A PHENOMENOLOGICAL STUDY OF 21-29-YEAR-OLD TEACHERS' PERCEPTIONS OF

USING TWITTER FOR PROFESSIONAL DEVELOPMENT

by

John Woodring

Liberty University

A Dissertation Presented in Partial Fulfillment

Of the Requirements for the Degree

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APPROVED BY:

Jerry Woodbridge, Ph.D., Committee Chair

Randell Dunn, Ed.D., Committee Member

Christopher Craft, Ph.D., Committee Member

ABSTRACT

This transcendental phenomenological study explored the perception of 21-29-year-old public school teachers' use of Twitter in their professional development. However, while teachers in the 21-29-year-old age range were part of the demographic dominating online social media use in general, they did not use online social networks for professional development purposes as much as their older peers (Carpenter & Krutka, 2014; Visser et al., 2014). While professional development was important for improving teachers' classroom performance and student achievement (Coldwell, 2017), traditional professional development often was ineffective in changing classroom instruction (Carpenter & Krutka, 2014; Dingle, Brownwell, Leko, Boardman, & Haager, 2011; Harcourt & Jones, 2016; Visser, Evering, & Barrett, 2014). Also, lack of relative professional development was cited as a reason teachers leave the profession within a few years of joining (Barry & Shields, 2017). Using Twitter for professional development was used by older teachers effectively, but younger teachers did not use it for potentially helpful professional development (Carpenter & Krutka, 2014; Visser et al., 2014). The theoretical frameworks of this study include sociocultural learning (Vygotsky, 1978), social networking theory (Moreno, 1946), and communities of practice (Lave & Wenger, 1991). Participants selected were six licensed K-12 public school teachers aged 21-29. The setting was a South Carolina suburban public middle school. Data collection methods included interviews, focus groups, and observation of Twitter use after participation in a professional development session on using Twitter in education. Data analysis included horizonalization, reduction and elimination, clustering, and thematizing recommended by Moustakas (1994) to develop themes to understand how teachers age 21-29 perceive using online social networks for professional development.

Keywords: Professional development, social networking, online social networks, Twitter, personal learning networks, professional learning communities.

Dedication

This dissertation is dedicated to the glory of God who gave me the talent to undertake this research study. In addition, I wish to dedicate this the students who will ultimately benefit from better education through the information in this dissertation.

Acknowledgements

First, I want to thank God for giving me the talent to complete this undertaking so I may do his will. Second, I would like to thank my wife, Priscilla, and my son, Drew, for their unwavering support during this process. Third, I would like to thank Dr. Derrick Rhodes for his inspiration and support for starting this educational journey. Fourth, I would like to thank Dr. Beth Bournias and Dr. Kathy Corley for being my unofficial mentors during this process. Their willingness to provide advice and to quickly answer my questions were an invaluable help during this process. And fifth, I would like to thank the research participants who gave up their time freely to not only help me but also education in general. Finally, I would like to thank the many administrators, teachers, and friends who cheered me on and kept me going when things got tough. A special thanks goes out to Leslie Natoli, Faris Feuers, Emily Rietveld, and Pamela Maddox for being my biggest cheerleaders.

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List of Abbreviations

\# - Hashtag

COP – Community of Practice

K-12 – Kindergarten through 12th Grade

OSN – Online Social Network

PD – Professional Development

PLC – Professional Learning Community

Web – World Wide Web

ZPD – Zone of Proximal Development

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CHAPTER ONE: INTRODUCTION

Overview

Good professional development is key to improving classroom practices that help raise student achievement (Desemione, 2009). However, traditional methods of professional development are ineffective in changing classroom practices (Dingle, Brownell, Leko, Boardman, & Haager, 2011; Rowan & Townsend, 2016). Teachers turn to online social networks (OSN), such as Twitter, for informal professional development as an alternative to flawed traditional professional development (Visser, Evering, & Barrett, 2014). While 18-29-year-olds dominate overall OSN usage, teachers 30-49 years old comprise the largest group using online social networks for professional development (Carpenter & Krutka, 2014; Visser et al., 2014). Surprisingly, teachers in the 18-29 age group are among the least likely to use OSN for professional development (Carpenter & Krutka, 2014; Visser et al., 2014).

The focus of this transcendental phenomenological study is the perceptions teachers, age 21-29, have about using Twitter for professional development. Moustakas (1994) posits a transcendental phenomenological research method obtains a textural description of the meaning and essence of a phenomenon, as experienced by individuals participating in the phenomenon, from the viewpoint of the researcher, who attempts to put aside one's beliefs on the phenomenon.

This chapter introduces the research study including background, the purpose statement, problem statement, significance of the study, research plan, and research questions. This chapter also grounds the study to existing research by providing an overview of relevant literature.

Background

Theoretical

Professional development is the "process and activities designed to enhance the professional knowledge, skills, and attitudes of educators so that they might, in turn, improve the learning of students. In some cases, it also involves learning how to redesign educational structures and cultures" (Finn, Swezey, & Warren, 2010, p.p. 7-8). Another way of looking at professional development is to promote activities that help teachers develop and become better educators (Coldwell, 2017). Professional development ranges from formal in-service seminars to informal teachers' hallway discussions (Coldwell, 2017; Desimone, 2009; Mackay, 2015). Traditional professional development offerings include workshops, attending seminars or conferences, taking classes, reading professional publications, participating in communities of practice, or involvement in train-the-trainer sessions (Finn et al., 2010; Harcourt & Jones, 2016). Good professional development is critical to help teachers improve instructional practices and an essential piece of education reform (Desimone, 2009; Coldwell, 2017). Teachers' values and aspirations to advance their classroom skills should motivate their professional development (Harcourt & Jones, 2016). Finally, Every Student Succeeds Act requires educators to use evidence-based interventions and practices to increase student achievement (Sharp, 2016).

Research-based professional development is necessary to improve teacher quality and increase student achievement. Elements of effective professional development principles incorporate clearly defined goals and outcomes, has administrator support, is sufficiently funded, promotes engaging and active learning, focuses on specific topics, offers networking opportunities, provides follow-up sessions lasting several months or even years based on

participants' interests, beliefs, and needs, and uses facilitators and resources outside of the school or district (Finn et al., 2010; Harcourt & Jones, 2016).

Historical

While research explains required elements of effective professional development, most traditional professional development is ineffective in changing classroom behavior (Carpenter & Krutka, 2014; Dingle et al., 2011; Harcourt & Jones, 2016; Visser et al., 2014). One-shot professional development affairs lasting one half to a whole day often leave teachers unable to engage in discussions about making effective changes or provide time to reflect on what they have learned (Dingle et al., 2011; Harcourt & Jones, 2016). Teachers need anywhere from a full semester with 20 contact hours to a full year for effective classroom instruction changes to be meaningful (Desimone, 2009; Dingle et al, 2011). It is impractical for a school or district administrator to dictate professional development procedures yet not give opportunities follow-up discussions or clarification (Visser et al., 2014). Gaps between current practice and targeted reforms develop when administrators, relying on top-down approaches, are disconnected from how teachers learned and develop (Harcourt & Jones, 2016; Pitsoe & Maila, 2012) and, therefore, fail to recognize teachers' needs in improving classroom instruction. These gaps between practice and targeted reforms prevent assimilation of new practices, pushing teachers back into previous bad instructional habits (Penuel, Sun, Frank, & Gallagher, 2012). Another problem with providing effective professional development is the costs. Limited budgets in poor areas, rural locations, and private schools make providing effective professional development difficult (Finn et al., 2010). Many teachers overcome these professional development deficiencies by turning to OSNs, such as Twitter, to fill gaps in professional knowledge (Carpenter & Krutka, 2014; Visser et al., 2014).

Social

Insufficient professional development is one reason teachers leave the education

profession (Barry & Shields, 2017). The United States faced a critical teacher shortage in 2016

because not enough young people entered the profession to balance the number of teachers who

left (Barry & Shields, 2017; Yaffe, 2016; Zhang & Zeller, 2016). Also, young people who enter

the education profession quickly leave. An estimated 40% to 50% of teachers leave the

profession within the first five years (Zhang & Zeller, 2016), therefore, providing essential

professional development to help new teachers should encourage them to stay in the profession

(Yaffe, 2016). However, younger teachers do not use their familiarity with OSNs to seek unique

professional development support to meet the challenges inexperienced teachers face (Krutka,

2014; Visser, et al., 2014).

Situation to Self

I have integrated technology into lessons and helped other teachers do the same during

my career as classroom teacher and technology coach. Integrating technology was one way to

prepare students for success in a more technology-based world. Also, using online social

networks or online learning management systems were important as hybrid and online courses

became more popular. Not only did technology benefit students, but teachers also improved by

sharing digitally new classroom techniques. Teachers met online to discuss their common

problems and worked together to create solutions to those problems. One group who may benefit

from interacting online with experienced teachers and experts are less-experienced teachers.

The philosophical assumption is ontological (Creswell, 2013) because multiple

participants share how they use online social networks for professional development (Moustakas,

1994). I also incorporate a postpostivist paradigm into my study. Creswell (2013) describes

postpostivist research as "a series of logistically related steps, believe in multiple perspectives from participants rather than a single reality, and espouse rigorous methods of qualitative data collection and analysis" (p. 24). Moustakas (1994) states transcendental phenomenology "emphasizes subjectivity and discovery of the essences of experiences and provides a systematic and disciplined methodology for derivation of knowledge" (p. 45). Moustakas (1994) cites several methods of data collection and analysis for phenomenological studies, including a modification of the Stevick-Colaizzi-Keen method, used in this study. My background as a teacher and technology coach shape my interpretations of participants' views (Moustakas, 1994). My motivation is to understand how younger teachers perceives using Twitter for professional development as a means of enhancing their pedagogy.

Problem Statement

The problem is that traditional professional development practices do not meet the needs of teachers 21-29 years old because it does not address issues facing new teachers. Using Twitter to connect experienced education professionals to new teachers addresses new teachers' needs by providing quick access to relevant pedagogical information crucial to helping new teachers succeed in the classroom. Teacher development and training are crucial to improving teacher and school quality along with retaining teachers (Barry & Shields, 2017; Desimone, 2009); however, professional development traditionally given in half-day to full-day one-shot sessions has little to no impact on improving classroom practices (Dingle et al., 2011; Harcourt & Jones, 2016). Therefore, teachers bypass traditional professional development by engaging other educational professionals through online social networks seeking information and ideas beneficial to improving classroom instruction (Visser et al., 2014). Using online social networks, such as Twitter, is a way for teachers to take charge of their own professional development (Cho, 2016;

Forte, Humphreys, & Park, 2012) as teachers build personal learning networks (PLN) for informal connections used in learning, collaboration, and knowledge sharing (Beach, 2012; Visser et al., 2014). Carpenter and Krutka (2014) along with Visser et al., (2014) observed teachers 21-29 years old are among the least likely to use online social networks for professional development, which contradicts age demographics of all online social network users and thus provides the foundation for this study. Visser et al. (2014) noted only 15% of participants 21-30 years old used Twitter for educational purposes compared to 37% 31-40 years old and 29% age 41 to 50 years old. It is puzzling that teachers who are comfortable using technology in other aspects of their lives (DuFour & Reason, 2016) are not using Twitter or other online social networks for professional development. While younger teachers dominate online social networks (Perrin, 2015), it is surprising to find lower participation among younger teachers using online social networks for professional development when compared to their more experienced colleagues (Carpenter & Krutka, 2014). One possible reason is policies restricting the use of Twitter at school (Carpenter & Krutka, 2014) because teachers who blend personal and professional Twitter use run the risk of posting inappropriate material (Visser et al., 2014). Visser et al. (2014) offered this challenge:

> Further research on young teachers may shed light on if they use or view social
> media differently than other age groups, whether they feel too overwhelmed with
> their workload to engage in PLN development, or whether their teacher
> preparation programs are adequately preparing them to develop PLNs and seek
> PD through social media sites, such as Twitter. (pp. 410-411)

Purpose Statement

The purpose of this transcendental phenomenological study is to understand the central phenomenon of the study for 21-29-year-old public school teachers' perceptions of Twitter used for professional development. Twitter for professional development is generally defined as using Twitter to connect with other education professionals to exchange education-related information, ideas, and resources for the purpose of improving classroom instruction. The theories that guide this study include Vygotsky's (1978) social learning theory, Moreno's sociometry/social networking theory (1946; Borgatti & Ofem, 2010; Daly 2010), and Lave & Wenger's (1991) communities of practice theory. These theories establish learning as a social activity where participants of lesser knowledge and experience interact with and learn from participants of greater knowledge and experience in established groups of shared interests (Vygotsky, 1978; Moreno, 1946, Borgatti & Ofem, 2010; Daly, 2010; Lave & Wenger, 1991).

Significance of the Study

Rarely do independent school or schools in rural areas have the financial resources to provide quality professional development for their teachers (Finn et al., 2010). Also, distances between other rural or independent schools make it difficult for teachers to connect, collaborate (Carpenter & Krutka, 2014), and share best practices leading to better student achievement. Teachers, schools, and school districts could use Twitter, because it is free (Cho, 2015) to use and has no limitations on distance between users (Carpenter & Krutka, 2014).

There are concerns regarding educational uses of Twitter. First, there is always the threat of cyberbullying among K-12 students using online social networks (Visser et al., 2014). Second, there are concerns about educators blurring professional and personal lines when using online

social networks where inappropriate material may have been posted (Visser et al., 2014). Many school districts forbid Twitter use because of these possibilities (Carpenter & Krutka, 2014).

Along with easing budget and distance restrictions, training classroom teachers and administrators seeking personalized professional development is beneficial because they knew what they need to help improve their performance (Visser et al., 2014). One way of encouraging this practice is providing teacher licenses or other educator credential renewal credits when using online social networks for professional development (Carpenter & Krutka, 2014; Visser et al., 2014). However, more empirical evidence is needed linking Twitter professional development to improved classroom practices and student achievement (Visser et al., 2014).

Equipping teachers to use Twitter in seeking better professional development for classroom instruction improvement increases job satisfaction that encourages younger teachers to stay in the education profession (Coldwell, 2017; Mackay, 2017; Sass, Flores, Claeys, & Perez, 2012). An estimated 54% of new teachers in the United States leave the teaching profession within five years (Gray & Taie, 2015). Connecting young teachers to expert educators online as a means of providing guidance could have eased retention problems faced by both public and independent schools.

As younger teachers interact online with more experienced teachers, relationships are built that provide encouragement to struggling, less experienced teachers. Teachers using online social networks believe them to be inspirational as they interact with their network of other educators (Forte, et al., 2012). Educators using Twitter find it to be superior to traditional professional development because it is personal and immediate (Carpenter & Krutka, 2014). Twitter was a constant source of information for teachers engaged within their networks (Forte, et al., 2012). Because Twitter relationships provide newer teachers the information they need,

they are willing to engage with their networks more often (Carpenter & Krutka, 2014). These connections are more secure as teachers use Twitter to build their own social capital, to build expertise one brings to a social network, and to connect with teachers with higher social capital (Forte, et al., 2012). Accessing educational articles increase as Twitter members share them with their networks (Veletsianos & Kimmons, 2016).

Connecting teachers with colleagues and experts with similar interests in teaching provide opportunities for online social network developers and online learning management systems to increase their businesses. Information from this study will be useful in understanding potential market demographics of online social network users. Highlighting the potential for providing quality professional development will attract new users of various online social networks, while retaining current users of these online social networks. Connecting teachers with one another online increases use on Twitter, a business dependent on advertising to generate revenue and continue providing their services for free.

Research Questions

Central Question

How did teachers 21-29 years old perceive using Twitter for professional development purposes? Both Carpenter and Krutka (2014) and Visser et al. (2014) found in their study of teachers who used Twitter for professional development purposes the smallest group was teachers 21-30 years old even though a Pew Research Center (Duggan & Smith, 2014) report showed this demographic was the largest group of online social network users.

Sub Questions

1. How do teachers 21-29 years old describe their purposes for using OSNs?

According to Duggan and Smith (2014) teachers 21-29 years old were part of the largest user demographic of OSNs. This question seeks to understand what online activities teachers 21-29 years old participate in if they are not seeking needed professional development (Carpenter & Krutka, 2014; Visser et al., 2014).

2. What perceptions do teachers 21-29 years old have about the usefulness of professional development? Research suggests most professional development does not meet the needs of teachers (Desimone, 2009, Dingle et al., 2011, Finn et al., 2010). Also, a lack of professional development meeting the needs of younger teachers is one of the main reasons teachers leave the education profession after a few years (Barry & Shields, 2017; Sass et al., 2012).

3. What perceptions do teachers 21-29 years old have about the possibility of using Twitter to build personal learning communities for professional development? While older, more experienced teachers found using OSNs beneficial for professional development, younger teachers were not using Twitter or other online social networks for the same purpose as their older peers (Carpenter & Krutka, 2014; Defise, 2013; Tseng & Kuo, 2014; Visser et al., 2014).

Definitions

1. *Professional Development* – A means of improving teachers' skills keeping them updated on current teaching techniques to improve their effectiveness and increase student achievement (Desimone, 2009; Fin et al., 2010; Tseng & Kuo, 2014).

2. *Professional Learning Communities* – A group of practitioners making collaborating and sharing resources to build a consensus in a never-ending process to solve problems and

achieve better results for students (DuFour, DuFour, Eaker, & Many, 2010; Trust, 2012; Trust 2015).

3. *Perception* – Informing ourselves by gaining knowledge through sensation and understanding unique experiences (Byrne, 2014; Hyman, 1992; Sienkiewicz, 2013).

4. *Online Social Networks* – Online communities where users share content, ideas, and other items with users having similar interests (Huff, 2013; Singh, 2013).

5. *Twitter* – A communication service allowing users to connect publicly through messages called Tweets containing photos, videos, links, and text messages up to 140 characters in length posted on individuals' profiles or sent to followers (Twitter, n.d.).

Summary

This chapter presents background information about the proposed research study and identifies a gap in the existing literature. A discussion of the background in understanding how teachers age 21-29 perceive online social networks along the problem statement, a purpose statement, and research questions is included. Chapter Two outlines the literature review underpinning the proposed research study including empirical evidence along with the theoretical basis of the proposed study. Chapter Three provides the methods proposed for selecting participants, collecting data, and analyzing data. Chapter Four presents an analysis of the information based on research findings. Finally, Chapter Five provides a summation of this study.

