director of Technology, otherwise known as the Facilitator. The interview with the facilitator contained a separate set of interview questions (see Appendix E).

Lastly, the researcher administered a survey via email using Google Forms. The email, (see Appendices B and C) included a general overview of the study as well as a timeline of when the survey must be officially completed.

Qualitative Results

Teacher interviews.

The teachers interviewed will be referred to in the following manner: Teachers A-D are middle school teachers, teachers E-H are high school teachers. Teachers A and D are male teachers, Teachers B and C are female teachers. Teachers E and H are female teachers, Teachers F and G are male teachers. All responses from interviews can be found in Appendix (D).

Question one: What are some of your methods to connect with others in the field of education?

This question relates back to the research question: How do 6-12 school teachers connect with other educators to create a network of professionals to further professional development practices? The responses to this question had teachers using both digital ways to connect with others as well as face to face experiences. Teacher A stated, “I think just going to conferences whenever I get the chance, is one way and obviously social media, Twitter is probably the number one app for collaboration.” While Teacher D stated, “I connect with others a lot of times through conferences, phone calls, social outings, and now through Twitter all across the globe.” Both teachers are male teachers at the middle school, however, many of the female teachers had similar responses. For example; Teacher B said, “I use Twitter quite a bit and that’s been very helpful... Other resources would be I taught in a lot of different districts, so I try to stay connected with those people and resources both in person and online.” Research note: most teachers within the Boustone district are utilizing Twitter in order to connect with others in the field of education, however, they are also utilizing other educators in face to face settings through personal connections.

Question two: How do you best learn new subjects or skills?

This question refers to the Andragogy study and how adults best learn. This question provided a variety of responses, however, one common theme that presented itself was learning

has to be hands on. Teacher F mentioned, “If something is hands-on and minds-on I tend to learn it much easier than by only listening.” Teacher G stated similarly, “I think I just need to see it then hear it and then do it, for me it’s the hands on.” Both of these teachers are males, however, there was a female teacher who felt the same way, Teacher B mentions, “I like being in person with people definitely more hands-on and actually have me doing things, versus just a lecture and listening to things.” While three teachers said, they learn best while actually doing something, the other five teachers also touched on reading, watching videos, discussing opportunities with others, or just trying something new on their own. None of the teachers in Boustone were in favor for sitting through a lecture on a topic, instead they were all active within their own learning.

Question three: How do you use digital tools to further your professional development?

This question relates back to the research question: How do 6-12 teachers personalize their professional development using digital tools? Six of the teachers interviewed mentioned using Twitter as well as Google to research topics of interest. Teacher H stated, “Obviously, Twitter would be a digital tool that I would use to find some resources if I needed to look something up or chase down a topic to get connected to other resources.” While Teacher C said similarly, “I constantly read articles on the internet and blogs, things like Edutopia or follow things on Twitter, stuff that you can find on Teachers Pay Teachers in which I can take and tweak to best work for me.” Both of these teachers are females but teach different grade levels. On the male side, Teacher A discussed the use of Google, “Obviously, the research on the computer, anytime I hear about something that’s how I try to figure it out is Google it, look it up.” Now not all of the teachers felt they needed digital tools to professionally grow. Teacher F mentioned, “I do not use a lot of digital tools other than a few apps on my iPad like iMovie,

classroom, Capture.” Teacher F is using the digital tools more for classroom instruction versus professional development. Overall, the interviewed teachers in the Boustone District are utilizing digital electronic technology in order to learn new subjects or skills.

Question four: How do you access forms of professional development that work best for you?

This question relates back to the research question: What are specific actions 6-12 school teachers take in order to access relevant professional development? This question was designed in order to help the researcher understand the methodology used by teachers to gain professional development opportunities. Seven of the teachers interviewed within the Boustone School District take advantage of the opportunities offered by the district when they can. Another common theme from the responses that arose was attending conferences. Most of the teachers responded with something similar to Teacher D, “I think that for our, we have a bigger conference, a Minnesota Music for Educators conference, that I branch off to discover other professional development opportunities.” While Teacher B stated, “Last year, I decided to apply to present at TIES, so once I knew that I asked my district if I could also go to the other days that were not paid for because I was not presenting, and they approved that through the district’s professional development funds.” In addition, Teacher E discussed a new type of conference within the past few years, “I have gone to a couple of Edcamps and actually last spring three of us went up to Morehead for a Spedcamp which was really focused around Special Education, and I am sure you are familiar with and aware with Edcamps so completely what everyone was there wanted to learn, teach, talk about, that is my favorite type of professional development because it is so personal to what you want to learn and talk about.” Overall, five of the teachers interviewed within the Boustone District related back to some form of conference in order to

access professional development. These five teachers were able to go to these conferences with professional development funds provided by the district.

Question 5: When is learning the most meaningful/powerful/effective to you?

This interview question relates back to the Andragogy study on how adults learn best. The researcher connects to the theory in order to gain an understanding of the learning styles of teachers and how that relates to their professional development practices. The recurring theme formed in the responses was the issue of relevancy. Learning needs to be relevant for the teachers interviewed. Teacher E stated this theme without hesitation, “I think when it is directly relevant to me it is the most effective.” While Teacher A stated the theme in a similar way, “I think when I can actually implement it and use it.” Teacher G said, “I learned a lot of the relevancy. I also think how is it relevant for the kids, what am I learning that will be relevant for them?” One last example Teacher C mentioned, “When I can use it on the spot, I can try this tomorrow.” For these Boustone teachers, relevancy and timeliness of the learning must be there in order for the learning to be meaningful to them.

Facilitator interview.

The Boustone School District’s Technology Director, referred to as the Facilitator, was interviewed to gain background information regarding the district’s progress in the use of technology for professional development. The Facilitator was asked five questions regarding classroom teachers as well as the overall district. The themes that arose from this interview were benefits of utilizing social media for professional development practices, the increase in technology use by district employees, and challenges facing educators.