CHAPTER TWO: LITERATURE REVIEW

Overview

This chapter provides a theoretical framework for this study along with a review of relevant literature pertaining to young teachers' age 21-29 perceptions of using online social networks for professional development. Three theories about social learning grounds this study. The first theory is Vygotsky's (1978) sociocultural theory explaining how social interactions influence learners. Another theoretical framework is social networking theory (Borgatti & Ofem, 2010; Moreno, 1946) where individuals with similar interests gather together to bring their levels of expertise to exchange with each other. Finally, Lave and Wenger's (1991) communities of practice establish how social groups can be a powerful tool in professional development as groups form a society based on specific interests or needs and how different levels of the group learn from each other. The relevant literature starts with a discussion of perception to understand how teachers view using online social networks through their own unique lens. Next, an explanation is provided on the importance of teacher professional development and the failure of professional development to change instructional practices in the classroom. The relevant literature also explains how Twitter helps teachers exchange ideas and practices and how this has moved online as teachers expand their networks beyond the confines of the school (Carpenter & Krutka, 2014; Visser et al., 2014).

Theoretical Framework

This section provides the theoretical framework of this study based on three learning theories. The first theory is Vygotsky's (1978) sociocultural learning theory. The second theory is Moreno's (1946) social networking theory. The third framework is Lave and Wegner's (1991) communities of practice.

Vygotsky Sociocultural Learning

Vygotsky (1978) believed people learn in the context of social interactions through collaboration with other people, objects, and events. The sociocultural theory reaffirms Vygotsky's belief that cognition occurs through social interactions with people, objects, and events (Wang, Bruce, & Hughes, 2011). Johnson (2009) believes separation of cognitive development from social, cultural, and historical context is possible (Wang, et al., 2011). According to Bozhovich (as cited by Freeman, 2010) Vygotsky believed learners' development is dependent on a nurturing environment. Vygotsky (1978) explained learners' development occurs first interpsychological as social interactions influence learners' experiences then develops intrapsychological as learners internalize what they learn. This transfer of development from the work of the learner to embed inside the learner could take a considerable amount of time (Vygotsky, 1978). Collaboration between individuals when making decisions and formulating strategies is key to sociocultural learning (Cicconi, 2014).

One concept of learner development in social situations is what Vygotsky (1998) termed the zone of proximal development (ZPD). According to one translation of Vygotsky (2012), ZPD was "the discrepancy between a child's actual mental age and the level he reaches in solving problems with assistance indicates the zone of his proximal development…" (p. 198). Another translation of Vygotsky (1978) explains ZPD as the distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers" (p. 95). Lave and Wenger (1991) identifies three categories of interpretations of the zone of proximal development. The scaffolding interpretation explains ZPD as the distance between the ability to independently solve problems and solving problems with the assistance of more

experienced people (Lave & Wenger, 1991). ZPD focuses on learning using interactions with

other learners or teachers (Murphy, Scantlebury, & Milne, 2015). Another interpretation explains

ZPD as the distance between cultural knowledge from instruction and lessons learned from

everyday experiences (Lave & Wenger, 1991). The collectivist or societal perspective explains

ZPD as the distance between everyday actions and new forms of societal activities (Lave &

Wenger, 1991). These ZPD interpretations show gaps between what leaners can do on their own

and what they actually do with the assistance of knowledgeable others (Vygotsky, 1978) in

different learner settings. Understanding actual and potential development is important to

understanding how individuals develop and learn (Wang et al., 2011). People with more

knowledge or better understanding of a concept than learners (Vygotsky, 1978) is key in the ZPD

(Cicconi, 2014). Gredler and Shields (2008) believe ZPD is a cognitive mental process of

learners collaborating with teachers or more advanced peers to solve problems. Gredler (2011)

also believes assessments are important in determining a learner's ZPD. There are four ways to

determine ZPD: a) see if a learner can imitate the steps a teacher uses to solve a problem, b) the

teacher begins to solve a problem then gives the learner a chance to finish solving the problem,

c) have the learner cooperate with a learner with a higher IQ, and d) other methods such as

asking leading questions, problem analysis with the learner, or explaining principals used in

solving a problem (Gredler, 2011). Learning in the ZPD is the optimal time for teaching because

Vygotsky believed instruction could move ahead of development (Gredler & Shields, 2008). The

best learning occurs when the learner is near the next stage of development (Murphy et al.,

2015).

There are criticisms regarding the concept of ZPD being the distance between what

learners can do on their own and what they can do with assistance of another, more

knowledgeable person as written by Vygotsky (1978). First, Gredler (2011) asserts the editors of Vygotsky's (1978) *Mind in Society* misinterpreted the ZPD. Gredler (2011) charges Vygotsky's (1978) editors of taking "significant liberties" (114) with Vygotsky's work. Cole, John-Steiner, Scribner, and Souberman (1978) admitted to taking "significant liberties" (p. 7) but defended their actions because of difficulties understanding Vygotsky's (1998) original writing style and, they "hope …we have not distorted Vygotsky's meaning" (p. 8). Gredler (2011) acknowledges difficulties translating Vygotsky's writings years after his death along with the number of years between publication of translated volumes of Vygotsky's collected work, and difficulty understanding Vygotsky's definitions. Another issue Gredler (2011) has with Vygotsky (1978) is how Cole et al., (1978) raises ZPD to a major topic yet ZPD appears in only 15 pages of Vygotsky's multivolume collected work. Other inaccuracies Gredler (2011) notes about Vygotsky (1978) is problem solving with more knowledgeable peers determining ZPD and developmental processes awakening when learners interact with others in their environments and cooperate with their peers. According to Gredler (2011), other translations of Vygotsky's work do not include these statements. However, Sannino and Sutter (2011) claim the Soviet Union under dictator Joseph Stalin made it impossible for intellectuals, such as Vygotsky, to fully develop and publish their theories because of fear of reprisals. These fears of reprisals forced Vygotsky to never finish his work in the years before his death, which is, why Vygotsky's writings are difficult to interpret (Gredler, 2009).

The assumption is new teachers have a basic set of pedagogical and content knowledge when they transition from pre-service to in-service. Basic teacher knowledge includes the history of education, educational psychology, pedagogical theories, teaching methodology, practicum experience, along with basic content knowledge (Liu, Miller, & Jahng, 2016). However,

professional change occurs when the contributing factors of teachers' internal knowledge and outside factors, such as school and community, contribute to this change (Shabani, 2010). Blanton, Westbrook, and Carter (2005) believe a teacher's ZPD is between one's present level of content and pedagogical knowledge and the next level of this knowledge achieved with the help of other teachers and administrators (Shabani, 2010). Teachers should have continuous motivation to advance their ZPD levels in their professional teaching careers (Shabani, 2010).

However, Liu, et al. (2016) notes preservice programs are under pressure to cut the required time to complete degrees (Liu, et al., 2016). Teachers expand their knowledge of pedagogy and content during their career through in-service professional development offerings from more knowledgeable professionals (Liu, et al., 2016). The preservice skillset is what new teachers can do without any assistance. When new teachers work with more experienced teachers during in-service collaborative activities, classes, workshops, and other PD methods it is the other end of their ZPD (Liu, et al., 2016). Murphy et al (2015) believes ZPD facilitates meaningful thinking as teachers collaborate in planning, teaching, and reflecting. Moll (1990) asserts instruction should be targeted towards learners' ZPDs or targeting future development versus yesterday's development (Shabani, 2010).

Social Networking Theory

Another theoretical framework that explains the importance of social learning is Moreno's (1946) philosophy of human interrelations known as sociometry. Individuals who are conscious of having social preferences and sociometry primarily discover individuals' needs for personal social companionship and fulfillment (Northway, 1967). When a group of girls ran away, Moreno noticed social links with each other allowed information exchange precipitating when and to where the girls ran away (Borgotti & Ofem, 2010). Moreno (1946) explains (a)

humans are either attracted to or repelled by people they meet and are indifferent towards all other people; (b) humans use spontaneity to respond to various situations; (c) people need other people's help to achieve set goals or objectives sociometrists call criteria; (d) relationship patterns based on different environments emerge when people's contacts are examined; (e) psychosocial networks are formed from people's chain formations in given communities where opinions and suggestions are communicated to other members of the community.

After outlining why people create networks, Moreno (1960 b) further explains social currents run through and shape networks. The basis of networks is the spontaneous encounters between individuals sharing common interests or experiences. Moreno (1960 a) calls this the "begegnung", a German term meaning encounter. Begegnung is the most intense level of communication, and individuals continue communicating with each other because they want to keep communicating with each other (Moreno, 1960 a). Demonstrating expertise on paths of their own choosing are why people join networks (Moreno, 1960 a).

Moreno and Jennings (1960) describe network theory as extending chains of relations by interpersonal choice when people connect with others. This building of connections is a process of growth as social organizations mature and differentiate (Moreno & Jennings, 1960). Social aggregates form around different criteria making a chain of relations as other social aggregates cross boundaries creating a larger configuration called a psychological network (Moreno & Jennings, 1960). Chain-relations between different social aggregates develop and stimulate networks (Moreno & Jennings, 1960).

Over time, Moreno's (1946) sociometry theory morphed into another means of social learning called social network theory. Borgatti & Ofem (2010) state social networking theory examines how different people, or actors, interact in different situations. Daly (2010) explaines,

"The foundation of social network theory is the primacy of the relationship and that the ties one has in a network determine the resources to which one has access" (p. 259). Networks consist of a set of actors tied together for a single reason are the central focus of the theory (Borgatti & Ofem, 2010). Groups of actors can be any entity having some relationship with other actors such as persons, teams, departments, industries, or other organizations (Borgatti & Ofem, 2010). Friendships, communications between groups, alliances between groups with similar interests, industrial communications, or conflicting viewpoints may tie individuals to various social networks (Borgatti & Ofem, 2010). Moolenar (2012) states three assumptions characterize social networks: (a) exchanging resources, such as knowledge and information, among individuals as they interact in a social network; (b) individuals are interdependent in their social structures as opposed to being independent; and (c) social networks may help or hurt individuals or organizations.

   Coburn, Choi, and Mata (2010) asserted

      … social networks are an emergent phenomenon. They form as individuals opt

      into relationships with one another, creating ties. As individuals enter into

      relationships and, as those with whom they have relationships form ties with

      others, a social network takes shape. (p. 34)

Formation of ties between networking individuals sharing common interests, or homophily, is more often found than those with different interests (Coburn, et al., 2010). Another reason bonds form between people is proximity or the physical distance between individuals, such as coworkers who overlap and discuss matters in the workplace (Coburn, et al, 2010). Online social networks use communication technologies to allow people to form network ties over greater distances. Finally, Coburn, et al., (2010) explain people seek information from individuals

thought to have a certain expertise. A person must know the other person has expertise in a subject or topic, value the knowledge that person has, and can communicate with this person for this tie to happen (Coburn, et al., 2010). There are two types of networks. The first type of network is expressive networks based on non-work-relationships and are social and friendship-based which may arise between individuals in an organization (Cole & Weinbaum, 2010; Moolenaar & Sleegers, 2010). The other type of network is instrumental networks created for professional reasons because individuals seek information needed to complete work-related tasks (Cole & Weinbaum, 2010; Moolenar & Sleegers, 2010).

After defining networks, network theory studies ascertain the functions of network properties as the consequences of network structure (Borgatti & Ofem, 2010). Theorizing takes place at three different levels: (a) the dyad or properties of actors, (b) the node that characterizes how and where nodes connect with networks, and (c) the group that include the whole network (Borgatti & Ofem, 2010). Based on these levels, Borgatti & Ofem (2010) list six types of network research: partner selection, contagion/diffusion, positional achievement, individual social capital, network structuring, and group social capital.

This study focuses on both individual social capital and group social capital. Successful groups find information from both external and internal sources to improve and learn new ways of operating. (Daly, 2010). Bourdieu (1986) explains social capital as "the aggregate of the actual or potential resources linked to possession of a durable network of more or less institutionalized relationships of mutual acquaintance or recognition" (Ranieri, Stefania, & Fini, 2012, p. 757). Social capital is beneficial when organizations use it to cooperate in coordinating activities as individuals gain information or build and manage various relationships (Ranier, et al., 2012). Because schools must invest heavily on training, social capital uses systemic social

relationships to access needed resources (Daly, 2010).

While social capital is the shared resources of networks, there are two types of social capital, bridging and bonding. Bridging occurs when individuals exchange valuable information with casual acquaintances in a network while bonding occurs when family or close friends help individuals (Ranieri, et al., 2012). While emotional social capital may develop between networked educators as they continuously interact over time, bridging social capital helps teachers use social networks to improve classroom practices. Individual actors share their talents or qualities, known as social capital, for the betterment of the group. Actors with greater amounts of talents or qualities to share have higher social capital, while those with lesser talents or qualities to share have lower social capital (Borgatti & Ofem, 2010). Actors' willingness to share and cooperate with the group reflect the group's ability to benefit its members in meeting shared objectives (Tseng & Kun, 2014). Therefore, teachers sharing classroom practices or answering questions posed by other members of the same online social network possess higher social capital. Teachers whose interactions with their online social network groups consist of only asking questions or observing the interactions of other members while contributing little to the group have lower social capital (Kadushin, 2012). The more central teachers are to a network, there is more access to resources and information as well as control over how this information and resource flow to others (Moolenar, 2012).

Making relationships around expertise supports an exchange of knowledge at deeper levels, but an intentional and formal approach to making connections to expertise is necessary (Daly, 2010). Learning is a social activity when individuals connect with one another to exchange ideas or information (Pettenati & Cigognini, 2007). This leads to the formation of connectivism, which is a learning theory based on using networking technologies and how learning occurs in a digital

world (Pettenati & Cigognini, 2007). According to Siemans (2004) "Connectivism is the assertion that learning is primarily a network forming process" (Pettenati & Cigonini, 2007, p. 45). The following are principles characterizing connectivism: (a) different opinions provide the best approach to learning, (b) learning is the connection of different opinions from different sources, (c) knowledge resides in the networks that may be in technology-based applications, (d) the ability to learn more is more important than what is known, (e) learning is a constant process that never ends, (f) making connections and recognizing patterns is a critical skill, (g) connectivist learning requires having accurate and updated information, and (h) individuals must choose what to learn based on shifting realities affecting information (Pettenati and Cigonini, 2007).

Teachers can only benefit when useful resources are accessible while unwanted or non-helpful resources limit teachers' ability to improve (Moolenar, 2012). It is important for new teachers to seek out and form relationships based on expertise to learn good instructional techniques that add value to their impact on student achievement (Daly, 2010).

Communities of Practice

According to Wenger (1998) the third theory of social learning, communities of practice (COP), is where people learn their practice by supporting and sharing what they know in group settings, such as online social networks (Trust & Horrocks, 2016). COPs are places for members to share and reflect on new information based on members' needs while taking responsibility for sharing information and participating in problem solving (Yang, 2009). Lave and Wenger (1991) formulated what they term situational learning based on observing different experts teaching learners a profession by giving the learners tasks to master. Machles, Bonkemeyer, & McMichael (2010) claim most things humans learn come from observations and interactions

called situational learning. Sometimes experts in the field teach the learners everything while at other times learners receive basic classroom instruction before going to experts to practice and expand their knowledge (Lave & Wenger, 1991). Another way of looking at situational learning is the master-apprentice method of vocational training. While new teachers basically understand their role as teachers, they receive mentoring in needed classroom skills by school administrators and experienced teachers after graduating from pre-service programs.

Because COPs are a form of hierarchal social learning, experts within the group often set the standards novices must master before moving on to new levels or individual practice (Lave & Wenger, 1991). The goals of each COP are helping members develop their voice, agency, and professional expertise (Lui, et al., 2016). Johnson (as cited in Trust & Horrocks, 2016) explains COPs have three common traits: (a) group members have different levels of expertise, (b) group members can move from novice to expert within the group, and (c) group members work together to find solutions to common problems.

Organization s key to successful COPs where members have roles and responsibilities to help the community grow and thrive (Lui, et al., 2016). Zeichner and Liston (as cited by Yang, 2009) believe teacher COP members work through problems; sharpen beliefs and goals, and become responsible contributing members of the community. Another trait of successful COPs is valuing members' contributions to the group (Yang, 2009). Groups need to find their unique identities for COPs to succeed in improving practices (Mak & Pun, 2015). Wenger (1998) claims shared knowledge comes from the process of participation, interaction, defining what the goal is, and developing the knowledge (as cited in Trust & Horrocks, 2016). Items shared in COPs are experiences, stories, tools, and routines centered around the group's shared practice (Puzio, Newcomer, & Goff, 2015). These interactions within the community are what define the

knowledge passed on to new learners (Lave & Wenger, 1991). This means COPs allow teachers

ongoing opportunities to create knowledge for improving professional skills by collaborating as a

group (Trust & Horrocks, 2016). Also, teachers become active learners as they construct new

knowledge and skills to improve their practice (Mak & Pun, 2015). Through the community

interactions teachers engage in reflective practice and communal learning facilitating changes in

beliefs and practices (Trust & Horrocks, 2016).

The biggest problem traditional COPs face is finding time for all members to meet (Mak

& Pun, 2015) or at least to meet face-to-face or they may be spread over a wide geographic area

(DuFour & Reason, 2016). Another problem is that teachers often work in isolation and have few

opportunities to communicate with other teachers (Lui, et al., 2016). This means COPs must

move to online environments to be effective. Mak & Pun (2015) posits online COP members

spontaneously share ideas and resources when they start meeting. Online COP members post

messages, ask questions, request help, respond to inquiries, and make suggestions in an

asynchronous method (Tseng & Kuo, 2014). Lui (2014) believes virtual COPs allow members to

reinforce each other and the goals of the greater community (Lui, et al., 2016).

Trust (2015) specifies little evidence of online COPs meeting the collaborative,

relationship-building, and mentoring needs of members. Marken and Dickinson (2013) cites lack

of time, poor preparation, problems with the technology, and lack of face-to-face interactions are

barriers of online COPs; however, face-to-face COPs are of benefit when their conversations

continue online (Trust & Horrocks, 2016). Trust and Horrocks (2016) believe participants in

blended COPs easily bridge traditional community participation with online participation in

COPs by exchanging resources and ideas to overcome classroom challenges. Cesareni, Martini,

& Mancini (2011) identifies blended COPs as a benefit to preservice teachers and a strategy for

improving their practice by facilitating collaboration, providing new learning opportunities, and extending interactions online (Trust & Horrocks, 2016). One problem observed by Trust and Horrocks (2016) is that some COP members prefer passive participation and provide little input to group discussions.

Related Literature

The related literature in this study explains topics important to the study. Defining perception is important because the study explores participants' perceptions of using Twitter for PD purposes. Next, PD and its problems are explained because they are central to the purpose of this study. Professional learning communities and how they work traditionally and online are explained because they are the participants are expected to participate on Twitter. A brief discussion of the World Wide Web and how it relates to Twitter is offered because participants use platforms residing on the World Wide Web. Because Twitter is considered an OSN, an explanation of what OSNs are and how they work is provided. Finally, Twitter is described with an explanation of how it works to include educational uses by various stakeholders.

Perception

It is necessary to examine the importance of perception to phenomenological studies is because this study scrutinizes 21-29-year-old teachers' perceptions of using online social networks for professional development. Perception is the way one sees the world through the "process of attaining awareness or understanding of sensory information" (McDonald, 2011, p. 3). Perception is a way of gaining knowledge (Byrne, 2014) using the process of knowing or understanding a unique experience (McDonald, 2011). Almeder (1970) counters that perception is not knowledge itself but knowledge entering into perception through perceptual judgment. Alston (1990) asserts perception is a causal relationship to an object or event creating a sensory

consciousness. A primary function of human life is sensory experiences leading to beliefs about

perceived objects or events (Alston, 1990). Maloney (1981) believes perception is "a species of

occurrent, sensuous thought" (p. 63) occurring during observations. Perception provides direct

awareness of the physical world and is a direct cognitive contact with objects and events as they

appear (Maloney, 1981). Perception is how we inform ourselves about a variety of different

things (Hyman, 1992) assuming the reliability of our perceptual experiences is the same

assumption of a causal dependence of perceptual experiences. Perception can also be a cognitive

experience relying on the knowledge one gains through sensation (Sienkiewicz, 2013).

  Perception is important in conducting phenomenological studies because it uses senses,

such as sight, sound, touch, and smell to gain knowledge, consciousness, or some relationship to

an object or event. Qualitative phenomenology studies characterize visual, auditory, and other

sensory experiences in exploring subjects' experiences with phenomenon (Stokes, 2013) while

knowledge came through physical and sensory interactions with a phenomenon (Sienkewicz,

2013). Miller (2014) believes perceptional experience affect the phenomenology of an

experience in two ways. One way isolates the phenomenon by contrasting the experience with

the consciousness of things and their imaging (Miller, 2014). The second way isolates the

phenomenological uniqueness by contrasting the experience by using the senses (Miller, 2014).

Phenomenological evidence requires sophisticated beliefs, but a lack of self-knowledge is no

barrier to such evidence (Byrne, 2014). Relationships of individuals and phenomenon is based on

physical, intellectual, and social levels qualified by the individual's own experience (Sienkewicz,

2013). Users of OSNs may not realize the potential for OSN use for PD because they are more

familiar to using them for share personal information with family and friends. Dwyer (2013) uses

the German phrase "unabgehobenheit" to describe an undetected phenomenon, not standing out

against the backdrop of more familiar and similar phenomenon, making the subject unaware of it. Different people may perceive the same object or event differently depending on their level of expertise, knowledge, or prior experiences (Votis, 2015). Differences in perception may also apply to groups sharing a phenomenon because of the enculturalization process communicated through the group (Votis, 2015).

Perception is important in understanding subjects' experiences in phenomenological studies, Moustakas (1994) underscores the importance of perception in transcendental phenomenology as researchers seek to set aside their prejudices to study a phenomenon as free from preconceptions, beliefs, and prior knowledge of the phenomenon as possible. Therefore, perceptions of subjects' experiences of a phenomenon are important to researchers to understand the phenomena. Transcendental phenomenology is separate from other qualitative approaches as it tries to construct an image of an experience using perception, thoughts, feelings, and the use of senses to become conscious with the experience (Moustakas, 1994). Moustakas (1994) believes perception of the reality of objects depends on the subject and the interpretive form allowing the subject's perception to create an existence in their consciousness. Noema is the phenomenon of an object or event perceived by a subject based on their views, experiences, and orientation to the phenomenon.

Professional Development

The desire to improve schools, teacher quality, and student achievement has led to concerns about traditional teacher professional development (Opfer & Pedder, 2011). District and school administrators rely on PD to update teachers on the latest pedagogy, effective use of technology, and learning how to deal with an increasingly diverse student population (Calvert, 2016). Continuous teacher professional development (PD) is instrumental in improving school

quality, improving teacher effectiveness, and increasing student achievement (Desimone, 2009; Finn et al., 2010). PD is a means of empowering teachers as they improve classroom practices (Tseng & Kuo, 2014). Creating a culture of PD not only improves teachers' skills and keeps them up to date on current teaching techniques and materials but also motivates them to continue learning (Finn et al, 2010). Teachers vested in PD have better job satisfaction (Mackay, 2017). Understanding the process of teaching and learning are the focus of PD throughout a teacher's career (Finn et al., 2010). Woods (2007) notes teachers need to be learners and knowers simultaneously for successful PD (Mak & Pun, 2015). Developing teachers' abilities to research, organize, and become leaders are more reasons for PD (Lui, et al., 2016).

When teaching students using 21st Century skills teachers must be prepared to incorporate tools and techniques necessary to benefit their students (Matherson, Wilson, & Wright, 2014). Also, teachers need to prepare for students with diverse learning needs entering their classrooms (Rowan & Townsend, 2016). Since traditional PD cost billions of dollars each year, understanding effective PD is critical to the success or failure of educational reforms (Desimone, 2009). Therefore, investing in effective and ongoing PD is a wise move, providing positive results for many years (Finn et al., 2010). Past studies of PD only document teacher satisfaction, attitude changes, or promises to innovate practices, rather than examining actual results or process implementation (Desimone, 2009). Schools that offer chances for teachers' growth and constantly challenge their intellect maintain high standards with ongoing PD (Finn et al., 2010). Cordingley, Bell, Evans, and Firth (2005) show when teachers change instructional practices through collaborative PD, it leads to higher student achievement (Opfer & Pedder, 2011).

It is important to explain what PD is to understand its importance. Marcia and Garcia (2016) explain there are three models of PD. The first model is the craft model where PD comes

from teachers' classroom experiences (Macia & Garcia, 2016). The second model is the expert model where expert teachers conduct PD (Macia & Garcia, 2016). The third model is the interactive model where teachers use external sources, such as Twitter, to gain new experiences and insights into teaching (Marcia & Garcia, 2016). Teachers' various experiences and interactions may increase their knowledge and skills to improve teaching practices (Desimone, 2009). These experiences may include formal sessions on specific subjects or even hallway discussions between teachers on improving instructional practices (Desimone, 2009). Other PD methods include workshops, conferences, college courses, special institutes, and centers (Desimone, 2009). When teachers reflect on their own classroom practices or observers share what they see in classrooms, powerful methods of improving teachers' classroom practices are discovered (Desimone, 2009). Teachers also help improve instructional practice by participating in curricula development, textbook adoption, or developing a school improvement plan (Desimone, 2009). De Rijdt, Dochy, Bamelis, and van der Vleuten (2014) explained a model of who take responsibility for PD starting with the management model or where PD initiatives often come from school or district administrators, ignoring the views and needs of staff members. The management model view is most often experienced by teachers (De Rijdt, Dochy, Bamelis, and van der Vleuten, 2014). The shop-floor model is where staff members take initiative to pushed to school and district administrators but could be hampered by staff's limited experience (De Rijdt, Dochy, Bamelis, and van der Vleuten, 2014). The final model of PD responsibility is the partnership model where administrators and staff work together to address PD needs (De Rijdt, Dochy, Bamelis, and van der Vleuten, 2014).

After defining PD, it is important to identify characteristics of quality PD that improve instructional practice. Quality PD characteristics include active learning among participants,

long-term duration, participation by all interested teachers, and focusing on the content (Desimone, 2009). Focusing on content is most important because evidence shows student achievement increases when teachers increase their knowledge and skills on the subjects they teach (Desimone, 2009). Active learning takes many forms. One form is observing teachers then providing feedback and discussing the observation (Desimone, 2009). Another form of active learning is groups of teachers collectively reviewing student work (Desimone, 2009). A third form of active learning is participating in teachers-led discussions. Desimone (2009) believes coherence, the amount that teachers are learning, is consistent with their current knowledge and beliefs. Consistency in school, district, and state policies regarding PD sessions allowed exposure to providing teachers the same opportunities to increase their knowledge (Desimone, 2009). Professional development activities should last over a semester or summer with at least 20 contact hours to effect changes in intellectual and pedagogical knowledge (Desimone, 2009; Postholm, 2012). Finally, Desimone (2009) considers collective participation as another critical feature of quality PD. Participation by teachers from the same school, subject, or grade level may be a powerful experience (Desimone, 2009).

Finn, et al. (2010) lists basic principles for establishing and maintaining effective PD for instructional improvement. PD is to have clearly defined, achievable goals and outcomes, so teachers understand the PD and its relationship to improving instructional practice. Administrators' support along with sufficient funding (Finn, et al., 2010) of PD initiatives ensure teachers receive quality PD that focuses on a school's documented needs. Quality PD encourages teachers to become active participants (Finn, et al., 2010) in seeking ways to improve classroom instruction. Teachers' active participation include observations with immediate feedback, reviewing student work, and teachers leading discussions on how classroom instruction may

improve (Desimone, 2009). Such active participation by teachers will have a major impact on their learning (Desimone, 2009). Teachers are to focus on a few specific goals deemed critical by all participants (Finn, et al., 2010) so teachers do not get overwhelmed and confused on how to implement the PD into their instruction. Networking opportunities with other teachers (Finn, et al., 2010) promotes reflection and discussions on different ways of incorporating PD into classroom instruction. Too often PD opportunities last from one-hour to one-day sessions, but they should extend beyond the initial event so teachers can engage in discussions, receive guidance, and undergo observations as they make necessary adjustments in instruction (Finn, et al., 2010). Quality PD should incorporate teachers' knowledge and experiences (Finn, et al., 2010) so it meets documented teachers' needs and targets schools' instructional goals. Finn, et al. (2010) believes employing outside facilitators provide a fresh perspective independent of a district's or school's culture to prevent distorting potential benefits of a PD initiative. Morris, Chrispeels, & Burke (2003) believes PD sustainability comes from teachers' commitment to share content and pedagogical knowledge (Mak & Pun, 2015). De Rijdt, Dochy, Bamelis, and van der Vleuten (2014) listed reasons for teacher satisfaction in their PD including easy application to their teaching practice; incorporating personal needs and interests; making the PD experience stimulating; having an expert facilitate the PD; using small groups; balancing explanations with interactions; and providing a wide variety of PD offerings. Calvert (2016) outlined the following steps for better PD to include planning PD with both administrators and teachers; structuring school days so teachers have time to collaborate with colleagues; involving teachers in data analysis to determine teaching and learning challenges; establishing effective learning communities; providing choice in PD offerings; ensuring the purpose of PDs is teachers' growth and not evaluation purposes; and examining potential PD sessions to ensure

instructional improvement.

Problems with Professional Development

While quality PD is important for student success in the classroom, there are few efforts to make sure PD is effective in changing teachers' behaviors (Edinger, 2017). Despite the tremendous amounts of resources expended (Desimone, 2009; Dingle et al., 2011) on producing PD to help teachers improve classroom instruction, PD sessions lasting a day or less, are the most common type of PD. These often have little to no impact on classroom instruction (Dingle et al., 2011). Traditionally mandated, one-time, conventional PD offer little or no follow-up sessions with materials and skills often being disconnected from practice (Visser et al., 2014). PD offerings frequently fail to focus on targeting teachers' needs (Rowan & Townsend, 2016). Learning activities via presentation or memorizing new information are not likely to change teachers' instructional practices (Opfer & Pedder, 2011). Calvert (2016) cited a 2014 Gates Foundation report describing PD as "irrelevant, ineffective, and not connected to their (teachers) core work of helping students learn (52)." Broad and Newstrom (1992) estimate adults retain only 10 to 15 percent of information given in traditional workplace trainings (Machles, et al., 2010). Hur, Brush, & Bonk (2012) note bringing in outsiders unfamiliar to school or district conditions isolates teachers and create passive learners (Tseng & Kuo, 2014). Rowan and Townsend (2016) posits teachers often believe ineffective or irrelevant PD to classroom needs take away valuable planning time. Administrators often settle for what they believed is uniformity as they dictate curriculum to teachers who provide different experiences for their students (DuFour, et al., 2010). This attitude by administrators may be the result of institutional culture and norms continuing to reassert themselves unless concerted efforts are done to change these behaviors (Schafer, Stringfield, & Devlin-Scherer, 2017). In fact, school and district

administrators are fearful of letting go of PD planning or have different agencies pushing their particular PD demands (Calvert, 2016). De Rijdt, Dochy, Bamelis, and van der Vleuten (2014) provides the following reasons for teacher dissatisfaction in PD to include the PD does not take into account teachers' level of knowledge; lacking useful information; does not provide appropriate materials; problems conveying information consistent with stated PD goals; lack of feedback for PD participants; a belief participants' time was wasted by participating in the PD. However, good leaders focus on asking the right questions instead of imposing solutions to guide their staff in the directions they want them to go (Kouzes & Poser, 2012).

Teachers need time to incorporate new knowledge into instructional practice to see any benefits (Harcourt & Jones, 2016; Opfer & Pedder, 2011). PD should be at least one semester or during the summer with at least 20 contact hours (Desimone, 2009) and up to a year (Dingle, et al., 2011) to effect change in instructional practice (Desimone, 2009). The second year of any new initiative in classroom teaching, one-to-one computing for example, is critical for long-term success in improving instruction (Swallow, 2015; Yin, Olson, Olson, Solvin, & Brandon, 2015). Long-term PD helps teachers improve as they learn from fellow teachers and outside experts (Richmond & Manokore, 2010). For example, teachers need two years of intensive PD with follow-up sessions, classroom observations, and instructional coaching to become comfortable using technology devices for classroom formative assessments (Yin, et. al, 2015).

Along with time, teachers also need hands-on experience to master new classroom practices (Opfer & Pedder, 2011). PD delivered via presentation and requiring memorization of new material is not likely to change teachers' instructional classroom practices (Opfer & Pedder, 2011). Not only do teachers need to participate in active learning, they also need to do so in a collaborative setting with their peers to make changes in their practices (Opfer & Pedder, 2011).

Besides time and hands-on experiences, another problem with traditional PD is that it did not meet the needs of younger teachers. Most teachers 29 years old and younger are relatively new to teaching with needs traditional PD might not meet (Coldwell, 2017). The United States currently faces a critical teacher shortage with 40% to 50% of teachers leaving the profession during the first five years (Zhang & Zeller, 2016). Receiving insufficient PD to meet their needs is one of the problems cited by teachers after leaving the profession (Barry & Shields, 2017; Yaffe, 2016). The teacher dropout problem put a burden on administrators as they spent precious time finding replacements in shrinking pools of qualified candidates (South Carolina Appleseed Legal Justice Center, 2013).

There are concerns questions raised about PD design effectiveness is based on weak evidence (Opfer & Pedder, 2011). While popular PD methods do not benefit teacher improvement, Opfer & Pedder (2011) observes other researchers ignore teaching and learning are contextually situated, arguing most research narrowly focuses on certain practices, while not accounting for complex educational environments teachers currently face. PD is a complex phenomenon where teachers deal with many variables and interactions that lead to outcomes that are not always predictable (Opfer & Pedder, 2011). PD involving collaborative learning may possibly lead to a decline in inventiveness and initiative (Opfer & Pedder, 2011) if teachers see no tangible benefits in their instructional practice. The use of new instructional materials covered in PD sessions might be seen as irrelevant or too costly by teachers who did not participate in the PD (Schafer, Stringfield, & Devlin-Scherer, 2017). Another problem is younger teachers are increasingly unwilling to devote uncompensated time preferring to spend their own money to purchase curriculum materials (Pittard, 2017).

Professional Learning Communities

Understanding the reason, purpose, and meaning of new ideas help teachers accept change (Defise, 2013). Various attitudes towards accepting change create gaps between intended curriculum and curriculum implementation (Defise, 2013). Carroll (2009) believes teachers working alone in classrooms is counter-productive in meeting students' educational needs (DuFour & Reason, 2016). Couros and Jarrett (2012) claim effective educators often share ideas on instructional practices and discuss educational issues important to them (Cho, 2016). Professionals should share knowledge and exchange ideas to meet clients' needs and achieve targeted goals (DuFour, et al., 2010). DuFour and Reason (2016) stress collaboration at different levels leads to better teacher satisfaction and higher student achievement. Education professionals must work and learn together no matter what background they come from (DeFour, et al., 2010). More formal professional learning communities (PLCs) and less formal personal learning networks help close gaps between intended and implemented curriculum (Defise, 2013). Schools or districts should have organized PLCs (DeFour, et al, 2010) to allow schools to engage in reflective practice and created a culture where teaching and learning receive attention from teachers and administrators (Wells & Feun, 2012)). Trust (2012) defines PLCs as a "system of interpersonal connections and resources that can be used for informal learning, collaboration, and exchanging knowledge and ideas" (Visser et al., 2014, p. 396).

Teachers meet regularly with common purpose and goals, share responsibilities and develop content knowledge collaboratively (Richmond & Manokore, 2010). Trust (2015) calls PLCs "a group of practitioners who negotiated expertise in a domain through participation and collective learning" (p. 73) sharing resources and knowledge for a common purpose. Participants in PLCs should build a consensus using shared knowledge to solve problems instead of exchanging opinions (DuFour, et al., 2010). The PLC process is not a program schools

purchase but a never-ending process that has a profound impact on achieving better results for its students (DuFour, et al., 2010).

PLCs are a commitment to each student focusing on their learning needs (DeFour, et al., 2010). Creating a climate conducive to perpetual learning by continuous innovation and daily experimentation should be the goal of PLCs (DeFour, et al., 2010). The assumption is that PLCs require improved aspects of a school's educational process and transformation of teaching practices as they make overall instructional improvements (Riveros, Newton, & Burgess, 2012). PLC members must work together to clarify all essential knowledge and skills and ensure students learn them in a timely manner (DeFour, et al., 2010). New learning results from teachers bringing their personal capital to share new instructional practices and motivate others to try these practices (Richmond & Manokore, 2010). Teachers believe they are gaining confidence when learning pedagogy and subject matter when interacting with their peers (Richmond & Manokore, 2010). However, teachers face difficulties figuring out, understanding, and incorporating shared knowledge when they do not participate in the creation process of learning communities (Trust, 2015).

As PLCs help teachers work together to improve instruction, they foster two types of knowledge: canonical and non-canonical learning. Cho (2016) explains canonical learning is "formally articulated and standardized" (p. 342) using classes, trainings, and reading materials found in traditional workshops, conferences, or classes teachers attend. Cho (2016) then defines non-canonical learning using "experiences, context, and relationships" (p. 342) shared through "stories, norms, and metaphors" (p. 342). While using non-canonical learning to augment formal, structured learning environments, but also used in informal learning environments. Thinking of canonical learning regarding practice and non-canonical learning as regarding the practitioner is

another way that differentiate the two ways of learning (Cho, 2016).