Question one: What benefits do you see for educators in using a personal learning network for professional development practices?

This question was chosen to gain an understanding of how the Facilitator sees the role of professional development when using digital tools like a Personal Learning Network (PLN). Overall, the Facilitator sees multiple benefits in using a PLN. The overall variety classroom educators can experience within the world of social media when creating a PLN. She sees a PLN in multiple stages, where the first stage is just having an experience with social media and seeing what is out there. However, the Facilitator stated, “But I think the real benefit happens when you start making connections.” This is the stage she finds the most important because if you are not connecting with others then it’s not a true network.

Question two: What role do you see digital technology playing in the future for this district’s professional development practices?

“So I see it as always increasing, I think as technology changes so do platforms and mediums. I love the idea that a PLN is usually self-directed.” The Facilitator is aware of the ever-changing technology. She is also able to connect the change with the idea that now most educators could be more self-directed within their learning and practices. She described how the district’s goal this year was to get the principals more involved in communicating to the public using social media. Each principal chose a platform and that was embedded on the school’s website. She mentioned, “I wish I could see more growth in that area, like I said it’s that idea of being self-directed, I think if we focus on that and say here are some avenues: a, b, or c that could be a possibility.” Here she is referring to the idea that while technology is changing quickly, the district is not advancing as fast as she would like it to in order to keep up.

Question three: How do you inspire others to connect in order to further their professional development practices?

The Facilitator is doing her best to reach out to the educators within each building. She has been traveling to various classrooms for observations, and while she is in those classrooms she is capturing the lesson or activity. “I was in a classroom observing some cool activity or lesson, so I took a video or a picture and said I am going to tweet this out and later that day or week, the educator I saw actually got on Twitter and followed me. So, finding ways to promote the cool things our teachers are doing and then let them know by the way I am going to tweet this out I think is a good way.” The Facilitator is finding simple solutions for teachers so they can experience the world of social media in a new way.

Question four: What are some challenges you see facing educators in using digital means for professional development?

The Facilitator sees the biggest challenge when it comes to educators navigating social media in order to use it effectively for what they need. She discussed, “For sure the time challenge of when to turn it on when to shut it off, how to filter through things, you know when you follow a couple thousand people, your account is just going off the wall, how do you manage it all? Strategies around that would be important.” The Facilitator sees this as an opportunity for coaching or supporting educators who are willing to give social media a try and then providing the strategies they will need in order to be successful with their time management.

Question five: What role do you see the district taking when it comes to digital professional development practices?

The Facilitator discussed right away some opportunities, “I think we have done some things already, not necessarily in the PLN, we have done Twitter chats, I think that’s helpful, I would love to see that on a more regular basis, because I have had so much good feedback on those Twitter Chats. Especially that cross curricular or cross building connections.” She has

found that these instances on Twitter have been an appropriate outreach for our educators within the district to get connected with each other as well as to others outside of the district. She does know that there need to be more opportunities and ways to manage these opportunities are still undefined.

Overall, the Facilitator is well aware of the happenings within the district in terms of technology and how it can play a role in the professional development of educators. She is in need of some feedback and additional resources in order to help grow this specific area within the district for teachers.

Quantitative Results

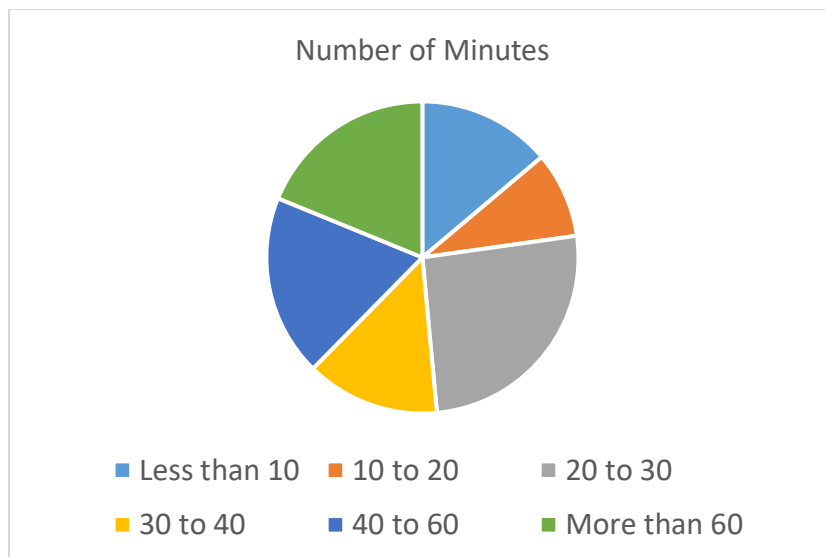
Survey.

The survey was administered to all the middle school and high school teaching staff. There were 43 total responses. The first two questions of the survey obtained basic demographic information from each building. Forty nine percent of those responses were males, while 51% were female responses. Forty nine percent of those responses came from the middle school teaching staff, while 51% of the responses were from the high school teaching staff.

Questions three and four from the survey asked about the number of minutes spent on professional development per week. Question three asked, “Number of minutes spent per week on professional development.” The results are displayed in Chart 1

Chart 1

Minutes Spent Per Week on Professional Development.