Teachers must be accountable to each other with reported individual progress on curriculum units and meeting school administrators' expectations (Richmond & Manokore, 2010). PLCs should (1) engage teachers in discussions about the subject content they taught, (2) advance teachers' preparedness to teach their subject content, and (3) increase teachers' focus on students' thinking about subject content (Mintzes, Barcum, Messerschmidt-Yates, & Mark, 2013). Teachers must be willing to work collaboratively with other teachers for PLCs to improve individual teaching practices (Wells & Feun, 2012). Richmond and Manokore (2010) indicate PLCs need outside facilitators to assist teachers with their meetings but warn there may come a point where teachers may gain the confidence and ability to work independently. PLCs require teachers to work together to study best educational practices and improve student instruction in the classroom (Wells & Feun, 2012). DeFour, et al. (2010) believe PLCs build powerful learning communities when participants engage in collaborative learning.

However, the achievement level of collaboration required for PLCs to work does not always happen. Some teachers believe PLCs are a form of book club that discusses common readings but never act on new information (DeFour, et al., 2010). Other teachers refuse to share helpful materials or insights by sitting silently in PLC meetings (Wells & Feun, 2012). Teachers meet with their PLCs but fail as functioning members by not incorporating new ideas from the group and continue to do things as they always have done (DeFour, et al., 2010). It is apparent uncooperative teachers believe forced participation in PLCs takes away time better spent in other areas of planning.

Despite perceived negatives or mismanagement of PLCs, teachers participating in PLCs often see collaborating and sharing ideas as beneficial to improve individual classroom practices.

However, it may take at least three years to see cultural changes and improvements in classroom instruction (Wells & Feun, 2012). District and school leaders need to support PLCs by providing time and space for teachers to meet, ensure school networks can handle online networking, and allow new research on PLCs to further support teachers' attempts to improve student learning (Mak & Pun, 2015; Mintzes et al., 2013). However, schools must make a total commitment to the PLC process or DuFour, et al. (2010) warn there will be no improvement in student achievement.

Educators have transformed their profession because technology provides better access to tools and information (DuFour & Reason, 2016). Obstacles, such as lack of interest among fellow teachers and administrators, lack of time to meet, or lack of expertise push teachers to create virtual PLCs to obtain meaningful PD (Beach, 2012; McConnell, Parker, Eberhardt, Koehler, & Lundeberg, 2012). DuFour and Reason (2016) explain several benefits of virtual PLCs. Experts in specialized fields work effectively with teachers online when great distances make such collaboration impractical (DuFour & Reason, 2016). Virtual PLCs could, in certain situations, provide better outcomes and be more innovative than traditional face-to-face meetings as members take time to reflect on online discussions (DuFour & Reason, 2016). Virtual PLC members articulate their expertise and experiences better online when sharing with the group (DuFour & Reason, 2016). Virtual PLCs continue to improve instruction by involving more people in research and shared responsibilities for further learning (DuFour & Reason, 2016). Virtual PLCs share several traits. Members of virtual PLCs usually share information from articles or research then discuss their perspectives (McConnell, et al., 2012). Members also read, reflect, and discuss solutions to common problems tried by other members (McConnell, et al., 2012). Virtual PLC members often develop professional friendships (McConnell, et al., 2012)

that extend beyond the purpose of the PLC. Successful virtual PLCs require member

collaboration so they may better learn from each other. It is important to build trust among

virtual PLC members, so the group is reliable, consistent, and responsive when clarifying

expectations and defining roles of team members (DuFour & Reason, 2016). However, DuFour

and Reason (2016) warn educators must use wisdom when continuing the PLC process when

reinventing themselves and their profession using new communication methods.

While there are many benefits to using virtual PLCs for instruction Ebrahim, Ahmed, and

Taha (2009) explain some challenges in using virtual PLCs (DuFour & Reason, 2016). One

challenge is the difficulty team leaders have monitoring the team's work, leading to

communications breakdowns, conflicts between members, and eventual mistrust (DuFour &

Reason, 2016). Another challenge virtual PLCs faced is access to dependable technology or

experience using the technology supporting the team's efforts leading to distrust of the PLC

process (DuFour & Reason, 2016). Conflict management plague virtual PLC leaders based on

conflicting expectations, cultural differences, or coordinating members' participation (DuFour &

Reason, 2016). Virtual PLCs spread over wide geographic areas make interactions difficult and

misunderstandings occur as the group attempts problem solving (DuFour & Reason, 2016).

Trust (2015) believes online learning communities are not effective in building relationships and

the idea of community appears to breakdown in online environments. Kirkman, Rosen, Gibson,

Tesluk, and McPherson (as cited by DuFour & Reason, 2016) cite the lack of social interaction

as a potential problem on virtual teams. To combat isolation, teams should physically meet and

introduce themselves in the beginning of the process, find ways to have simulated face-to-face

interaction, allow informal interactions, use social networking, maintain contact with each other,

and share leadership responsibilities (DuFour & Reason, 2016).

Teachers harnessed the Internet as they seek out other teachers with similar interests to share ideas and expertise to help classroom instruction (Trust, 2015; Tseng & Kuo, 2014). Community members meeting online use listservs, discussion forums, social networking sites and other interactive online methods to share information and best practices (Trust, 2015). Teachers use the Internet to augment functioning PLCs or substitute for dysfunctional or non-existence PLCs. Using the Internet allows teachers to break down traditional geographic or temporal barriers in making connections with one another (McConnell et al., 2012; Trust, 2015). The United States Department of Education Office of Educational Technology (2011) defines an online community of practice as "a virtual space that supports the traditional notions of a community of practice and allows members to connect across spatial and temporal boundaries" (Trust, 2015, p. 73). Also, the United States Department of Education encourages schools to experiment with using OSNs to expand learning opportunities for both teachers and students (Carpenter, 2015).

While teachers need to realize their participation in PLCs is important for the concept to improve classroom achievement, the role of administrators is vitally important for PLCs to be successful in schools. November (2012) explains educational leaders must expect teachers to continuously engage in self-learning and collaboration that goes beyond their schools to learn new techniques and integrate them into the classroom. Mintzes, et al. (2013) explains administrators need to be active participants in strong PLCs. Thomas (1995) explains educational leaders must be willing to model learning environments in which they want others to participate in (DuFour, et al., 2010). Administrators start PLCs by sharing what they have learned in classes, conferences, and other training events (DeFour, et al., 2010); however, administrators should avoid the temptation of taking shortcuts that prevent PLCs from being effective in changing

classroom achievement (DeFour, et al., 2010). Such shortcuts include using state guidelines to substitute for team discussions, conduct small groups of staff develop curriculum then present it to the rest of the staff, purchase curriculum or use the textbook as curriculum, purchase outside developed assessments instead of using team-developed assessments, and not use student work samples as part of the curriculum and assessment process (DeFour, et al., 2010).

The World Wide Web

Because this study explores how young teachers use online social networks for PD purposes, an explanation of how the Internet works is in order. November (2008) explains "the Internet is a network of many different computers, all over the world, connected together" (p. 7) allowing users to communicate with each other over varying distances. The resources to develop PLCs along with the Internet, especially the World Wide Web (Web), are constantly evolving to provide more powerful and beneficial user experiences; however, the user experience is like living in the Wild West (Fodeman & Monroe, 2012). Rapid growth occurs as better web-based interactions affects users' communications, access, and use (Smith, Chavez, & Seaman, 2014). There are versions of the web called Web 1.0 and Web 2.0 (Smith, et al., 2014) based on user interactions. Users only consume information in Web 1.0 as they view static web pages with little to no interaction with the content creators (Singh, 2013; Smith, et al., 2014). Web 1.0 content is broadcast by producers for users to see and think about but not react to the information online (Aghaei, Mematbakhsh, & Farsani, 2012). Web 1.0 tools commonly include computer workstations, overhead projectors, LCD projectors, interactive whiteboards, computing labs (mobile and static), and document cameras (Smith, et al., 2014).

Because Web 1.0 lacks user interactivity, web creators started working on what became known as Web 2.0. Known also as the wisdom web (Aghaei, et al., 2012), Web 2.0 is

collaborative, interactive, and dynamic as users simultaneously consume and create content (Abshire, Cummings, Mason, & Abernathy, 2014). User interactions come in the form of blogs, wikis, video conferencing, and online social networks (Cooke, 2012; Khader & AbdulHafeez, 2013; McConnell, et al., 2012; Smith, et al., 2014). Online communities develope as users exchange information, photos, and videos with each other (Carpenter & Krutka, 2014; Smith, et al., 2014). This means the Web is a medium of multi-sensory communication for its users (Abshire, et al., 2014). There are two communities within Web 2.0 sites. The first community is public and accessible by anyone with Internet access and specific audiences, such as, educators comprise the other community (Schad, 2014). Web 2.0 resources are popular with educators who constantly search for new ways to engage learners in authentic learning activities (Abshire, et al., 2014).

Online Social Networks

Almost as soon as the Web 2.0 became popular, educators found ways to integrate it into educational practices. One type of the Web 2.0 site, online social networking (OSN), quickly gained popularity because users can create communities with users having similar interests they can easily share content, ideas, and other artifacts with each other online (Huffman, 2013; Singh, 2013). Because of concerns about how others perceive them, OSN users want to present themselves in the most favorable light (Hertz, et al., 2015). OSNs provide an ideal platform to easily choose what individuals want to present online for self-expression and self-presentation (Hertz et al., 2015). Berk (2013) notes users of OSNs would rather work with people they know and trust than people they don't know or lack any kind of relationship with. Hertz, et al. (2015) believe as OSNs provides easy access to people's lives. They also provide an emotional support system through a sense of connectedness and bonding with other users. An important function of

OSNs is relationship maintenance, because it allows people to stay connected and is a major motivation for OSN use (Dainton, 2013). People also use online social networks for self-promotion (Hertz, et al., 2015) as they share their social capital or daily life. Fear of missing out is another phenomenon that occurs when users believe others are having experiences, they wish they could have (Hertz, et al., 2015). OSNs also forces changes in education policy. A school superintendent resigned after two years on the job, because concerned parents used Facebook to oppose the superintendent's call for more testing and adoption of the Common Core State Standards (Blumenreiche & Jaffe-Walter, 2015).

Desiring to share their lives and not wanting to miss out on friends' activities, young people adopt online social networks in large numbers (Hertz, et al., 2015). The Pew Research Center found online social network usage by all adults grew from seven percent in 2005 to 65% in 2015 (Perrin, 2015). The research noted 90% of adults 18-29 years old use online social networks, thus making it the largest demographic of online social network users (Perrin, 2015). Men and women are almost equal in their use of OSNs, 62% and 68% respectively (Perrin, 2015). Individuals with at least some higher education experience comprise the most users of online social networks with 70% of users having a college or associate degree and 76% with a college degree or higher compared to 54% of users with a high school diploma or less (Perrin, 2015).

OSNs, such as, Twitter, have an impact in the construction of PLCs or PLNs because they empower users' network connections and improve classroom instruction (Tur & Marin, 2015). As social networking improves classroom instruction, policy makers acknowledge the importance of teacher collaboration to strengthen schools and increase teacher knowledge. There are two reasons social networking theory helps improve classroom instruction. First, social

network theory has a framework and mechanisms that allow detailed investigation of teacher collaboration (Moolenaar, 2012). Second, research on social network theory has an advanced and rigorous methodology with visualization to study relationships between people (Moolenaar, 2012). Normally schools have academic coaches, subject area leaders, and administrators to provide PD (Moolenaar, 2012) but because traditional professional development does not often meet the needs of teachers, academic social networks often deviate from traditional PD structures of most schools (Moolenaar, 2012; Visser et al., 2014). Couros and Jarrett (2012) claimed OSNs are where knowledgeable and experienced educators meet to share information, resources, and collaborate with the goal to seek constant improvement (Cho, 2016). Yet, educator adoption of OSNs for PD moves slowly (Sauers & Richardson, 2015). Questions about the effectiveness of OSNs to improve teacher quality include: 1) Are OSN experiences like school-based experiences, 2) What knowledge do users share via OSNs, and 3) Does knowledge gained from OSNs improve classroom instruction and overall school performance (Cho, 2016)?

OSNs generally allow users to create personal profiles and communicate using posts, pictures, videos, or links centered on personal preferences (Reynolds, 2013; Schoper, 2015; Waghid, 2015). Multitasking is easier with bulletin boards, instant messaging, and email functions (Escobar-Rodriguez, Carvajal-Trujillo, & Monge-Lozano, 2014). OSN users connect with other users they know personally or share common interests while connections expand by viewing lists of users' followers (Waghid, 2015). Users often post what they believe is relevant information to their network (Reynolds, 2013).

Over time, OSNs have become more specialized to meet uses' unique social networking needs, such as, promoting businesses, events, non-profit organizations' updates of philanthropy, or other social topics (Waghid, 2015). OSNs encourages and facilitates sharing content to wider

audiences by providing synchronous or asynchronous access to experts to engage with educators without limiting factors, such as, geographical distance (Forbes, 2017). Dainton (2013) argues OSNs facilitate behaviors and interactions needed to keep personal relationships going. Such groups used by teachers' center on educational topics or classroom extensions and allow connections with other teachers or integrate the OSN into classroom instruction (Gettman & Cortijo, 2015; McCole, Everett, & Rivera, 2014; Waghid, 2015). Kelly and Antonio (2016) found teachers connected with other teachers via OSNs to socialize or seek practical advice but not for reflecting or providing feedback on teaching practices. However, many teachers are reluctant to engage professionally on OSNs due to privacy issues, especially when attempting to separate personal from professional lives (Forbes, 2017).

There are several OSNs available to use from general purpose to those serving a special purpose. Pinterest mainly uses photos as a means of communications. People describe what the photos mean, and others share these pictures like when teachers share classroom ideas, materials, and PD information (Reynolds, 2013; Schoper, 2015). Teachers using Pinterest often leads them to using Teachers Pay Teachers, which is an online marketplace for teachers to sell curriculum materials they created (Pittard, 2017). LinkedIn allows users, such as educators, to connect and discuss educational topics and share PD ideas (Berk, 2013). Because online social networks provide emotional support and social capital for users, students quickly learn OSNs can provide needed help from their friends rather than contacting unfamiliar experts (Cadima, Ojeda, & Monguet, 2012). Eventually, teachers recognize new opportunities to use social networks for learning (Haseski, Sahin, Yilmaz, & Erol, 2014; Huffman, 2013) that lead to learning management systems (LMS), such as, Edmodo or Schoology that have social networking features. LMSs allow teachers and students to engage in learning anywhere and anyplace there is

an Internet connection (Abshire, et al., 2014; Khader & AbdulHafeez, 2013). LMSs also facilitate online communications between teachers (Trust, 2015) to communicate and exchange ideas with other teacher-users in like subject groups or other educational interests (Batsila, Tshouridis, & Vavougios, 2014; Trust, 2015).

Twitter

A popular online social network for educators is Twitter (Carpenter & Krutka, 2014; Tang & Hew, 2016). Twitter is a public microblogging site where users communicate with short messages of up to 140 characters known as "tweets" (Carpenter & Krutka, 2014). While 140 characters could be limiting, Ricoy and Feliz (2017) believe the limitation make users more ingenious. Tweets are real-time information, stories, news tailored to users' unique tastes or needs (Visser et al., 2014). All tweets are public unless members wish to keep their posts private (Sauers & Richardson, 2015), but all users can exchange private messages (Tang & Hew, 2016). Using the @ symbol with a user's Twitter name directs the message to a specified user (Sauers & Richardson, 2015). Members use hashtags (#) in messages to distinguish tweets meant for specific interest groups. For example, #edchat tags discussions centered around education technology (Cho, 2016) so interested members can quickly find any tweets posted about the subject (Visser et al., 2014). Hashtags also serve as a public forum during synchronous online discussions (Cho, 2016; Sauers & Richardson, 2015). Another feature of Twitter allows users to share information with other interested members by inserting hyperlinks to the sources (Carpenter & Krutka, 2014). Twitter has 313 million monthly active users, one billion unique visits to linked websites, and 82% of users access the site via mobile devices (Twitter, 2016). There are drawbacks to using Twitter. New users feel overwhelmed by the number of tweets proliferating the site. Twitter takes work and time to properly maximize potential benefits from

the site (Tang & Hew, 2016). Many tweets from PLN members are often unrelated to educational issues as users post tweets meant for different members of their network (Tur & Marin, 2015) or provide distractions from its intended uses (Tang & Hew, 2016). The 140-character limitation often make it difficult for users to engage in reflection or critical thinking (Tang & Hew, 2016; Tur & Marin, 2015). There are privacy concerns regarding Twitter use (Tang & Hew, 2016). Although keeping Twitter activities private is an option, it negates the benefit of engaging with other users in different networks.

Twitter has many different educational uses. Educators look to the site to obtain information or share ideas used in classrooms (Tang & Hew, 2016). It is the gathering and sharing of information that makes Twitter a powerful communication tool for educators (Tang & Hew, 2016). Users build communities around Twitter's communication capabilities to solve problems or work on projects though collaboration (Tang & Hew, 2016). Educators also use Twitter's communication tools to send students and other community members notices of upcoming events or reminders (Tang & Hew, 2016). Class events on Twitter can be in-class or after-class activities, such as, continuing discussing class topics between students and teachers (Tang & Hew, 2016). Finally, Twitter users engaging in self-reflection in assessing their work and contemplating future improvements (Tang & Hew, 2016). Ricoy and Feliz (2017) discover three phases to using Twitter. The initial phase is where users get acquainted with the site and learn its potential benefits and drawbacks (Ricoy & Feliz, 2017) The central phase is where users build their PLNs, become more comfortable communicating on the site, and start finding useful resources (Ricoy & Feliz, 2017). The final phase shows users fully engaged in Twitter, finding new ways to collaborate with others, build and share large amounts of resources, and fully comprehend the learning based on interactions with others (Ricoy & Feliz, 2017).