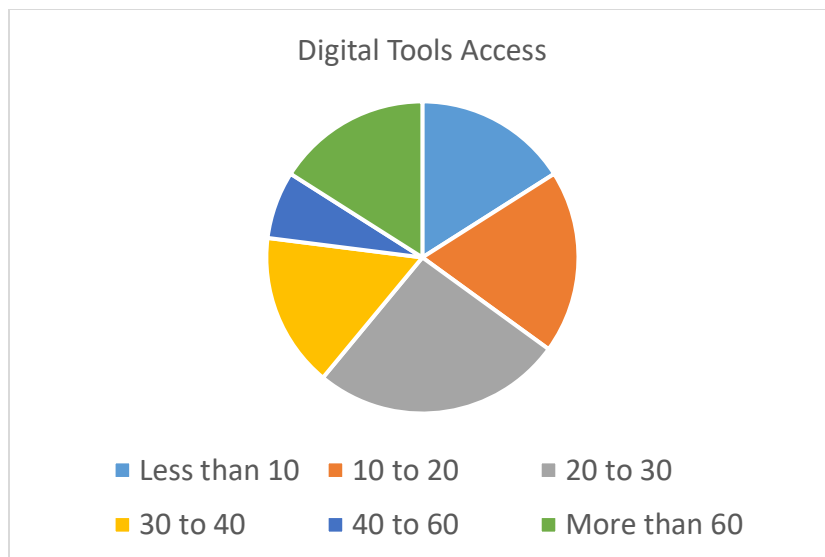


In the six predefined ranges of minutes spent on staff development each week, the respondents varied from 9% in the 10 to 20-minute range to 26% in the 20 to 30-minute range; 49% of the respondents spent 30 minutes or less on professional development and 52% spent more than 30 minutes.

Question four asked the question, “Number of minutes spent per week using digital technology to access professional development.” The results are displayed in Chart 2.

Chart 2

Minutes per week spent on using digital technology to access professional development



In the six predefined ranges of minutes spent on the use of digital technology to access professional development each week, the respondents varied from 19% in the 10 to 20-minute range to 26% in the 20 to 30-minute range; 16% of the respondents spent 30 minutes or less on professional development and 23% spent more than 30 minutes. Between questions three and four there are a number of similarities. This data shows teachers are completing at least ten minutes of professional development each week. How teachers are accessing professional development changes percentages of how many minutes spent using digital tools for that professional development by about two percent. This data surprises me knowing the amount of content on the Internet and the background knowledge of staff members all having access to a device to utilize digital technology. This leads me to believe in most cases teachers are reading professional development materials in books or articles not utilizing digital technology.

Questions five through ten on the survey were based on a four-point scale. Displayed in Table 1 are the results of the survey.

Table 1

Responses to Questions 5 through 10

#	Question	Strongly Agree	Agree	Disagree	Strongly Disagree	N
5	I choose what I want to learn and how to learn it	28	49	23	0	43
6	I know how and where to access professional development for myself	30	51	19	0	43
7	I know how and where to access further non-digital professional development for myself	26	44	23	7	43
8	I connect with others not in the district in order to advance my ideas about my field of study	28	35	28	9	43
9	I am confident in seeking feedback from others	30	54	16	0	43
10	I am confident in my abilities to use social media for professional development purposes	8	16	12	7	43

Question five responses suggest that 77% of teachers feel like they are in control of their own learning (Strongly Agree and Agree). Question six responses suggest 80% of teachers feel comfortable with the overall process of accessing further professional development. Question seven responses suggest 69% of teachers feel comfortable with the process of accessing further non-digital professional development. These three responses are consistent with the concept of Self-Directed Learning by Knowles. Sixty nine to eighty percent of the teaching staff at Boustone feel comfortable in the activities of self-directed learning by choosing the professional development that meets their learning needs and selecting the appropriate strategy by which to obtain their professional development.

Question eight responses suggest 63% of teachers in the Boustone school district are connecting with others outside of the district in order to advance their ideas. The 63% who are connecting are demonstrating the theory of Connectivism as well as building a network in which

they can refer to as needed for professional purposes. Question nine suggests 84% of teachers are confident in their ability to seek feedback. Relating this to the theory of Connectivism and networking, this would suggest a healthy majority of the Boustone teachers feel professionally connected to their peers. The 84% of teachers could be comfortable receiving feedback from other teachers within the district because only 63% of teachers are connecting outside of the district for support.

Question ten suggests 56% of teachers in the Boustone School District are confident in using social media for their own professional development practices. This question relates the idea of building a PLN to teachers utilizing it for sharing ideas, receiving feedback, and referencing others with similar passions or interests. My hypothesis for why only 56% feel confident in establishing a PLN through social media is that like the Facilitator stated in her interview, “You really need some time management skills, for those that are new, I can see for some people I could see they might want to have some coaching available, you know having a buddy, or having that help or support available so they get more confident in using Twitter or Social Media. For sure the time challenge of when to turn it on when to shut it off, how to filter through things, you know when you follow a couple thousand people, your account is just going off the wall, how do you manage it all? Strategies around that would be important” (Appendix E). There may be a number of teachers who need exactly what the Facilitator is suggesting, therefore they do not feel confident.

Overall, from this survey there are common themes. The teachers in the Boustone School District know what professional topics they are interested in (Question #6) and understand how to access those topics through professional development. In addition, the teachers also know how to connect with others outside of the district (Question #8) in order to gain more information or

advance their ideas further. These teachers are also confident in their ability to seek feedback about their professional practice and ideas. Lastly, from this survey teachers need more training or information on accessing social media for professional development purposes.

The last two questions on the survey were open-ended in order to gain more specific feedback regarding the use of technology for professional development. Question eleven: What are some past experiences you have had connecting with other educators digitally? Overall 30 teachers responded for this question, with a focus around the use of social media tools like the 19 who stated they use Twitter or the nine who use email to connect with other educators. One teacher stated, "Twitter has been a great idea generator." In terms of email, one teacher wrote, "Email colleagues from other districts, share ideas and get feedback." In addition, one educator wrote about the use of both email and Twitter, "I have met many teachers at workshops and conferences specific to my content area that I follow on Twitter and keep in touch with via email." From the data, the teachers in the Boustone School District are becoming more comfortable branching out and using digital tools, especially tools like social media in order to advance their professional development. The use of both Twitter and email can be seen as meaningful in building a digital PLN, they are just using a format that best suits their needs.