It is important to explore how higher education students use OSNs, such as Twitter, to understand young teachers' attitudes towards using OSNs for PD. Burstein (2013) explains millennials, those starting work after the turn of the century, used OSNs to find advice, information, or feedback from others in their decision-making process (DuFour & Reason, 2016). Using Twitter in higher education has potential benefits for students by allowing expanded communications and collaboration opportunities for students (Arabacioglu & Akar-Vural, 2014; Daher, 2014; Escobar-Rodriguez, et al., 2014; Kaur & Yadava, 2013; McCole, Everett, & Rivera, 2014; Rambe & Ng'ambi, 2014; Wang, Lin, Yu, & Wu, 2013). College students find Twitter helpful as classes meet less frequently (Carpenter & Krutka, 2014). Higher education students find using Twitter helps them better understand discussion topics and classmates' arguments (Tur & Marin, 2015). Twitter's audiences and information are available 24 hours a day (Rambe & Ng'ambi, 2014) to better suit students' unique study habits. Students who normally do not speak up in traditional classrooms might be more willing to participate in Twitter-facilitated backchannel or after-class discussions (Carpenter & Krutka, 2014; Escobar-Rodriguez, et al., 2014; McCole, et al., 2014; Rambe & Ng'ambi, 2014; Wang, et al., 2013). Multimedia capabilities (McCole et al., 2014) can potentially accommodate students' different learning styles (Cerda & Planas, 2011). Students often find OSNs are beneficial to their learning once they engage in class OSN activities (McCole et al., 2014). Teachers use Twitter's hashtags as backchannels to expand discussions or answer questions by students (Carpenter & Krutka, 2014; Tur & Marin, 2015). Outside of class, students use Twitter to continue classroom discussion sometimes more actively than in class (Tur & Marin, 2015) and combat feelings of isolation by building community (Carpenter & Krutka, 2014). Higher education students who use Twitter for learning purposes are willing to continue using the service (Tur & Marin, 2015).

Despite potential benefits of higher education use of OSNs, students have concerns leading to their lack of use for PD as teachers. Students often use more than one OSN in their personal lives and using Twitter could cause social network fatigue (Carpenter & Krutka, 2014). While some students see OSNs as potentially powerful learning tools, students also see OSNs as a pleasure activity and academic use intrudes into personal space (Escobar et al., 2014). Yet, where students might not see academic Twitter use as an intrusion into their personal lives (McCole et al., 2014), they resist mandatory use of OSNs in their classes (Rambe & Ng'ambi, 2014) but participate when required (McCole et al., 2014). Another concern is the belief Twitter is a short-term trend, rather than a long-term learning tool (Escobar et al, 2014). Research also suggests differences in how male and female students use Twitter in higher education. Female students tend to prefer privacy, such as sending private messages to their professors, while male students are more willing to engage on open forums (Rambe & Ng'ambi, 2014).

Like other higher education students, preservice teachers need to focus on their unique educational needs as they move through their academic career. Carpenter (2015) notes Twitter helps preservice teachers establish a professional identity as they connect with more experienced educators. Twitter helps new and preservice teachers adapt to classroom challenges during student teaching or initial in-service assignments (Carpenter, 2015). However, preservice teachers often stop actively participating in Twitter for PD reasons when they start student teaching (Carpenter, 2015). Student teachers continue reading posts to help find resources, blog posts, group posts, and articles for helpful information (Carpenter, 2015). Reasons given for the lack of active participation, including Twitter, are OSNs do not always allow teachers in a school to work together, the brevity of posts do not allow users to gain deeper meaning of shared information, posters appeared to talk over each other and do not attempt to understand what

others say, and student teachers discover they do not have the time or desire to actively participate in Twitter (Carpenter, 2015).

Teachers who use Twitter for professional purposes, constantly seek out other professionals with similar interests to collaborate with (Carpenter & Krutka, 2014) and built communities of practice (Visser et al., 2014). Teachers who use Twitter more often follow students or fellow educators outside of teachers' schools (Forte et al., 2012). Educators who follow teachers using Twitter first connected at professional conferences (Forte et al., 2012). Also, teachers who use Twitter access it multiple times per day (Carpenter & Krutka, 2014). Teachers often actively tweet to their networks when using Twitter (Visser et al., 2014). Carpenter & Krutka (2014) found teachers use different topic hashtags when communicating with other professionals with education being the largest hashtag topic (Forte et al., 2012). Teachers drawn into using Twitter for professional reasons start using it for personal reasons (Carpenter & Krutka, 2014). Carpenter & Krutka (2014) found popular professional uses of Twitter by teachers include getting or sharing resources, collaborating with other professionals, participating in Twitter chats, communicating with students and parents, classroom discussions, and activities outside of class. Venting about professional problems or frustrations is another way teacher uses Twitter (Budge, Lemon, & McPherson, 2016). Barriers to using Twitter at school is a common frustration among teacher Twitter users (Forte et al., 2012). Responding to other users or professional status updates comprise most of teachers' communications on Twitter (Forte et al., 2012). Teachers more often access Twitter on mobile devices than on traditional computers (Visser et al., 2014). Most Twitter using teachers rate their technology proficiency at average or better (Visser et al., 2014).

Once teachers enter teaching positions, they employ Twitter much the same way they

used it as students, such as communications with students and backchannel or outside of class discussions, but quickly find other uses (Carpenter & Krutka, 2014). Teachers discover Twitter is a powerful means of conducting PD at the grassroots level after finding traditional PD offerings insufficient for differentiating teachers' instructional needs (Carpenter & Krutka, 2014; Tur & Marin, 2015; Visser et al., 2014). The asynchronous nature of Twitter and quick responses (Macia & Garcia, 2016) make Twitter instrumental in building teachers' professional knowledge and social capital (Visser et al., 2014). Once users become more comfortable with using Twitter, they often find low barriers to participation (Budge et al., 2016; Visser et al., 2014) which often leads to critical thinking and reflection on the information they find on the site (Tur & Marin, 2015). Combating isolation, teachers also like finding ideas from other teachers and experts normally not found within their geographic localities (Carpenter & Krutka, 2014). This wide reach, including cross-curricular connections (Visser et al., 2014), gives teachers greater access to resources and ideas often not found locally or by teachers on their own (Carpenter & Krutka, 2014). As teachers expand their PLNs on Twitter, they engage in crowd sourced collaboration that leads to new ideas for classroom use (Budge et al., 2016; Carpenter & Krutka, 2014), which further improves instruction (Visser et al., 2014). Because a lack of funds or time prohibits teachers from attending conferences, they turn to Twitter to keep up with conference proceedings attended by members of their PLN (Visser et al., 2014).

The promise of Twitter appears as a way for school and district administrators to encourage teachers or themselves to use Twitter for PD (Cho, 2016). It is important for school leaders to engage with their peers to improve leadership skills and build more effective schools (Sauers & Richardson, 2015). Twitter allows administrators to engage in their own PLCs (Sauers & Richardson, 2015) making them feel less isolated as they connect with other administrators

online (Cho, 2016). Because of these interactions, administrators feel more upbeat, believe they are part of a special club or community of users sharing similar experiences and problems (Cho, 2016). Like their teachers, administrators are often unable to physically attend conferences but use tools, such as, Twitter hashtags, to keep up with conference events (Cho, 2016). Curiously, while administrators believe Twitter helps them grow as administrators, they frequently do not share nor apply any knowledge gained in their professional practice (Cho, 2016).

Summary

This chapter explores how social learning including sociocultural learning, social networking theory, and communities of practice provide a theoretical framework, explains how and why teachers gather in formal and informal groups for professional development. Including perception research helps one to understand the exploration of younger teachers' perceptions of using Twitter for professional development. Also, it explains the importance of professional development along with the requirements needed for effectiveness in improving classroom instruction. Research suggests most traditional professional development is ineffective, because it is usually top-down mandated, one-time sessions with little or no follow-through, and often fails to address real classroom needs. Teachers gather to form professional learning communities to address these professional development concerns. One means teachers use to address their PD needs is using Twitter to engage with fellow professionals to seek answers to their questions or share their expertise by reaching out in an asynchronous format. Because of the Internet-based nature of Twitter, an explanation of how the Internet works along with different variations of Web 1.0 and Web 2.0 is offered. Different types of OSNs and how they work leads into an explanation of Twitter and how it works. Examining administrators' uses of Twitter is essential because of their role as instructional leaders. Administrators believe Twitter helps them become

better administrators, however, most do not share what they learn with their teachers (Cho, 2015).

An examination of educators' uses for Twitter, including PD purposes show teachers found the microblog useful. Teachers who used Twitter during preservice training often stop using it once they enter student teaching or teaching jobs. Some teachers believe using Twitter does not allow teachers in a building to work together. Another reason new teachers stop using Twitter is the character limit fails to provide deeper meaning of shared information. The chaotic nature of Twitter conversations makes it hard to understand discussions. Finally, teachers stop using Twitter because the demands of teaching, especially with new positions, do not allow time to engage with other professionals.

In summation, it is surprising younger teachers are not turning to Twitter or other online social networks for professional development considering their age demographic dominate OSNs for personal reasons (Carpenter & Krutka, 2014; Visser, et al., 2014). Professional development schools and districts often fail to meet what younger teachers needed in order to succeed in educating their students (Coldwell, 2017; Rowan & Townsend, 2016). This leads to frustrations that force young teachers out of the education profession (Barry & Shields, 2017; Sass, Flores, Claeys, & Perez, 2012). Older teachers are successfully using Twitter to create networks of fellow educators they can turn to when searching for new solutions to increased classroom challenges (Carpenter & Krutka, 2014; Visser, et al., 2014). Therefore, it is important to discover why younger teachers do not tap into veteran teachers' expertise online as they search for needed PD to make them successful in the classroom.

CHAPTER 3: METHODS

Overview

This chapter discusses the proposed research design along with the researcher's role in the study, the setting, and the participants. Data collection and analysis are also found in this chapter. Finally, trustworthiness and ethical considerations of the proposed research study conclude this chapter. The intent of this chapter is to repeat the nature and purpose of the study with more detailed information regarding the methods proposed for conducting the research.

Design

A qualitative research approach focuses on the wholeness of an experience (Moustakas, 1994). Researchers search for meaning and essence of experiences by obtaining first person accounts of experiences through informal and formal conversations along with interviews (Moustakas, 1994). Data gained from recollections of experiences help formulate questions and problems reflecting the commitment and involvement of researchers as they view the integrated experience and behavior in part and whole (Moustakas, 1994).

This qualitative research approach uses a transcendental phenomenological study to explore the experiences of teachers' age 21-29 use of OSNs for PD purposes. Transcendental phenomenological studies require researchers to set aside preconceived notions or the epoche process to review recollections of subjects experiencing a phenomenon impartially (Moustakas, 1994). The data from subjects' recollections of the phenomenon studied went through a reduction process to determine what common themes would emerge (Moustakas, 1994). The researcher will use the themes to determine how a phenomenon affects the subjects of a study (Moustakas, 1994).

This study explored the phenomenon of how licensed K-12 public school teachers age 21-30 used OSNs. This study examined participants' perceptions of OSNs, perceptions of PD, and their perceptions about using OSNs for PD. The epoche process attempted to set aside the researcher's beliefs, feelings, and perceptions about using OSNs for PD (Moustakas, 1994).

As a user of OSNs who has conducted professional development sessions about using OSNs in education, it is important for the researcher to acknowledge and bracketed any previous assumptions held on the topic. A process of interviews, focus groups, and observations gathered data about the phenomenon. Themes developed during data analysis that explained the phenomenon of using online social networks for professional development.

Research Questions

Central Question

How did teachers age 21-29 perceive using Twitter for professional development purposes?

Sub questions

1. How did teachers age 21-29 describe their purposes for using online social networks?

2. What perceptions did teachers age 21-29 have about the usefulness of professional development?

3. What perceptions did teachers age 21-29 have about the possibility of using Twitter for professional development?

Participants

To ensure getting proper data for this study it is important to invite a homogenous group of participants meeting required age, professional, and OSN usage requirements (Kruger & Casey, 2015). Homogeneity are focus group participants having something in common the

researcher is interested in (Kruger & Casey, 2015). This study used a criterion sample (Moustakas, 1994) of six K-12 South Carolina licensed public school teachers age 21-29 to participate in this study. Participants came from H.E. McCracken Middle School in the Beaufort County School District to provide a balance of participants teaching different academic subjects. It is important to understand teachers' PD needs at various grade levels and different subjects to understand their unique professional development needs. Also, participants consented to participate in focus groups and be interviewed (Morgan, 1997; Seidman, 2012; Veletsianos, 2012). The researcher was granted access to their social network sites for observations (Morgan, 1997; Seidman, 2012; Veletsianos, 2012).

Setting

H.E. McCracken Middle School of the Beaufort County School District is the setting for this study. This setting provided a diverse group of potential research participants. The geographic location of the school serves both a high population growth and transient community that often hires younger teachers to meet staffing needs. The selection of the school is because of its convenient location to conduct multiple interviews and focus group meetings (Seidman, 2012).

Procedures

The selection of using a phenomenological study to examine how teachers age 21-29 perceive using OSNs for PD is the first step of this study (Moustakas, 1994). The second step is completing a comprehensive review of existing professional and research literature on the topic (Moustakas, 1994). Along with completing the literature review, the research methodology on how this study is conducted occurs (Joyner, Rouse, & Glatthorn, 2013). The appropriate permissions from school principal and district authorities is the third step of this research study.

The fouth step is gaining permission from the participating school district is necessary for the Institutional Review Board at Liberty University to grant approval for this study. Applying for Liberty University's Institutional Review Board's approval happened after the school and district authorities' consents were obtained.

After IRB approval, potential participants received an introductory email explaining the nature of the study, participants' time requirements, obligations, ethical considerations, and an invitation to participate in a focus group discussion and a training session on using Twitter if they needed it (Moustakas, 1994). Participants in this study completed and signed the necessary consent forms (Seidman, 2013). Interviews with participants focused on the research topics and questions (Moustakas, 1994). Follow-up interviews are conducted to clarify the discussion from the initial interview (Moustakas, 1994). Data collection include focus groups (Morgan, 1997), observations of Twitter interactions (Krueger & Casey, 2015; Veletsianos, 2012), and individual interviews (Moustakas, 1994; Seidman, 2013). Upon completion of data collection, organization and analysis a description of the information along with its meaning and essence was conducted (Moustakas, 1994).

The Researcher's Role

Moustakas (1994) saw the epoche as not only a preparation for gaining new knowledge but also, "a process of setting aside predilections, prejudices, predispositions, and allowing things, events, and people to enter anew into consciousness, and to look and see them again, as if for the first time" (p. 85). I wanted to understand how and why teachers age 21-29 might or might not use OSNs for PD. I am the human component that collected and analyzed all data used in this study. This meant I may bring certain biases or assumptions to this study.

I am a classroom teacher who interacted often with younger teachers at my school through casual education discussions, professional learning communities, and professional development sessions. Also, I was a former school district Instructional Technology Coach who helped teachers integrate technology into their classroom teaching including OSNs. Furthermore, I provided PD sessions about using OSNs for educational conferences and training seminars. Personally, I used OSNs to connect with other educators to exchange information, ideas, and resources for personal and professional reasons. I also wrote a blog using OSNs as a topic as I advocated for the use of educational technology. My role as the researcher is an independent observer as participants engaged on Twitter for PD purposes, interacted with participants during focus groups and interviews to solicit their perceptions of using Twitter for PD, and collected and analyzed the data brought forth from the study. I had no supervisory or evaluative role involving any of the participants nor did I participant on any grade-level team outside of my normal duties.

Along with my potential biases, I had certain assumptions about this study. First, not every teacher age 21-29 used OSNs. Next, not every teacher 21-29 wanted to discuss their online activities using OSNs. I also understood participants may have made statements that are contrary or had different perspectives to my personal views. For this purpose, I have used direct quotes from interviews, focus groups, and online social network observations. As researcher, it important to have remained faithful to a constructivist view of the data (Creswell, 2014).

Data Collection

Data collection for this phenomenological study included: focus groups, observations of participants' Twitter usage, and interviewing individual participants. The focus groups determined participants' experiences with PD and their experiences using OSNs (Twitter in

particular) and using Twitter for PD purposes (See Appendix H). The observation recorded any

Tweets participants made, descriptive notes on the Tweet, and reflective notes on the purpose of

the Tweet can be found in the individual observation protocol (See Appendix J). Finally,

interviews established participants' experience, recapped prior OSN usage, experience using

OSNs during preservice, explained how Twitter benefited participants, and what obstacles

participants encountered (See Appendix D).

Focus Groups

The data collection process began with a focus group of six K-12 teachers, 21-29 years

old that took place in a centrally located school. Either an after-school or planning period session

allowed potential subjects to participate without missing any class time. The focus group

introduced participants to the research study and gave them an opportunity to share their

experiences using OSNs and PD through group interactions. Morgan (1997) believes focus

groups provide a good starting point for research studies because they provided insight into

participants' beliefs on the research topic. The purpose of focus groups is for researchers to

better understand subjects' feelings or thoughts on the topic studied (Krueger & Casey, 2015).

Focus groups in qualitative research allowed researchers, acting as moderators, to interview

groups of three to ten participants then use the interaction between participants as a source of

data (Morgan, 1997). The goal of focus groups is to have a group that shared the same

phenomenon (Krueger and Casey, 2015). Focus groups provided researchers a valuable source of

insight into complex behaviors further explaining how participants use OSNs (Morgan, 1997).

Focus groups also worked best when the participants are comfortable and free to give

their opinions without fear of judgment (Krueger & Casey, 2015). Participants selected for focus

groups participation shared something in common with the phenomenon of how teachers age 21-

29 use OSNs (Krueger & Casey, 2015). Starting a study with focus groups helped determine the suitability for research participation of participants (Morgan, 1997). Focus groups is a small group of people meeting defined characteristics that collected qualitative data during a discussion to understand the share experience of the phenomenon (Krueger and Casey, 2015). With permission, recordings of online focus group interviews with participants created transcripts for data collection purposes.

After establishing focus groups, developing questions to gather useful data from participants becomes important. The recommended number of questions to ask during a focus group is about twelve questions during a two-hour session (Kruger & Casey, 2015). Successful focus groups must have assumed the following: participants understood the questions, the environment is suitable for participants to answer honestly, participants knew the answers, participants could articulate and answer, and the interviewer understood the answers (Kruger & Casey, 2015). Kruger and Casey (2015) believe focus group questions should evoke conversation, uses words participants would use, easy to say, clear, short, open-ended, one-dimensional, and includes clear directions. Focus group questioning should start out broad then narrow to more specific questions about the topic (Kruger & Casey, 2015). The first questions asked in focus groups are introductory questions designed to introduce and get participants to think about the topic of discussion (Kruger & Casey, 2015). The next set of questions transitioned participants towards the main topic of conversation and allowed participants to become aware of what other participants are thinking about the topic (Kruger & Casey, 2015). Once the transition is complete, the focus group moved on to key questions about the topic (Kruger & Casey, 2015). Kruger and Casey (2015) believe there should be four to six key questions about the research topic. Focus group sessions ended with what Kruger and Casey

(2015) consider final questions that allow participants to reflect on the focus group's discussion and provide final thoughts about the research topic.

Standardized Open-Ended Focus Group Questions

1. Tell us your name and what area you teach?

2. Name the online social networks you use and what you use them for? Examples include Twitter, Facebook, Google +, Instagram, Snapchat, LinkedIn, Pinterest, or any others not on this list.