Question twelve: What suggestions do you have to spice up professional development for educators in Boustone Public Schools? Most of the themes from the responses to this question surrounded independence or choice, relevancy, and collaboration time with others in the district. Thirty teachers responded to this question. Out of the 30 teachers ten of them discussed the theme of independence or freedom of choice in plotting their own professional development. One teacher states, "Choice and Voice; Choose Your Own Adventure style learning, but also clear expectations for learning aligned to district initiatives." While another teacher wrote,

“Needs to be more independent to allow us to learn things that are relevant to us, instead of one size fits all PD.” This teacher brings in the idea of relevancy which nine teachers responded with as well. Another teacher explained, “Give us time to do PD, but time for ourselves to work on something valuable to us.” This teacher not only discussed the notion of relevancy to themselves, but also the notion of time needed to accomplish this professional development. Five teachers wrote specifically about the need for time just like the one above. Another teacher stated, “Allow us time to do our own professional development. Time to do a book study or participate in a webinar.” Again, the theme of time as well as choice is shown in this response. Lastly, the theme regarding collaboration with others. One teacher responded, “Bring treats. Turn off the Wifi when it’s not needed for the task...the professional dialogue is amazing.” While another teacher shared, “I love teachers teaching teachers!” Question twelve overall brought out many themes to how professional development can be changed for teachers. These suggestions could be used in order to help teachers establish a PLN by giving them the time, the choice of who to connect with and what idea to connect on, and allow collaboration to occur with what is being learned through the PLN.

Chapter Summary

Chapter four has provided the results for this inquiry. This qualitative approach with a mixed methodology was used to examine teachers’ perspectives on utilizing a digital personal learning network for professional development. This chapter has also the connections to the research questions, and how the inquirer plans collected the data during the inquiry. In addition, this chapter has also presented the findings of this study as well as question analysis. Chapter five will present the overall findings as well future ideas for further study.

Chapter 5: Conclusion

The purpose of this study was to explore digital networking practices for teacher professional development purposes. This study specifically sought the perspectives of teacher's in a Southeast Minnesota school using a digital personal learning network as a professional development practice compared to the traditional professional development practices. This study sought to use the theories of andragogy and connectivism to see how teachers best learn and connect with others to enhance learning.

The findings of this study have concluded that teachers within the Boustone School District are comfortable finding professional development opportunities to further their growth. Two thirds of the teachers interviewed were comfortable using social media in order to connect with others as well as look for professional development opportunities. In addition, teachers as well as the facilitator both have stated the need for strategies to support teachers in utilizing outlets for newer professional development opportunities like creating a PLN. Lastly, teachers are looking for more opportunities to collaborate and connect with others in the district, and more independence when it comes to their professional development opportunities. Overall, these three themes can all connect back to the idea of personal learning networks where teachers can connect with others through an independent study on a topic of their choice and take charge of their own learning.

What Was Learned About Doing Research

Research is a time-consuming process, one in which I had no idea how much actual time was involved in the process. I had originally thought research was learning some background information, asking your subjects of your study a few questions, and then writing a simple paper of the findings. I learned that there is a process for completing research where I discovered there

are many formalities within each step. With each formality, there are challenges in which I faced. For example, the notion of receiving permission for each step of the data collection. Another challenge that was faced was the actual writing of this paper. The last piece I learned is I am not the best technical writer because of my creative writing background. I wanted this paper to be enjoyable for someone to read, so my extra adjectives I added in the beginning stages of this process are no longer a part of this paper.

What Could Have Been Done Differently To Improve the Study

Looking back on the overall process from this study there are a few items I would change. I would definitely spend more time on trying to find more information on PLNs and how they are being used in other schools. I would do this because I could have an idea about PLNs in practice as another resource. Another part of the process I would improve upon would be the clarity of my questions. I would reexamine my research questions to ensure they match exactly it is I am looking for the study, I would then take those research questions and carefully design each individual question for interviews from the research questions. I would also ensure my survey questions went through the same process. I did this to some extent, however, I do believe my questions could have been better in order to obtain more accurate information. In addition, I would be more adamant about receiving more survey responses. I originally was aiming for 50 responses and fell short to 43 total responses. Instead of falling short, I would make another appearance at a staff meeting as well as follow up with additional emails to ensure more participation. Lastly, I would have spent more time sifting through my overall data. I did spend time analyzing the data, but after finishing this process, I know I could have done some more analysis and connections to the theories associated with my study.

Ideas for Future Research

The information from this study can be used for future practice or research investigating teaching tools for educators in order to help them navigate other outlets like social media for professional development purposes. In addition, future research could also focus on growing and expanding the personal learning network as a way for educators to continue growing their network of professionals therefore growing themselves as individuals. Future research could also help to establish more of an independence for educators when seeking professional development opportunities. With this more independence, future research can also try to establish ways for this type of professional development to be approved for teacher re-licensure purposes. Overall, future practices or research could all surround the use of digital tools for furthering educator's growth.

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Appendix A

Email correspondence for approval on research project:

March 8, 2017

Dear Mr. Superintendent,

I am finishing my Master's program this year in Educational Leadership through Winona State. Part of my graduation requirements is to do a research project. Winona State University requires the approval of the superintendent before I can continue with my project.

For my research, I am looking at digital tools for professional development practices. I am seeking your approval to interview eight teachers across the Middle School and High School and the Technology Director. I am also seeking your approval to send a survey to the Middle School and High School teaching faculty.

I have all of my questions written out for both interviews and survey. I would be happy to discuss these with you in person or, if it works better for you, to converse over email.

Please let me know what works best with your schedule. I look forward to hearing from you.

Response From Superintendent

March 8, 2017

Kirsten,

Congratulations on finishing your Ed. Leadership program. I approve of your request to continue your project. I would like you to forward the questions on to me in the event that anyone would ask for a written record of the interview questions. Once again, congratulations!

Appendix B

Email sent to High School teachers:

March 16, 2017

Dear High School Teachers,

I am in my final semester as a graduate student and I need your assistance. I am conducting research surrounding the use of technology in conjunction with professional development. Below you will find a short survey to take in order to help me complete my research. The survey is completely anonymous and based on your own practices. I would really appreciate it if you could take a few minutes to complete the survey by Friday, March 24.