3. Share your best professional development experience and how it helped you in the classroom.

4. Share your worst professional development experience.

5. Think back to when you sought professional development to help you in the classroom on your own initiative. To whom or where did you turn for help?

6. What do you think would make professional development offerings more helpful to your classroom teaching?

7. What are your thoughts on using online social networks to engage in professional development?

8. Explain what you believe Twitter is and how it works.

9. What other thoughts do you have about using online social networks for professional development or professional development in general?

Question one is an opening question designed to introduce all participants and give each participant a chance to speak early (Kruger & Casey, 2015). Question two is a transformation question preparing participants for the discussion ahead (Kruger & Casey, 2015). Perrin (2015) found 90% of adults 18-29 years old used some form of OSNs. Questions three through six are

key questions regarding participants' experiences with PD (Kruger & Casey, 2015). Traditional

PD often failed to change teachers' instructional practices and is disconnected from needed

instructional improvement (Dingle et al., 2011; Visser et al., 2014). Teachers often sought out

other teachers to help improve instructional practice (Desimone, 2009; DuFour et al. 2010).

Questions seven and eight sought participants' openness to using OSNs for professional

development and how Twitter worked (Kruger & Casey, 2015). Teachers sought assistance with

instructional improvement by turning to OSNs, such as Twitter (Carpenter & Krutka, 2014;

Visser et al., 2014). Question nine is a closing question that allowed participants to share any

thoughts they may not have expressed with the other questions (Kruger & Casey, 2015).

Observations

After the focus group and PD session concluded, the second method of data collection is

observing participants use Twitter for 90 days. The researcher created a research Twitter account

and added the participants observed in the study. The researcher is a nonparticipating observer

for 90 days (Angrosino, 2007). While this method of observation ran the risk of participants

changing their online networking behavior because they knew they knew the researcher was

observing them, it is better than the unethical practice of covert observations of participants'

behaviors (Angrosino, 2007). Participants engaged in their normal Twitter interactions while the

researcher avoided unintended observer effects (Angrosino, 2007). Checking the research

Twitter account at least daily showed participants' activity on the site and how participants used

Twitter (Veletsianos, 2011). During the observation period, participants' Twitter activities with

individual tweets are copied into an observation protocol document. The observation protocol

(Appendix A) provided both descriptive and reflective notes along with classifying Tweets to

assist with coding (Angrosino, 2007). The descriptive notes are the Tweets of individual

participants (Angrosino, 2007). The type of Tweets include professional or personal Tweets, statements, questions, responses, retweets, discussion participation with hashtags, sharing links or other resources. The reflective notes are the thoughts about how a participant used Twitter and what they desired by using the microblog (Angrosino, 2007). Other information gathered is how long participants use Twitter, the number of Twitter users the participants follow, and how many Twitter users that follow the participants (Angrosino, 2007). This data collection took place at the end of the observation period. Upon the conclusion of observation and data collection the researcher disconnected the participants' Twitter accounts by discontinuing the research Twitter account (Angrosino, 2007).

It is necessary to observe participants' interactions on online social networks to understand how participants use them. Observers could gain new insights by observing the reality of what happened in the field (Angrosino, 2007). Using peripheral observation allowed the researcher to identify as an insider with the knowledge of participants but the researcher did not engage in participants Twitter activities (Angrosino, 2007). Participants needed to allow the researcher to join their individual OSNs so the researcher could understand how participants used Twitter (Angrosino, 2007; Veletsianos, 2011). A PD session showed participants how to use Twitter to create virtual professional learning communities (Trust & Horrocks, 2016). Also, a Twitter hashtag for this study helped participants locate individual tweets if needed.

Interviews

Once the observation period concluded, participant interviews regarding their experience and perception on using Twitter for professional development began. The researcher interviewed participants at mutually agreed upon times in a designated space provided by the school's administration or other agreed upon locations.

Moustakas (1994) wrote, "The phenomenological interview involves an informal, interactive process and utilizes open-ended comments and questions" (p. 114). Interviews helped understand other peoples lived experiences and the meaning they made of those experiences (Seidman, 2013). Brinkman and Kvale (2015) believe qualitative research interviews help phenomenological studies clarify and get closer to the meaning of subjects' experiences by allowing subjects to describe their experiences instead of using other analytical methods where subjects give accounts of various situations they have experienced. Morgan (1997) also believes follow-up interviews provide both depth and more details than information shared during focus groups. Also, interviews allow exploration of details noted during the observation period (Morgan, 1997). Personal, semi-structured interviews with individual participants obtained descriptions of participants' personal experiences using online social networks and professional development with respects to interpreting the described phenomena (Brinkman & Kvale, 2015; Moustakas, 1994).

In developing interview questions, Moustakas (1994) states that altering or not asking certain questions may occur if participants are provided the full story or experience of the bracketed question. Pilot testing of interview questions helped further develop the interview questions (Krueger & Casey, 2015). Also, interview questions may have changed based on information coming from the focus group (Krueger & Casey, 2015). Broad questions obtain rich, vital, substantive descriptions of participants' experiences of the phenomenon (Moustakas, 1994). However, an interview guide focused the interview on certain themes that may have included suggested questions (Brinkman & Kvale, 2015). Recorded interviews with the permission of the participant helped generate transcripts that provided materials and data for the

study (Brinkman & Kvale, 2015). Interviews helped explore depth and details along with further

clarifying information gathered in the focus groups (Anderson & Spencer, 2013; Morgan, 1997).

Standardized Open-Ended Interview Questions

1. Please introduce yourself and what would you like people know about you as a person and teacher?

2. What are your roles in your current position?

3. How long have you been teaching?

4. Recall how professional development offerings have met and not met your needs as a teacher?

5. Share the people and resources you turn to when you need to improve your classroom practices.

6. What online social networks do you use besides Twitter and how long have you used them?

7. What aspects of online social networks do you find most valuable?

8. How are OSNs used in your preservice courses and student teaching?

9. Share how your recent use of Twitter benefited you professionally.

10. How do you feel your teaching workload affects you using Twitter or other online social networks for professional development?

11. How do you see using Twitter for professional development for future professional development needs?

12. What other thoughts do you have regarding using Twitter or other online social networks for professional development?

Seidman (2013) says interview questions fall into one of three categories: focused life history, details of the experience, and reflection on the meaning of the topic. Questions one through three were introductory questions focusing on the life experience of the participant (Seidman, 2013). The introductory questions provided more details of each participant's background as a person and teacher that may not have come out in the focus group (Seidman, 2013).

Question four and five asked individual participants to share their traditional PD experiences and opinions of the value of these experiences in improving their teaching. Traditional PD often failed to make improvements in classroom instruction because of its disconnection from practice (Dingle et al., 2011; Visser et al., 2014). Whenever traditional PD failed to meet teachers' needs, they often turned to more non-conventional resources to meet their needs (Carpenter & Krutka, 2014; DeFour and Reason, 2016; Visser et al., 2014).

Questions six through eight turned the attention to participants' uses of OSNs. Perrin (2015) found 90% of adults 18-29 years old participated in some form of OSNs; however, teachers in this demographic age range often did not use OSNs for PD (Carpenter & Krutka, 2014; Visser et al., 2014). Users of OSNs often used them for emotional support systems and relationship maintenance (Dainton, 2013; Hertz et al., 2015). Studies that explored OSN use in preservice instruction found them to be beneficial to participants when required to use them, but interest waned after required participation ended (Carpenter, 2015).

Questions nine and ten focused on using Twitter for PD purposes (Seidman, 2013). These questions uncovered participants' perceptions of using Twitter for PD (Carpenter & Krutka, 2014). Benefits for using Twitter included gathering and sharing information (Tang & Hew, 2016), reflecting on and seeking feedback to improve practice (Tang & Hew, 2016),

collaborating with other teachers to find ways to improve practice (Carpenter & Krutka, 2014), and providing access to experts normally not available due to geographic constraints (Carpenter & Krutka, 2014). Twitter also helped education professionals lessen the isolation often found when teaching (Cho, 2016). Preservice teachers who used Twitter to engage with in-service professionals for class assignments stopped using Twitter when their student teaching started because of time constraints (Carpenter, 2015).

Questions eleven and twelve provided participants the opportunity to further reflect on using Twitter for PD and other aspects of their participation in this study that did not come out in other interview questions (Seidman, 2013). Participants are able to provide their perspective regarding using Twitter in the future (Carpenter, 2015). This gave participants a chance to express any thoughts regarding the study that are not covered in the previous questions.

Data Analysis

After transcribing individual interviews, observations, and focus groups, Moustakas (1994) suggests using a modification of the Stevick (1971), Colaizzi (1973), and Keen (1975) method of analyzing phenomenological data. First, researchers needed to explain and set aside their own personal experiences with the studied phenomenon to focus on the participants' experiences (Creswell, 2014; Moustakas, 1994). Upon completion of verbatim transcripts of participants' experiences the researcher needed to consider all statements and record all relevant statements (Moustakas, 1994). The listing of any nonrepetitive, nonoverlapping statements provided meaningful units of experience or invariant horizons (Moustakas, 1994). The invariant horizon units need to relate and cluster into themes then synthesize into what Moustakas (1994) called "a description of the textures of the experience" (p. 122). Descriptions included verbatim examples of these themes (Moustakas, 1994). Using imaginative variation, constructing images

of the participants' description of their experiences along with "a textual-structural description of the meanings and essences" (Moustakas, 1994, p. 122) of their experiences to understand their perceptions. Upon completion of all participants' textual-structural descriptions of their experiences, a composite textural-structural description of the meanings and essences of the experience to construct and integrate those experiences into a universal description of the experience of all the participants (Moustakas, 1994). Participants are given an opportunity to review the phenomenon descriptions to validate the findings of the researcher. The final description may include any new relevant data (Anderson & Spencer, 2013).

Trustworthiness

There must be mechanisms for this study to be valid in explaining the perceptions participants have about using Twitter for PD purposes. Triangulation provided more accurate data to analyze from the research methods. Member checks allowed participants to review transcripts of focus groups and interviews to verify the accuracy of those transcripts. Epoche is setting aside any preconceived ideas or bias the researcher may have about this study. Using multiple sources verified the validity of this study. Finally, a pilot study is conducted to determine if focus group and interview questions will provide information relevant to this study.

Triangulation

Using triangulation corroborated and cross-validated data by comparing information obtained from different collection methods (Oliver-Hoyo & Allen, 2007). This method yielded more accurate and valid results when different methods of data collection provided the same answers (Oliver-Hoyo & Allen, 2007). However, the convergence of data may have led to a range of possible estimates to include the answer sought (Oliver-Hoyo & Allen, 2007).

Employing triangulation or the use of different sources, investigative methods, and theories provided corroborating evidence supporting the study's potential findings (Creswell, 2013).

Member checks

Participants reviewed and responded to transcripts created and preliminary synthesis of the data from the transcripts to check the accuracy and reflect participants' true experiences and perceptions. Participants are given an opportunity to delete or suggest additions to any part of the transcript to ensure accuracy of experiences and perceptions (Grigsby & Megel, 1995; Krueger & Casey, 2015).

Epoche

Epoche, also known as bracketing, is the process of setting aside personal assumptions, thoughts, prejudices, and predispositions the researcher might have brought to the study based on previous experiences with the phenomenon studied (Moustakas, 1994). The epoche process is so researchers may interpret collected data about the phenomenon as participants experienced it (Moustakas, 1994). Moustakas (1994) saw epoche as, "the opportunity for a fresh start, a new beginning, not being hampered by voices of the past that tell us the way things are or voices of the present that direct our thinking" (p. 85). While it is difficult for the researcher to not bring any predisposed assumption to the study, the researcher made efforts to avoid allowing personal assumptions to effect data analysis (Creswell, 2013).

Verification

Verification of the study came from many sources. Methods of verification included a comprehensive literature review, adhering to phenomenological methods, interviewing a sample of participants to ensure data saturation, and identifying negative cases (Anderson & Spencer, 2013).

Pilot Testing

Questions for both the interviews and focus groups underwent pilot testing to determine if participants understood the questions and if the questions would produce useful data to analyze (Krueger & Casey, 2015). Three teachers, over 30 years old, from a suburban middle school in the South Carolina Lowcountry comprised the pilot testing subjects.

Ethical Considerations

Moustakas (1994) wrote, "Human science researchers are guided by the ethical principles on research with human participants" (p. 109). The consent documents participants agreed to explained "the nature, purpose, and requirements of the research project" (Moustakas, 1994, pp.109-110). Precautions that protected participants from harm when doing research using human subjects, such as this study, were important (Angrosino, 2007). Protecting the identities of participants in this study is the main ethical consideration. Pseudonyms took the place of participants' names. Also, none of the participants' workplaces and exact locations are not identified either. These measures are in place to ensure the participants' privacy and avoided any conflicts of interest that may have arisen by revealing participants' identities. All research with identifying information is kept confidential (Angrosino, 2007). Any other ethical issues are handled on a case-by-case basis in consideration of the best interest of the participant in mind. Participants are allowed to stop their participation and not allow the research to use any data from their participation in the study (Moustakas, 1994).

Summary

The research design for the proposed study is a transcendental phenomenological study with a justification for the selection of this research design. This included a site description and justification for selection. This chapter also addressed ethical considerations of participants

including protecting any identification features, confidentiality of participants, and allowing participants to leave the study. This chapter explained and supported the triangulation of data from individual interviews, focus groups, and observations. Analysis of the data collected used epoche, phenomenological reduction and elimination, imaginative variation and synthesizing the meanings and essences of participants' experiences recommended by Moustakas (1994). The transparent exposure of research methods increased the trustworthiness of the proposed research study.

CHAPTER FOUR: FINDINGS

Overview

The purpose of this research study was to examine the perceptions of teachers age 21-29 years-old about using Twitter for PD purposes. The following themes were developed based on data analyzed from the focus group session, observations of how research participants used Twitter, and interviews with research participants. This chapter describes the research participants in this research study including years of experience, the subject they taught and other duties they held at the school, and other items of interest as educators. Next, the research questions were addressed based on analyzed data participants provided through a focus group discussion, Twitter usage observations, and individual interviews conducted at the end of the study. Participants' responses were categorized into themes the researcher found during the analysis of the data.

Participants

Twenty teachers were invited to participate in this study and twelve participated in the study. Some of the participants requested their ages not be disclosed but all were under thirty-years old at the time of the study.

Boba

Boba is a first-year teacher teaching eighth-grade math and a middle school boys' basketball coach. Two things came out during my conversations with Boba. First, he appears to struggle with classroom management, as all new teachers do. Second, he is always seeking ways to improve his teaching and content knowledge, again, a trait shared by new teachers. Boba was eager to seek out any PD he believes helps him, but he does not have the knowledge or expertise to know what PD will help him the most.

Cadix

Cadix is a second-grade teacher and relatively new to the district. He prefers anything he tries in the classroom to be research-based. Also, Cadix appears to be a visual learner because of his preference to viewing pictures demonstrating various teaching methods.

Evaan

Evaan is a 28- year-old white female from Ohio She is a sixth-year middle school Science teacher and girls' soccer coach. She also coordinates school-wide science, technology, engineering, arts, and math projects. Evaan is devoted to her students and is always seeking to make her classes more enjoyable and meaningful for them. Also, Evaan is comfortable using technology and is not afraid to try new technology-based classroom activities or PD if it promises to help her improve.

Ezra

Ezra is a 26-year-old white male from Georgia. He is a fourth-year middle school Science teacher and boys' basketball coach. Ezra appears to prefer PD that provides instant benefits to his classroom teaching such as content or methods to deliver content. However, Ezra also shows he is willing to learn new things if it benefits him personally.

Garma

Garma is a third-grade teacher. This is her second-year teaching at her school but she previously taught fourth grade in another school. Garma has a passion for teaching and creating engaging lessons. She is constantly looking for new and innovative ways to engage her students but prefers sources she can quickly evaluate because she quickly moves on to other ideas unless something quickly catches her eye.

Hera

Hera is a 27-year-old white female from Ohio. She is a sixth-year middle school math teacher as well as the school's Response to Intervention Coordinator and cheerleading coach. Outside of school, Hera teaches English to students around the world via an online program. Hera is focused on helping her students and seeks PD that helps her improve helping those students. Yet, new methods need to easy to integrate and for students to use. Hera does not care for unproven gimmicks to use in her classroom.

Kath

Kath is a 24-year-old white female from Michigan. She is second-year middle school English Language Arts teacher and coaches the schools track team. She also participates in the district's new teacher induction program that provides mentors and other support for new teachers entering the teaching profession. Kath appears to struggle with classroom management and is open to any suggestions on this topic. Also, Kath is open to new ideas to help make her classes more enjoyable to her students. The biggest problem is Kath is shy about speaking up online, which probably does not direct her to specific help she needs.

Nadien

Nadien is a fifth-grade teacher along with core instruction for fourth grade as well. Like many of the other participants, Nadien prefers PDs that get to the point and doesn't waste his time. Therefore, Nadien prefers PD and information that presents new information quickly and avoids potentially disrespectful conversations.

Rey

Rey is a middle school dance teacher, middle school cheer coach, and dance teacher at a local

dance studio. She is frustrated because of a lack of meaningful PD for her subject area. Rey does have a passion for dance and is creative in finding new content to teach her students, such as watching Tik Tok videos for new dance steps.

Sabine

Sabine is a 26-year-old white female from Illinois. She is a second-year middle school English Language Arts teacher and participates in the district's new teacher induction program. Sabine's mother, also a teacher, has a big impact on how Sabine approaches her teaching. Because of the belief teaching consumed her mother's time, Sabine is not willing to put forth much effort in improving her teaching to include using OSNs for PD. Also, Sabine only cares about PD that is specifically relevant to her and does not want to waste time in what she believes is unnecessary PD.

Sarla

Sarla is a third grade gifted and talented teacher and does math talent development for first grade students. She is also a high school girl's soccer coach. Sarla has five years of experience and has taught second and third grades. Sarla is constantly searching for new teaching methods to make her classroom teaching better even if it is attending conferences on her own time and pays for by herself.

Temmin

Temmin is a 29-year-old white male from North Carolina. He is a fifth-year middle school social studies teacher and the school's baseball coach. Unlike the other participants, Temmin used South Carolina's PACE program, which is an alternative path to teacher certification. The unique method to entering the teaching profession and his previous work for the federal government affects how he views using OSNs for PD and OSN use in general. Like Sabine, Temmin does not

like to waste time and generally has a closed mind to new teaching methods. However, Temmin appears to have a great rapport with his students and gets the best out of them.

Results

This section explains the results after analyzing the data from the focus groups, Twitter observations, and individual interviews. First, the development of the themes that emerged from the data analysis is explained with examples leading to identifying a theme. Second, a chart of t themes with selected quotes from data sources is provided. Third, a chart of themes and their relationship to the central and sub research questions is provided. Next, the central and sub research questions are provided using information from the data analysis and organized by the themes developed from the data analysis.