Appendix C

Email sent to Middle School teachers:

March 16, 2017

Dear Middle School Teachers,

I am in my final semester as a graduate student and I need your assistance. I am conducting research surrounding the use of technology in conjunction with professional development. Below you will find a short survey to take in order to help me complete my research. The survey is completely anonymous and based on your own practices. I would really appreciate it if you could take a few minutes to complete the survey by Friday, March 24.

Appendix D

Interview Questions and transcriptions for the teaching staff:

Interview Teacher A

1. What are some of your methods to connect with others in the field of education? (connect)

I think just going to conferences whenever I get the chance, is one way and obviously social media, Twitter is probably the number one app for collaboration. I use pretty much my Twitter account for looking at other people that have presented or teachers I have met at other places and have found them and keeping up with them and watching NBA highlights is how I use my Twitter.

2. How do you best learn new subjects or skills? (personalize)

I dive in, so when I hear about something, so like the other day at Hoegh's thing or your thing, I just come back and try them. That's what I like about working here we can dive into anything and nobody really comes down on you too hard if it works great or not. I just dig in and dive in, try something as soon as I hear it I try to try it right away to see how it works.

3. How do you use digital tools to further your professional development? (connect, personalize, access)

Obviously the research on the computer, anytime I hear about something that's how I try to figure it out is Google it, look it up. I use all the Google Apps in class and it's amazing that I will learn from the students new things and then I go back and try it to see how it works in my classroom and get hands on with it. I learned a lot from my students: Quizlet, Kahoot. I tweak whatever my kids teach me to have it work in here.

4. How do you access forms of professional development that work best for you? (access, personalize)

We are lucky to be able to sign up for all of our PD days, so that's easy. Just going to St. Marys for grad school, I still get emails from them for opportunities and information.

5. When is learning the most meaningful/powerful/effective to you? (personalize)

I think when I can actually implement it and use it. I can sit and listen to people philosophize, if that's a word, about something all day, but if I can't see it, and see how it is useful everyday then it becomes useless to me. If it is things that I can put to practice, like if someone shows me an app or website that I think I can go back and use that next week or whatever the next school day is, or if it is information that I can relate to doing now that seems to be the most useful for me.

Interview Teacher E

1. What are some of your methods to connect with others in the field of education? (connect)

I love, recently, Twitter and Twitter chats, I think it's so cool to connect and hear what people here think about different topics as well as people across the state, country and nation think about them as well. I like that it has as special area, you know there is one of me here or three of us in the whole district and I love that I connect with other people that teach the same thing I teach whether its on Twitter or on any social media because right here I don't have that.

2. How do you best learn new subjects or skills? (personalize)

I am very visualize, so I learn best seeing things. I can read directions and hear directions and that's okay but if there is screenshots of things but if I am really trying to learn something

new, like I taught myself to knit a few years ago so I watched YouTube videos because written directions don't do a whole lot for me.

3. How do you use digital tools to further your professional development? (connect, personalize, access)

I mean Twitter as one, I think, I love and am a little addicted to finding new apps and things for my students, you know we have to review a lot of the same skills multiple times so I like finding not all technology based ways to make it different for them since we have to practice it so much.

4. How do you access forms of professional development that work best for you? (access, personalize)

I have gone to a couple of Edcamps and actually last spring three of us went up to Morehead for a Spedcamp which was really focused around Special Education, and I am sure you are familiar with and aware with Edcamps so completely what everyone was there wanted to learn, teach, talk about, that is my favorite type of professional development because it is so personal to what you want to learn and talk about.

5. When is learning the most meaningful/powerful/effective to you? (personalize)

I think when it is directly relevant to me it is the most effective. When I have a challenge or something I am struggling to really get taught or teach one of my kids, when I am learning about that and I know it is really going to help an area that I am struggling with it's effective to me. If it is something down the road this is really cool and down the road I could use this, it's not as immediate and useful to me.

Interview Teacher F

1. What are some of your methods to connect with others in the field of education? (connect)
Weekly PLC meetings, meeting and talking with other Tech Ed. teachers from other schools, semiannual meetings with other Career and Technical Education teachers, and attending graduate school I have learned many new and exciting things to directly apply to my classroom at grad school. Hearing about the ways other teachers set up their classrooms and build community with their students has been very beneficial to me.

2. How do you best learn new subjects or skills? (personalize)

I learn best by doing a task and seeing someone else demonstrate it. If something is hands-on and minds-on I tend to learn it much easier than by only listening.

3. How do you use digital tools to further your professional development? (connect, personalize, access)

I do not use a lot of digital tools other than a few apps on my iPad like iMovie, classroom, Capture. I have started flipping some of my lessons to allow more class time for discussions and projects.

4. How do you access forms of professional development that work best for you? (access, personalize)

Professional development that I use: Master's class, Project Lead the Way training, school training sessions

5. When is learning the most meaningful/powerful/effective to you? (personalize)

Learning is the most beneficial to me when I can immediately apply it to what I am doing at the time(JIT). The most effective is when examples are given and I am given time to do the task

myself. Hands-on training keeps my attention longer and I tend to learn more and retain the information longer. Learning from an expert in the field of study has proven valuable to me. It is always evident if someone knows what they are talking about from experience or if they are presenting something they know little about.

Interview Teacher G

1. What are some of your methods to connect with others in the field of education? (connect)

I think the biggest one for me right now is Twitter, it has been for me an eye opener, especially as a FACS teacher because I can connect with some other FACS teachers, being a singleton up here at the high school. I mean we have our PLC with Health and Phy Ed, so I will have that up here. We have a K-12 PLC as well so I have those individuals. For me it's been Twitter it's been the biggest change for me to get different ideas and be open to ideas, like grading, I have always thought, I would always be a person that would be if you don't turn in your work it's a zero, so that's been a big change through Twitter.

2. How do you best learn new subjects or skills? (personalize)

I think I just need to see it then hear it and then do it, for me it's the hands on. Same with the subject I teach and why I like it, FACS, the hands on, best way to teach kids how to cook is to let them cook, not just talk about cooking. I do think for the different types of learners, like recipes, some want to see it, but for me I like to see it and hear it then do it, that's the way I learn best.

3. How do you use digital tools to further your professional development? (connect, personalize, access)

Right now I am doing, or I did this last quarter project with KG, where I periscope my live feed of cooking labs, KG would see this and comment why don't I ever get food, so I connected with her fifth graders for a quarter. Her fifth graders worked on the engineering, design, and stem process and we taught them how to cook when they came up here. Then the fifth graders gave us a problem where we had to try and solve it for them and we made suggestions to make it better. Next quarter I am going to do a debate in my Child Development class with another school in the Glencoe Silver Lake area. I have another teacher in New Jersey who wants to connect collaboratively where kids in my classroom can work with kids in her classroom on a presentation. I just love it, almost an addiction. I just meet other people and learn new things. Just like with grading, kids can now earn all points in all of my classes. Now I can see hope in their eyes that they can now do better, which helps build rapport with the kids through teaching them a different way of responsibility.

4. How do you access forms of professional development that work best for you? (access, personalize)

I try to always do a conference every other year. I went to UW Stout, and luckily enough I get asked to go back to present about every two to three years, so it's a free conference. I still have to fill out the form to cover a sub that day and transportation. The cost of the conference and food is free, so it's pretty a cost effective conference for me, which has been great. We did an Edcamp here a couple years ago, which is a great opportunity and I talked to Jen to tell her we needed more of these. Even this last Friday, we have great teachers in this district who have great ideas and we need to hear those great ideas to spark other ideas. We used to do that a couple of years ago where we had Data Coaches who used to teach others about ipads or other subjects and I think we need to get back to that. We have a lot of up and comers, who can teach us some things and I would like to hear more of what other teachers are doing. That way we can work

collaboratively, that project I did with Kory was awesome, my kids said at the end of the year it was the best project they had done and was super cool. Just giving those connections a chance, years and years ago we started what we use now, where we go over to the younger kids in my Child Development class and that all stemmed from an in-house PD session. I know we have some amazing teachers. The MN leads on Twitter, are great, you don't always have to participate you can just stalk it and reflect on what others are saying and that's free. I just think overwhelmingly be adapt to try the trainings so you aren't always the same teacher year after year.

5. When is learning the most meaningful/powerful/effective to you? (personalize)

I have to understand why is it important for me to learn it what use does it have for me? I was reluctant to start Twitter right away, I thought what use does it have for me? I learned a lot of the relevancy. I also think how is it relevant for the kids, what am I learning that will be relevant for them? I think in everything I do the number one question I always try and ask myself is, if I was sitting in my classroom, what would I think of me? If I had my kid in here what would they say about me? I want them to understand why they need to use it and how it's applicable to them. Today my students were on Twitter in class and to them that's relevant. They were doing what they needed to be doing, sending a survey. Making them see that the tools they want to use are appropriate and meaningful to them. I now don't have to ask them to make accounts for tools these days, they know and love to try and figure it out. You have to give some leeway, give them some direction in how they want to use it, instead of being so strict. When kids feel like they are close to being on the same playing field, that's when real learning takes place.

Interview Teacher H

1. What are some of your methods to connect with others in the field of education? (connect)

I think within my building there is a lot to be learned from different content areas, finding at the lunch table and staff meetings really listening and making sure you work outside of your silo of the obvious groups to learn different things. I have used Twitter to connect with different professional groups. different conferences I have made some connections and then shared emails and have stayed in touch.

2. How do you best learn new subjects or skills? (personalize)

I am a reader and so I like to read about them , I like case studie, I like that sort of learning, I am not a video person, I hate videos. If i can read about something or talk to someone about something they have done, that's what has worked best for me.

3. How do you use digital tools to further your professional development? (connect, personalize, access)

Obviously Twitter would be a digital tool that I would use to find some resources if I needed to look something up or chase down a topic to get connected to other resources. I wouldn't say my professional development hinges on digital tools, but I would say web searches to put technology into my classroom for my kids.

4. How do you access forms of professional development that work best for you? (access, personalize)

Right now because I am in grad school I haven't gone looking for PD because that's kept me busy. Prior to that, anything that is offered in district, I tend to use and go to and utilized. A lot of that is focused on relicensure. Otherwise, MCTM the Minnesota Council of Mathematics Teachers, they have a yearly conference in Duluth, breakout sessions, keynote speakers, I have

attended that last year and the year before the NCTE conference which was amazing. If something peaks my interest through those conferences, then I tend to look for seminars on those topics.

5. When is learning the most meaningful/powerful/effective to you? (personalize)

I think when it's something I am curious about or something I need. So if I have a problem, a kid or a subject that isn't doing well or going well, or I go looking for a solution to a problem. That's extremely meaningful because then I look at myself and say I need to be better, so all in all I go looking for solutions to problems that are meaningful for me. Relevant and timely are the big pieces for me.

Interview Teacher B

1. What are some of your methods to connect with others in the field of education? (connect)

I use Twitter quite a bit and that's been very helpful. I have also been using Facebook more, it's been interesting because Facebook was the place that a lot of teachers left to go to Twitter but now it seems that they are going back to Facebook. Other resources would be I taught in a lot of different districts, so I try to stay connected with those people and resources both in person and online. In general in the buildings that I work in I make a big effort to connect with the other teachers.

2. How do you best learn new subjects or skills? (personalize)

I read a lot on the internet, I will admit I am not necessarily a big book reader, I have now made it a goal to read one book this summer that focuses on education. Otherwise I really like to read articles, blogs, different things like that online. I do like attending conferences and workshops, I like being in person with people definitely more hands-on and actually have me doing things, versus just a lecture and listening to things. I have now and have been taking classes, five graduate classes, but I wouldn't necessarily say I would be one that takes classes for credits. I like talking to other teachers too. I go to EdCamps to talk with other teachers and gain ideas and resources from them.