Theme Development

Based on data collected from the research questions, coding themes were developed during data analysis. Table 1 outlines the development of themes based on information found analyzing the data. Table 2 identifies the various themes and their relationships to the central research question and three sub research questions. Finally, the central and sub research questions are addressed with thematic evidence from data analysis.

The researcher purposely avoided using Twitter during the data collection period to set aside any personal beliefs about Twitter during data analysis of the focus group, Twitter observation, and individual interview transcripts (Creswell, 2014; Moustakas, 1994). During the analysis of the data, statements providing meaningful explanations of participants' experiences were identified and clustered into themes (Moustakas, 1994). An example of the themes developed from data analysis include lack of familiarity, difficulty finding information, and lack of relevant information (Table 1, 87-88). The thematic clusters allowed the researcher to describe

"textures of the experience" (Moustakas, 1994, p. 122) along with constructing images of participants' description of their experiences for "a textual-structural description of the meanings and essences" (Moustakas, 1994, p.122).

Participant descriptions came from focus group data, observations of Twitter usage, and interviews with individual participants. Examples of these descriptions come from data derived from focus groups. "The worst ones (PD) I have been to are ones that don't pertain to me, the arts, and my subject," (Appendix H) demonstrates how focus group responses demonstrates the lack of relevant choices theme. Sabine demonstrates the theme of repetition with "…but they keep doing the same. Here's the 4.0 rubric, here's the 4.0 rubric, here's the 4.0 rubric" (Appendix H). The second source of data came from Twitter observations. Sarala's retweet, "I love when teachers put PD into action! @Twitter user Thank you for the idea. I love sharing this idea with our teachers!" (Appendix J) is an example of the theme using connections with other teachers though Twitter had value. When Hera (Appendix L) opined in her interview, "I just don't think it's very organized. The feed is very sporadic and updates very quickly. So, it's sometimes hard to follow certain things demonstrates the theme difficulty finding information.

Table 1

Thematic Development

Theme	Participant Quotes
Lack of Familiarity	"I really don't know about Twitter" (Ezra, Appendix H). "I don't think the young ones use it anymore" (Temmin, Appendix L).
Difficulty finding information	"With Twitter I was trying to search something with it and it just wouldn't give me the instant answer that I was looking for…." (Ezra, Appendix L). "I just don't think it's very organized. The feed is very sporadic and updates very quickly. So, it's sometimes hard to follow certain things" (Hera, Appendix L).
Privacy concerns	"We were taught not to and everywhere we grew up in a generation that says your employers are watching what you use, and they will check it" (Sabine, Appendix H).

	"Social media and professionalism are two distinctly different categories when we were coming up through school" (Temmin, Appendix H). "I don't do anything for professional development for like behavior and stuff because it can get misconstrued" (Evaan, Appendix H).
Time consuming	"I grew up with the teacher who was 100% a teacher 100% of the time…. I saw the toll it can take on an educator and the stress it puts on somebody…. (Sabine, Appendix H). "I have a Facebook account, but I deleted the app because I spend a lot of time sitting and scrolling on it" (Garma, Appendix H). "I did not use Twitter because I was busy with basketball and teaching so I couldn't fit it in" (Boba, Appendix L). "It was hard for me to find the time to use Twitter" (Sarala, Appendix L).
Used OSNs for personal reasons	"Instagram and Facebook for personal reasons" (Ezra, Appendix H). "I mostly use Facebook to keep up with friends in Michigan because I don't ever see them in person" (Kath, Appendix H). "Instagram more for just personal things" (Cadix, Appendix H). "I use Facebook like personal to connect with my family and that kind of stuff" (Sarala, Appendix H). "I use a lot of social media but not for my classes…." (Rey, Appendix H).
Some traditional PD was useful	"Probably something to do with classroom management, cause that's one of my downfalls as a teacher" (Kath, Appendix H). "…one of my best ones …somebody from the Lucy Calkins…." (Sarala, Appendix H). "I think it was great because it was actually somebody who works directly with the Lucy Calkins and knew really what it was, like, meant how to be used…." (Garma, Appendix H). "My most beneficial PD was for iXL and specifically the iXL Diagnostics" (Boba, Appendix H).
Repetition	"…but they keep doing the same. Here's the 4.0 rubric, here's the 4.0 rubric, here's the 4.0 rubric" (Sabine, Appendix H). "So a lot of the Google trainings and stuff are a little bit not helpful. They are like uhh I got to do this again?" (Kath, Appendix H). "I am sure I have done four PDs on how to do Google Classroom at this point" (Temmin, Appendix L).
Lack of relevant choices	"The district sponsored PD Day…. There was nothing for social studies specifically" (Temmin, Appendix H). "How are we supposed to differentiate for our students when our PD is rarely ever differentiated?" (Temmin, Appendix H). "The worst ones (PD) I have been to are ones that don't pertain to me, the arts, and my subject" (Rey, 170). "Offering choice" (Evaan, Sabine, and Temmin, Appendix H).
Forced to look outside school and district for relevant PD	"I went to this thing called Roper Mountain, which was probably the best PD I ever went to because it was directed just at middle school science" (Ezra, Appendix H). "I'm going to the conference…in Charleston and it's somebody I follow on Instagram" (Sarala, Appendix H).

	"The most beneficial PD I have been to was the ABC Conference I went to in October. I learned different ways to incorporate core subjects into dance" (Rey, Appendix H).
Forced to bypass traditional PD for relevant PD	"So, I've like signed up for a couple of online things and I do just like a webinar and most of the time I can't make it to the actual webinar, so they send it in an email and it's fine" (Kath, Appendix H). "…we follow the people on Instagram and we saw them, like, all over social media. We read their books and you know, we've just been really interested in the work that they've been doing…." (Garma, Appendix H).
Preferred to watch what others posted	…I'm on social media but I've never been one to participate in social media" (Kath, Appendix L).
Recertification credit would motivate more OSN PD use	"I think that would be a double positive having that resource for the classroom and the incentive of gaining recertification credit" (Boba, Appendix L). "I feel like everyone needs the recertification and if you could do it on your own time on social media…. Yeah, I would love to use it for recertification purposes" (Ezra, Appendix L)
Using connections with other teachers through Twitter had value	"Learning lots and having fun at the #hellolitcon" (Sarala, Appendix J). Retweeted "Are we developing passionate readers?" along with a photo stating "In our pursuit to establish classrooms filled with passionate readers, we must make sure that the things we do, do not do more harm than good" (Sarala, Appendix J). Tweeted "Look how they have the Lucy writing rubric blown up" (Sarala, Appendix J). Retweeted "This week's read has finally arrived! Thanks @user for the recommendation!" (Sarala, Appendix J). Retweeted from another Twitter member "I love when teachers put PD into action! @TwitterUser Thank you for the idea. I have loved sharing this idea with our teachers!" (Sarala, Appendix J). Tweeted "Need some ideas on how students could create a meme or gif about animal adaptations & natural selection! Any amazing free meme/gif generators that you love? #STEAM" (Evaan, Appendix J). Retweeted "an idea from another Twitter user about using books to create an Advent calendar" (Sarala, Appendix J). "Like they have these chats on Twitter and that's where I got the idea to read *The Giver* with some of my students this year" (Kath, Appendix L).
Advocacy for the teaching profession	"I started following the politicians like Joe Cunningham who's the representative for our district…." and "There's the SC for Ed Facebook page that I'm following" (Appendix L). "I liked Facebook for our SC Red for Ed keeping up with people in our district…." (Sabine, Appendix L).

Table 2

Thematic Categories Based on Research Questions

Research Question	Thematic Category
Central Research Question: How did teachers 21-29 years old perceive using Twitter for professional development purposes?	Lack of Familiarity
	Difficulty finding information
	Privacy concerns
	Time consuming
Sub Research Question 1: How did teachers 21-29 years old describe their purposes for using OSNs?	Used OSNs for personal reasons
Sub Research Question 2: What perceptions did teachers 21-29 years old have about the usefulness of professional development?	Some traditional PD was useful
	Repetition
	Lack of relevant choices
	Forced to look outside school and district for relevant PD
	Forced to bypass traditional PD for relevant PD
Sub Research Question 3: What perceptions did teachers 21-29 years old have about the possibility of using Twitter to build personal learning communities for professional development?	Preferred to Watch What Others Posted
	Recertification credit would motivate more OSN PD use
	Using connections with other teachers through twitter had value
	Advocacy for the teaching profession

Research Question Responses

This section addressed the central research question: How did teachers 21-29-year-old perceive using Twitter for professional development purposes? The results also addressed answers to the three sub-research questions included:

1. How did teachers 21-29-year-old describe their purposes for using OSNs?

2. What perceptions did teachers 21-29-year-old have about the usefulness of professional development?

3. What perceptions did 21-29-year-old have about the possibility of using Twitter to build personal learning communities for professional development?

The research questions were addressed based on analyzed data participants provided through a focus group discussion, Twitter usage observations, and individual interviews conducted at the end of the study.

Central Research Question

How did teachers 21-29 years old perceive using Twitter for professional development purposes? Participants' perception (teachers 21-29 years old) discussed their reasons for not liking Twitter for PD purposes. A lack of familiarity with Twitter, difficulties finding information on Twitter, privacy concerns, and checking tweets consumes valuable time better used in other endeavors gives participants a negative perception of using Twitter for PD purposes (See Appendices H, J, and L).

Lack of Familiarity

Most of the research participants did not use Twitter because they were more comfortable using more familiar OSNs. The OSNs research participants usually cited they used were Instagram, Snapchat Pinterest, and YouTube. Ezra shared that he did not have a Twitter account. Sabine shared she had not used Twitter since "While having a Twitter account, Sabine admitted to not using Twitter for several years except for a chance to meet a movie actor. "The last time I used Twitter was because I heard Patrick Stewart was doing something … if you tweeted him back, he could come visit you." Rey uses Twitter for a similar purpose. As a NASCAR fan Rey goes to Twitter to view the latest news of the sport. The research participants believed younger people did not use Twitter as older people do. Temin opined, "I don't think the young ones use it anymore." Sabine said, "I don't know what the young ones these days use it for."

Two research participants noted they actively used Twitter before this study started. Kath said, "I do have a Twitter to follow … celebrities and stuff" but later admitted, "I don't ever use

Twitter right now." Evaan used Twitter to find content she could use in her classroom teaching, such as science videos. Yet, Evann, who declined Twitter training, believed she needed "more training on how to use it or I need some ideas on how I can connect with people that I would want to connect with." This lack of familiarity did not deter Evaan from sharing tweets, such as this retweet from @NatGeo "Capable of long-distance travel and dominating most other animals, why they aren't Komodo Dragons more widespread?" or asking through this tweet "The last time I learned about #DopplerEffect was in my middle school years. Suggestions to easily show this in a classroom. #STEM."

Sarla started using Twitter for PD during the study. Most of her tweets shared reading strategies including "Retweeted a link to an article sharing 24 books to teach students kindness" or "In our pursuit to establish filled with passionate readers, we must make sure that the things we do, do not do more harm than good." Sarla also tweeted from a literacy conference she attended but did not provide any details about what she learned, only that she had fun, ate tacos, talked about literacy. School activities was another favorite topic Sara tweeted about. One retweet was a link to a school district YouTube video of students at her school learning weather forecasting from a meteorologist. Another retweet shared how students at her school was privileged to hear musicians from a local symphony orchestra perform for them. While Sarla attempted to use Twitter for PD she stated, "I'm not sure that I will continue to use Twitter for PD" because of the time it took her to use Twitter.

Difficulty Finding Information

Besides not being relevant in their lives, research participants also believed finding useful information on Twitter was too difficult. The research participants claimed Twitter was too disorganized to find anything quickly as Hera observed about Twitter, "I just don't think it's very

organized. The feed is very sporadic and updates very quickly." The participants believed continuously checking Twitter posts took too much time out of their day. Sabine shared what her mother told her about Twitter, "My mom just told me it's not bad anymore." Cadix and Nadien thought finding research-based information on Twitter would be a problem because of reliability issues.

Participants believed Twitter and other OSNs became a distraction that constantly needed attention, taking away from what he considered important. Sabine saw how much time her mother, a teacher, spent on Twitter and other OSNs looking for content and ideas and believed it was not worth it. Temmin and Ezra believed Twitter was too opinionated to find anything valuable for their teaching. Ezra noted he preferred OSNs, such as YouTube, where he entered a search term related to his lesson and found information or content. Ezra preferred seeing fewer choices when he searched for content and further explained Twitter searches overloaded him, and he had little time to process the information. One example he gave about simplifying content searches was searching YouTube for videos to share with his classes. Sarala explained using Instagram was better because it is visual, "It's quicker to find people based on pictures and for me it takes less thinking to search for pictures rather than reading the words and hashtags on Twitter." Another visual OSN is Pinterest. Garma saw a picture of a game using popsicle sticks with math information put into Crystal Light container. Based on that picture Garma used popsicle sticks and similar containers she saw on the picture and quickly created 30 sets of the game without having to open the post.

Evaan claimed to have found useful information on Twitter when she stated, "I found some really good videos and articles. Evaan further opined about what she found useful, "what I found more of is like kind of on the creative side of teaching, like here are some project ideas ….

Kath believed Twitter should be tailored to what each teacher needs when she observed "I think it's definitely a personal thing for teachers to use it for professional development." Kath further elaborated, "it's definitely like a personal thing that you could figure out how to do if you really wanted to."

Privacy Concerns

As the research participants noted, they did not care for Twitter. Study participants were also concerned about their privacy because they were afraid of what employers and members of the community would think about what teachers posted online and use those posts against them. Sarla admitted she uses two different Instagram accounts. A personal one she uses to keep up with family and friends and a professional one to "get ideas for the classroom, see what strategies people are using and that kind of stuff." Temmin explained "social media and professionalism are two distinctly different categories when we were coming up through school." Sabine pointed out "we grew up in a generation that says your employers are watching what you use, and they will check it.". Sabine later stated, "Someone said one thing and (an) administrator or someone somewhere in the district takes it the wrong way or some parent takes it the wrong way … that's what makes me nervous." Even teachers who liked using OSNs for PD are careful about what they search for. Evaan admitted "I don't do anything for professional development for … behavior and stuff because it can get misconstrued." Research participants shared a belief that veteran teachers, who did not grow up using OSNs and were more secure in their careers, did not share the fears younger teachers had about the pitfalls of what they posted on OSNs. Temmin explained,

> … the interesting thing about people that are older than us who do use it (Twitter) as
>
> professional development, … they were already introduced to social media when they

were already in the middle of their careers, where as we were trained on social media and then started our careers.

Sabine feared searching for PD on OSNs might give school and district administrators an impression of weaknesses individual teachers might have as educators.

Temmin cited his previous experience work in the federal government influenced his views of OSNs. Because OSN posts were used against their authors in Washington, D.C., Temmin found it best to not post on OSNs to avoid potentially embarrassing situations caused by misconstrued posts. Temmin extended this attitude to his teaching career because he believes teachers are in positions of authority and serve as community role models. Therefore, Temmin opined, teachers should avoid sharing their opinions on OSNs because it is an inappropriate action for role models. If teachers want to use Twitter or any other OSN for PD, that is their personal choice but there should be separate OSN accounts for personal and professional purposes.

Time Consuming

Another concern the research participants had about using Twitter or even OSNs for PD was the concern keeping up with Twitter feeds would consume too much of their free time. Ezra, who found YouTube easier to use, stated, "With Twitter I was trying to search something with it and it just wouldn't give me the instant answer that I was looking for like YouTube would." Garma complained the 140-character limit stressed her out because if a message didn't fit then she would have to take time to recompose the message, while she could just compose a message on Facebook or Instagram and it was done. After attempting to use Twitter for PD, Sarala complained, "It is very hard to find time to use OSNs for professional development based on my teaching workload." Boba claimed his life as a first-year teacher and coaching basketball did not

leave him any time to use Twitter. Sabine shared how her mother was constantly on Twitter or Pinterest while working on lesson plans and had little time to spend with her daughter. Temmin believed "the intention (of OSNs) was to follow some stuff and just keep apprised of what was going on in the world, but it just became one more thing to check …." Temmin further explained "using social media for professional development kind of damages the concept of the work-life balance because it becomes you … doing schoolwork at home. As the father of two young children, Temmin believes it is important to spend as much time with his family as possible, "at a certain point, I have to be dad as well as teacher and sometimes the two can't coexist." Therefore, when Temmin leaves school, he assumes the role of husband and dad and leaves school matters behind him. Sabine, a daughter of a teacher, shared what she believed using OSNs constantly for PD could do to a family,

> I grew up with the teacher who was 100% a teacher 100% of the time …. But I saw the toll it can take on an educator and the stress it puts on somebody and she is a great educator …, but I mean, I was always waiting on Daddy…. She's always on that computer … on some kind of social media looking at like Pinterest, looking at different activities to do …. I saw what it can do to a person ….

Hera shared how an email from Pinterest interrupted her getting ready for school,

> … this morning at six I got … an email … check out this new pin on Pinterest and it was something I was working on with my kids …. But I need to just focus on getting ready for work, but I was literally sitting there on my phone.

While most of the participants believed time was a factor in not using Twitter, a couple of participants believed using Twitter to search for PD might save them time. Nadien believed

Twitter "…could provide a more flexible for those with hectic lives." Rey also believes using

Twitter would help her keep up with PD as she struggles to balance her life with three jobs.

Sub Research Question 1

How did teachers 21-29 years old describe their purposes for using OSNs? Participants

report they use OSNs for personal reasons for a variety of reasons explained below (See

Appendices H and J).

Used OSNs for Personal Reasons

All the research participants used OSNs to mainly keep up with family and friends,

understandable because none of them were native to the geographic location they taught in. Hera

used Facebook and Instagram for keeping in touch with family, friends, and news. Kath used

Facebook to keep up with friends back home she did not see often, along with viewing food

videos, and Instagram to view photos her friends shared. Of all the research participants, Kath

and Rey were the only one who used Twitter regularly to keep up with celebrities or NASCAR

but did not post anything. Rey admitted she only likes to look while Kath admitted only using

Snapchat to share information with her close friends.

Ezra liked to view how-to videos on YouTube whenever he needed to fix something at

his house and recently started posting his own content on the video sharing site about his travels.

Temmin claimed he did not use OSNs and preferred to connect with people closest to him via

face-to-face meetings, telephone calls, text messages, or email interactions. Evaan's Twitter feed

shared dishes she fixed using her Instapot, such as this tweet "Homemade Bolognese" with a

picture attached. Evaan also shared the success of her soccer team with this retweet from the

school's Twitter account, "Come out and support the girls' soccer team in their playoff game.