3. How do you use digital tools to further your professional development? (connect, personalize, access)

Twitter has been a big one for me in that it has allowed me to have conversations with teachers, educators, superintendents, and people in the field of education. Having conversations with them help me to develop, I consider it professional development even though it might not be considered formal professional development, it helps me to gain ideas and resources through the conversations I have with these people. It allows me to ask the questions I want to ask helps me become a better teacher. I have done polls on Twitter to gather information, which has been helpful. Facebook too, I have been in a couple of groups that are geared for educators and so that helps as well.

4. How do you access forms of professional development that work best for you? (access, personalize)

The Edcamps have been pretty big for me, I haven't attended a ton but enough, but over the past 4 or 5 years those definitely personalize what I am able to hear about and connect with others with the same interests and then stay connected with them. I have been able to enjoy going to TIES for the past two years and I have gotten a lot out of that as well. And taking the grad classes I have been taking has been a worthwhile experience as well. Last year, I decided to apply to present at TIES, so once I knew that I asked my district if I could also go to the other

days that were not paid for because I was not presenting, and they approved that through the district's professional development funds.

5. When is learning the most meaningful/powerful/effective to you? (personalize)

When it's something that I can picture that I can actually use as a teacher. Whether it's something I can use in my classroom or in general during my days of teaching, it has to be something that I am actually going to use. Even with learning about educational philosophies it can be challenging to learn about that because sometimes it doesn't directly connect to me personally. So the more I can see the connection between what I am doing and how it can be used the better it is for me to learn something new.

Interview Teacher C

1. What are some of your methods to connect with others in the field of education? (connect)

Talking to people, morning conversations like this, PLC time, Team Time, staff meetings. I don't ever really use my prep at school for my own stuff, I am always talking to my teaching partner, and sometimes we are off topic. I am new to Twitter and I am following a couple of really helpful chats relating to grading, so that's helpful to see what's happening out there. I am also a part of a Facebook group about grading too, surrounding teachers throwing out grades, gives me more ideas.

2. How do you best learn new subjects or skills? (personalize)

Repetition, and a personal conversation about something I am personally interested in and will help my classroom. I hate going to PD that is vague, generalized and not specific to my classroom right now. I need something that will work right now for me to try in my classroom that will help better my practice. Not big lofty ideas.

3. How do you use digital tools to further your professional development? (connect, personalize, access)

It's calling up other teachers at night to talk through ideas or plans, more personal conversations on phones. I constantly read articles on the internet and blogs, things like edutopia or follow things on Twitter, stuff that you can find on teachers-pay-teachers in which I can take and tweak to best work for me.

4. How do you access forms of professional development that work best for you? (access, personalize)

My number one motivator is the pay raise, and what's most convenient for me. So those classes which are book studies that I can earn credits for, so I did standards based grading in order to best suit me. I just am interested in something I grab a podcast or Ted Talks to get my ideas flowing, and that's free.

5. When is learning the most meaningful/powerful/effective to you? (personalize)

When I can use it on the spot, I can try this tomorrow. Even if I am not measuring it with data, I can see that they are lit up with excitement, they are engaged, something that gets the content across, it's good.

Interview Teacher D

1. What are some of your methods to connect with others in the field of education? (connect)

I connect with others a lot of times through conferences, phone calls, social outings, and now through Twitter all across the globe. So a lot of times I will do classroom exchanges where I will use Skype to take my students to another location or vice versus, the other class will come to us. Being a specialist in a building, obviously I am the only band director in the building so I

have to figure out different ways to connect with others. We go to festivals as well and things like that. Things face to face and others integrated with technology.

2. How do you best learn new subjects or skills? (personalize)

I like to give a purpose to why I am doing it and then asking myself why am I doing this and how does this connect to me. And then from there I like to break it down into a step by step basis building a foundation and then building upon that. I was actually thinking about that today because I am reading a book called “Grit”, and I am able to connect that back to going over the break on the clarinet, which is very difficult to do. So it got me thinking how do you learn something that is basically impossible to do when you first start? So breaking it down into smaller steps in order to achieve success along the way is the way I like to learn.

3. How do you use digital tools to further your professional development? (connect, personalize, access)

I currently use it more as technology to one just connect on a broader basis as an idea exchange. I also use it to track achievement my own personally. So you can go outside and just run or you can go outside and track that I did 4 miles today and 6 miles another day. So I am trying to do that with technology so I can establish a path to help me understand what I am doing. I like to always have growth, and to have that growth I have to continuously track myself. I use Evernote because it syncs with all of my devices so I can track easier. Integrating technology has allowed me to be able to track my development easier instead of just on a notepad like I used to do.

4. How do you access forms of professional development that work best for you? (access, personalize)

I think that for our, we have a bigger conference, a Minnesota Music for Educators conference, that I branch off to discover other professional development opportunities. Through our school, so like we went to the FIRST conference, which was more of a local opportunity. Professional Development a lot times I feel like is trying new things and seeing what others are doing and trying to do what they are doing in my own classroom, so through observations, I consider this another form of professional development.

5. When is learning the most meaningful/powerful/effective to you? (personalize)

Learning is I don't always see it until the end of the learning when I have seen the achievement. So once I have seen the level of success. It's meaningful and powerful when I have seen a small portion of success, which motivates me to go forward and reach another success. I also like relationships so seeing how people are achieving things together in groups, whether that's teachers or students and seeing those successes. Having a structure of a clear cut plan so I can see where I was, where I am going and where the end result will be makes it meaningful and powerful to me.

Appendix E

Interview Responses from the Facilitator:

1. What benefits do you see for educators in using a personal learning network for professional development practices?

Well I think for me I think about how I use it. So once you develop a PLN you kind of go in different stages you might just be lurking and learning and that's just the first thing I think about. It's just a place to go and get ideas. When you have different groups and hashtags and things you can start searching. They have English chats, science chats, leadership chats, and principal chats, and so you can start searching or finding really good resources. But I think the real benefit happens when you start making connections. So there's the one phase of just this huge resource to go and get ideas and so on and so forth. My use of the PLN was different when I started actually connecting and collaborating and discussing issues or topics or resources with other people and actually creating relationships with other people. Example would be in one of my classes we had a prof from Wisconsin who had teacher candidates that were just at the beginning stages of integrating technology, while I had a group of graduate students that are also at that point where they were comfortable with integrating technology and using the medium at that time was Google Hangouts to connect. So there are opportunities for me to connect with other educators in the field, opportunities for me to connect my students with other students, and experts. So I think there are different phases, but once I started creating relationships with people, that's when the benefit came in. It was like my own little PLC via a PLN. Especially for me who's a Tech Director, I am a one person, there's not really another Jen in the district. Especially those subject matters who may be the only person, there's that opportunity for them to make those connections. I also find it helpful for me to get feedback on things, so every once in awhile I might have an idea that's just started in my brain that I blog about or tweet about, just to get feedback on that and then get those ideas, come back to mine and refine.

2. What role do you see digital technology playing in the future for this district's professional development practices?

So I see it as always increasing, I think as technology changes so do platforms and mediums. I love the idea that a PLN is usually self-directed. Would I love it if every teacher in our district had a PLN and were you know going after ideas themselves, versus however other method, however not everybody is super excited about social media and that kind of thing. I do see it increasing even as I look at Pinterest for instance, it's something you can kind of blend your personal interests and your school interests. So I just look at myself and I have a Pinterest account and have multiple pins on house plants, but I also have multiple pins of pedagogy and technology so I can see different mediums suiting the skill sets of different educators. You know I love the idea of creating videos and sharing the insights of your classroom like the things you guys do, you know you did a Fishbowl activity but you recorded it so someone could almost be inside your classroom. Peer feedback and peer instruction I think increases, but as a district we have done some things to help with that. Some of our principals have chosen their own platform to be responsible for like the Middle School has chosen Twitter, we have them embedded on our websites, but it's slow moving. I wish I could see more growth in that area, like I said it's that idea of being self-directed, I think if we focus on that and say here are some avenues: a, b, or c that could be a possibility.

3. How do you inspire others to connect in order to further their professional development practices?

Well, I do some things for instance. Example, I was in a classroom observing some cool activity or lesson, so I took a video or a picture and said I am going to tweet this out and later that day or week, the educator I saw actually got on Twitter and followed me. So finding ways to promote the cool things our teachers are doing and then let them know by the way I am going to tweet this out I think is a good way. I have also had some good experiences at an Edcamp, where a person from another district was just talking about things, was a lurker on Twitter, but not really using it for her own social learning, and we did something as simple as taking a selfie, and asked her why aren't you doing it? And just having that question and now I look at that person on Twitter and it's amazing what she's doing she's doing a lot of her own leading in her own district through Social Media. I wish I had a step one a step two and a step three, but it's really about finding those opportunities to highlight what our educators are doing, giving practice, I think it's important to continuously give practice, other than that it's really about the PLN, personal learning network, needs to be personal, I do believe, thinking about the diffusion of innovation, more people get connected you will see more people get connected. There hasn't been any huge outreach, but the big thing we did this year was getting the digital platform for principals to share and I think that's been really successful and a great model for other districts to use.

4. What are some challenges you see facing educators in using digital means for professional development?

I would say the biggest challenge would be the time it would take if you're not focused. You can just get lost for hours looking at stuff. You really need some time management skills, for those that are new, I can see for some people I could see they might want to have some coaching available, you know having a buddy, or having that help or support available so they get more confident in using Twitter or Social Media. For sure the time challenge of when to turn it on when to shut it off, how to filter through things, you know when you follow a couple thousand people, your account is just going off the wall, how do you manage it all? Strategies around that would be important. You know having that mindset, there's a lot of mindset that Twitter is just a kid's tool or a useless tool and so finding opportunities to challenge those mindsets and showcase where it can be a great learning tool. Just that continuous coming back to finding ways to connect others, helping those that are a little more reserved.

5. What role do you see the district taking when it comes to digital professional development practices?

I think we have done some things already, not necessarily in the PLN, we have done Twitter chats, I think that's helpful, I would love to see that on a more regular basis, because I have had so much good feedback on those Twitter Chats. Especially that cross curricular or cross building connections. You are talking about something educationally, it doesn't necessarily have to be specific, and like classroom management is classroom management from high school to elementary school. I would love to see definitely some more of those chats its finding the opportunity to lead those chats, and who leads the chats. Is it building principals and tech directors, or is there another avenue because teachers leading teachers is always great. One thing I would really like to figure out is how CEU's can be offered for participation because right now they are not, any kind of carrot to draw people in would be beneficial, and then using and practicing the tool would be awesome. But right now it's not possible according to our continuing ed committee has kind of not permitted that at this point, but I do think there's value

in that. There's other opportunities for other social media like Google Hangouts, I haven't really thought about other opportunities for this year as a district, because this year it has been beneficial to get our principals connected and getting our new website up and running. I really do need to think of more outreach kinds of things, and not that extrinsic motivators are important but they do bring people to the table.

Appendix F

Survey Results: Questions 11 and 12

4/7/2017

Teacher Survey - Google Forms

Twitter

Twitter

Twitter

2

2

4

4

None

None

1

I listen to pod casts, webinars from my national organization, web sites, I have a twitter account but have not been using this effectively yet. Still love face to face with my co-workers, or email with teachers from other districts.

Twitter.

What suggestions do you have to spice up professional development for educators in Byron Public Schools?

(43 responses)

1

1

4

4

None

None

2

Allow us time to do our own professional development. Time to do a book study or participate in a webinar. Our Byron staff development is good but many times does not touch on important items for all teachers.

Get us up and moving around!

Integration between departments.

I'd like us to use the Friday PD differently sometimes... perhaps to have some spontaneous (unplanned) time and various people to share from within teacher teams.