Good luck" and "Congratulations to the Lady's Soccer Team as they clinched their second District Championship in a Row!!" Sarala stated she uses Instagram to post information for her soccer team she coaches.

Temmin claimed he did not use OSNs and preferred to connect with people closest to him via face-to-face meetings, telephone calls, text messages, or email interactions. Temmin explained "I've had a Facebook for, I think, twelve year now. Rarely used." Temmin said this about Twitter, "I have a Twitter, I don't tweet, and I don't follow very many people, but I haven't seen anything beneficial for professional development." The reason Temmin does not use OSNs is "this is going to sound incredibly callous is I just don't care."

Sub Research Question 2

What perceptions did teachers 21-29 years old have about the usefulness of professional development? Participants admitted some traditional PD was useful but most experienced PD that was repetitious and lacked relevant choices for their grade levels and subjects taught. These experiences forced some participants to seek helpful PD outside of traditional PD offered by their school or district (See Appendices H and L).

Some Traditional PD was Useful

Research participants found traditional PD most helpful when it focused on helping teachers become better or provided useful ideas or materials that could be used immediately in the classroom. Kath liked traditional PDs about classroom management. One example she shared was a session that explained how to clarify and convey classroom expectations so students could easily remember and follow those expectations. Research participants explained they liked traditional PD relevant to their content areas and grade levels so teachers could quickly apply it to their teaching. For example, Evaan and Ezra believed traditional PD that provided materials

and instructions on making labs better were very helpful to them. Ezra also related about one PD session, "We did a Pear Deck … that I used in my classroom almost immediately after I learned about it." Hera echoed Ezra's sentiments when she stated, "So the most engaging … professional development has helped me … are things that I can apply in my classroom …." Nadien recalled a Summer Institute session on how to make reading exciting, "We were … Legos in different strategies that I thought was pretty cool." Garma enjoyed working with an expert from Lucy Calkins who explained the best and easiest ways to use their curriculum. Being a first-year teacher Boba believed he has gotten value from all of his PD sessions "because they help me deal with issues, I experience for the first time…. So, I have had no bad experiences yet." One session Boba mentioned was a PD on how to use IXL Diagnostics to improve students' math grades and prepare them for upcoming state tests. Rey shared that PDs about classroom management have helped her in her career.

Repetition

While research participants noted some helpful traditional PD, they believed traditional PD offerings were not helpful to their classroom teaching. Research participants reported traditional PDs repeated previously covered topics and considered them not beneficial and believed their time could have been better used. Sabine believed most traditional PDs repeated things she already knew; the sessions did not meet her needs as an English Language Arts teacher. One example, Sabine explained, were repeated sessions on integrating technology in the classroom, such as, Google Classroom. She stated "… they keep doing the same. Here's the 4.0 rubric, here's the 4.0 rubric, here's the 4.0 rubric." In her opinion, the technology integration sessions covered what she earlier learned in college, so there was no need to go over them again. Evaan also highlighted repetitive technology PDs were not helpful and were an example of

ineffective PD. Sabine also added repeated sessions about the 4.0 rubric of South Carolina's teacher evaluation system were not helpful and considered a waste of time.

Lack of Relevant Choices

Along with repetition, research participants stated there were a lack of choices in traditional PD offerings, especially for their content areas. When participants were asked what they thought would make PD more helpful, Evaan, Sabine, and Temmin all said, "Offering choice." They stated they were frustrated when traditional PDs did not offer choices, especially in respective content areas or grade levels. Ezra opined, "if it's not directed at my content it's a useless PD. Sarala, Garma, and Cadix recounted how they would sit in PD sessions that were totally inappropriate for their students because either they don't have the resources to make it work or the session is wrong for the age group. Garma opined about one such session, "…the kids are not going to be able respond to that." Cadix also offered, "I know I've been to some that sounds like this is a great idea, but I don't think it would work very well for second grade versus fifth graded…."

A lack of relevant PDs happens to related arts teachers, such as Rey. As a dance teacher, Rey finds most of the PDs she attends not helpful at all. "…being an arts teacher there have been a good many PD meetings I have had to attend that did not pertain to me and only left me confused as to what they were talking about." Because most PDs Rey experienced were targeted to traditional classroom teachers would not work because, she believes, dance requires movement in open spaces that are not like traditional classrooms. Because most PD targets traditional classroom teachers, Rey must make up her dance curriculum with no training or advice. "What I have has come from trial and error", Rey states.

The research participants believed most traditional PDs were targeted to either elementary or high school teachers or English Language Arts or Mathematics teachers, which left few choices for middle school science and social studies teachers. Temin stated, "… its's rare on those days that there is anything for social studies provided. It's usually all math." Hera shared math PDs occurred but at the wrong grade levels, "getting middle school math professional development is even more tough …. Everything seems to be geared to either high school or elementary." In a recent district PD day, Ezra found one reading session helpful, while Temin got frustrated and left to attend to personal matters. Temin summed up problems with repetitive traditional PD by asking, "How are we supposed to differentiate for our students when our PD is rarely ever differentiated?"

While participants claimed many PDs did not pertain to them, other traditional PDs promised to teach one thing but did something totally different, which confused participants. Garma recounted a PD session about what she thought was on how to use Discovery Education with a science textbook Garma used in her class. However, the session was about quick tips on using a variety of apps that had nothing to do with Discovery Education. According to Garma, "Maybe they switched it on us, and we didn't know but we like had no idea what was going on and I walked out super annoyed…."

Forced to Bypass Traditional PD for Relevant PD

Experiencing repetitive and unrelated traditional PD forced the research participants to seek beneficial PDs outside of their district. Because traditional PDs Sabine was interested in were often moved to inconvenient times or cancelled, she often found what she needed on her own time outside of school. Ezra attended a seminar at Roper Mountain to learn more ideas to integrate into his science classroom. This seminar provided ideas and materials targeted to what

Ezra taught which he incorporated into his classroom teaching immediately. He stated, "They gave me microscopic slides that I use in my classroom every year and the worksheet that goes along with them." Sarla attended a literacy conference in Charleston, South Carolina she saw on Instagram. The conference was paid for with funds raised through Donors Choose. Kath often participated in PD offerings from email invitations she received, such as, a USA TestPrep webinar about how to create pre and post unit assessments, then use the data collected to develop lessons for her classes. Many of the research participants went to Teachers Pay Teachers, which Hera explained was a website where teachers shared classroom materials for free or a modest fee. At Teachers Pay Teachers, research participants found classroom activities beneficial to their students.

Being the only participant with children, Temmin's commitments to his family makes it difficult for him to find relevant PD at a convenient time. Temmin shared "So, Summer Institute is a no-go for me. Anything that requires a weekend or traveling is typically a no-go or requires extensive planning. So, I don't often actively seek out professional development."

Sub Research Question 3

What perceptions did teachers 21-29 years old have about the possibility of using Twitter to build personal learning communities for professional development? The participants reported they built personal learning communities but preferred watching what others posted. Participants indicated they would participate in OSNs if they received recertification credits for their efforts because they found value in connecting with other teachers online. Online social network education advocacy pages connected participants to other OSN using teachers about education and teaching issues. These connections may lead participants to expand these connections to include PD (See Appendices H, J, and L).

Preferred to Watch What Others Posted

Most research participants, who used Twitter or other OSNs for PD, showed little interest in building PLCs to exchange information and were mostly content with following education professionals who posted information teachers found valuable. Based on Twitter observations, Evaan was more interested in using information from commercial sources, such as an article she retweeted about Komodo Dragons from National Geographic's Twitter feed. Kath admitted she did not engage in the Twitter chat groups or hashtags she followed and preferred to view what others posted instead. Sarala admitted to finding other teachers in her district on Twitter to get ideas from but was unsure if she would continue using Twitter for PD because time constraints.

The lack of engagement on OSNs spread to other sites such as Instagram or Facebook. Hera followed teachers' posts she connected with either on Teachers Pay Teachers or Pinterest, so she would be notified when those teachers posted new material on either website. Rey used Pinterest for ideas on dance and her cheerleading squad along with a new OSN, TikTok to "keep up with the latest dance moves." Ezra preferred targeted searches on YouTube or Instagram to find useful information for his classes instead of attempting to navigate, what he believed was, the more chaotic Twitter feed. Kath summed it up by saying, "…I'm on social media but I've never been one to participate…. I kind of just look at other people and see what they are talking about and what they are doing." Evaan believed more training would be helpful, "I feel like I need some training on how to use it (Twitter) or I need some ideas on how I can connect with people that I would want to connect with." Boba, who declined training, also believed more training on using OSNs for PD would be helpful once he is more settled in his career. Boba stated, "A training on using OSNs like Twitter would be beneficial to find sources of PD."

Recertification Credit Would Motivate More OSN PD Use

While most research participants were not excited about using OSNs for PD, all of them were willing to participate in OSN PD, if recertification was offered. Hera believed using OSNs was an easier means of earning recertification credit, "Yeah, I feel like it (Twitter) be an easy way to get recert credits." Ezra stated, "That is an easy question. I feel like everyone needs the recertification…I would love to use it for recertification purposes." Nadien, seeing the benefits of using OSNs to receive recertification credit stated, "It would be nice to be able to complete the majority of PD from my home or at my convenience." Even Sabine and Temin, who did not have an affinity for Twitter, would reconsider using it or other OSNs for PD because they admitted they needed the recertification hours.

Connecting with Other Teachers Through Twitter Had Value

While most research participants were not interested in building PLCs through Twitter or other OSNs, Evaan found potential value connecting with teachers teaching the same content she taught to share ideas and resources. Sarala liked connecting with teachers around the world and follows some teachers in Australia. While Boba has not used OSNs for PD he sees a benefit to connecting with other teachers through hashtags on Twitter or Instagram. Rey also thought the possibilities of networking online with teachers with similar interests is potentially helpful. "I think it would be awesome because you could make it to where only certain people are part of it….you can make it more personal to their subject….,Even though she did not engage in conversations, Kath liked the potential of using Twitter and other OSNs for PD because users could connect with similar users across the world. Kath believed these connections could lead to exchanging ideas, opinions, and information about teaching that could not be obtained in traditional PD sessions. Using the novel, *The Giver* with her students came from observing a

Twitter English Language Arts chat. At first Kath was reluctant, "I read *The Giver* with my 8th graders last year but I didn't think that it would be appropriate for 6th graders…." Kath noticed chat participants claimed they had success using *The Giver* with their 6th graders, which encouraged her to successfully use *The Giver* with her own students. Garma, Hera, Sabine, and Sarla followed educators on Facebook, Instagram, or Pinterest which led them to purchasing classroom materials on Teachers Pay Teachers.

Advocacy for the Teaching Profession

Research participants found another use for Twitter and other OSNs in advocating for their profession. While advocacy did not address any of the research questions, it could connect teachers online and lead to using those new connections to build online PLCs later. Sabine stated, "I liked Facebook for our SC Red for Ed, keeping up with people in our district that I don't know." Not only did Kath follow South Carolina Red for Ed but she is also followed a county educators' group and her local Congressman. Kath believed it was important for teachers to keep up with the politics that governed education and the community.

Summary

The data analysis yielded important themes. The research participants did not care to use Twitter because they did not use it in their personal lives. Also, the research participants found Twitter to be too chaotic to locate helpful information beneficial for them and preferred OSNs that allowed quick searches for the material they needed; however, once the research participants found good sources of information, they followed those sources on OSNs they were more comfortable with, such as, Facebook, Instagram, Pinterest, or even YouTube. As participants followed other educators on OSNs, especially Instagram or Pinterest, they uncovered Teachers Pay Teachers. Teachers Pay Teachers is a convenient marketplace for classroom activities and

materials teachers easily purchase and quickly use in their classrooms. One of the reasons the research participants stayed away from what they believed was the chaotic Twitter and preferred quick searches is that they valued their personal time outside of school and avoided letting teaching consume their lives.

The data analyzed also showed the research participants believed traditional PDs conducted were not beneficial because it was either repetitive or targeted courses and grade levels outside of their subject levels. The research participants wanted PD that provided materials and ideas that could be used immediately in their classes. This led participants to seek PD they needed elsewhere and often at their own expense.

The research participants liked the promise of using OSNs, to find content, videos, articles, and observing what other teachers did in their classrooms. All of the participants agreed OSNs would be a valuable means of getting the recertification credit they needed and would use them provided it was not too time consuming and respected their privacy.

CHAPTER FIVE: CONCLUSIONS

Overview

The purpose of this study was to examine the perceptions teachers age 21-29 years-old had about using Twitter for PD purposes. This chapter summarized the findings of the study after analyzing information from focus groups, observations, and individual interviews. Also, there was a discussion on how the findings related to both the theoretical framework of the study and the literature review. An explanation of the delimitations and limitations of this study was offered. Based on the findings of the study along with the delimitations and limitations of the study, recommendations for further study were offered to future researchers. Finally, a summary of this study was provided by answering the research questions.

Summary of Findings

This study examined how teachers age 21-29 perceived using Twitter for PD purposes. The answer to how do teachers 21-29 years old perceived using Twitter for PD purposes: The research participants did not find Twitter beneficial for PD. The research participants stated they preferred other OSNs they were more familiar with, such as, Instagram, Pinterest, or Snapchat. Another reason the research participants gave was they found Twitter's feed chaotic and hard to locate desired information. A third reason was they believed using Twitter for PD would consume time better spent in other PD or planning activities. Finally, the research participants, who guarded their privacy, did not use Twitter because they feared messages posted on Twitter or any other OSN could be misconstrued professionally (See Appendix H).

Another research question addressed was how teachers 21-29 years old describe their purposes for using OSNs. The reasons research participants reported using OSNs was personal rather than professional. OSNs were used for keeping up with family and friends. All the

research participants came to South Carolina from other parts of the country and OSNs provided a simple way to maintain long-distance relationships with family and friends left behind. Another purpose for using OSNs, such as YouTube, was finding instructional videos to help with everyday life outside of school.

The next research question addresses what perceptions teachers 21-29 years old had about the usefulness of professional development. While a couple of the research participants did report they experienced some useful traditional PDs, all the research participants claimed traditional PD did not meet their overall needs. One complaint was traditional PD was targeted to elementary and high school teachers and left out middle school teachers. Another complaint about traditional PD was it mainly targeted English Language Arts or mathematics teachers and left out science and social studies teachers. Research participants reported having to either do without relevant PD or search outside of the district to find relevant PD. A third complaint about traditional PD, saw it as often repetitious, which tuned out teachers who had already heard the same message many times before.

The final research question targeted what perceptions did teachers 21-29 years old had about the possibility of using Twitter to build personal learning communities? Most of the research participants preferred to search for the materials and ideas they needed, instead of engaging in dialogue with other teachers about ideas and materials to use in the classroom. Also, when research participants searched for content, they wanted a few homogeneous ideas, rather than differing opinions submitted on Twitter. This lack of engagement was because the research participants explained they valued their free time and avoided educational issues when not at school; however, Kath did use a unit idea found through a Twitter chat group. Finally, research participants might not be directly building PLCs based on their content but were building

networks though participation in teacher advocacy groups, such as SC for Ed on Twitter or Facebook.

Discussion

Empirical Literature

Carpenter and Krutka (2014) along with Visser et al., (2014) discovered teachers age 21-29-years-old were among the least likely to use online social networks for professional development, contradicting age demographics of all users of online social networks. Visser et al. (2014) stated only 15% of participants age 21 to 30 years old used Twitter for educational purposes, while 37% age 31 to 40 years old and 29% age 41 to 50 years old are on Twitter. One explanation offered by research participants was they did not use Twitter because they were more comfortable using OSNs, such as, Facebook, Instagram, Pinterest, or YouTube. Another reason the research participants preferred not to use Twitter is because they sought instant gratification when they searched for relevant PD content. The research participants stated finding information on Twitter was too confusing and time consuming. Carpenter, Tur, and Marin (2016) described how preservice teachers in the United States and Spain found Twitter overwhelming and useful information was buried in what they believed were useless tweets. Strategies to help educators deal with the vast amount of information on Twitter need to be developed (Carpenter, Tur, & Marin, 2016). The participants were concerned with their privacy when attempting to create dual personal and professional identities online, confirming Forbes (2017) discovery.

Along with not using Twitter for PD, the research participants commented on the ineffectiveness of traditional PD. Dingle et al. (2011) observed traditional PD had little to no impact on classroom instruction. Visser et al. (2014) found traditional PD was often disconnected from practice, while Rowan & Townsend (2016) believed traditional PD offerings

do not focus on teachers' needs. Calvert (2016) cited a 2014 Gates Foundation report explaining teachers believed PD was "irrelevant, ineffective, and not connected to their core work (52). Research participants commented traditional PD focused on subjects and levels that were not relevant to their needs. Also, the research participants claimed traditional PD quickly became repetitive because they covered the same topics that were previously covered in past PDs.

Even though research participants found traditional PD non-beneficial, they admitted relevant PD was beneficial to improve teacher effectiveness and increase student achievement (Desimone, 2009; Finn et al., 2010). Research participants demonstrated a willingness to use different means to seek PD to improve their classroom instruction. By using Teachers Pay Teachers, Instagram, and Pinterest, the research participants bypassed traditional PD and sought beneficial information and ideas by engaging with other educational professionals (Visser et al., 2014). Research participants reported they attended webinars found through emails, followed favorite Teachers Pay Teachers content creators often found through Pinterest (Pittard, 2017), and looked for relevant classroom videos on YouTube. Research participants also sought help from more experienced educators to help improve instruction.

Carpenter and Krutka (2014) and Visser et al., (2014) stated younger teachers did not use Twitter for PD purposes; however, the research participants indicated they were not against using other OSNs for PD. Preservice teachers believed Twitter has useful educational purposes because it has a wealth of information (Carpenter, Tur, & Marin, 2016). While the research participants claimed Twitter's feed was time consuming and confusing to search for what they needed for classroom instruction, they used familiar OSNs. Research participants started following helpful content creators on Facebook, Instagram, or Pinterest to get new ideas and materials along with notifications of when new materials were released. Also, research

participants preferred OSNs that provided information through searches, like how Ezra searched YouTube for content videos.

As research participants indicated they would fulfill their classroom needs by bypassing traditional PD, this need for instant gratification could prove disruptive to traditional PD. This would be especially true if PD recertification credit were offered for OSN participation. Observing OSN interactions might be helpful to traditional PD planners to better understand what teachers desired to be successful in the classroom. However, observing OSN interactions would be difficult given the privacy concerns the research participants expressed.

Another disruption of traditional PD was the emergence of sites, such as, Teachers Pay Teachers. The research participants demonstrated their desire to seek information and materials outside traditional PD. Pittard (2017) discovered teachers are increasingly reluctant to use uncompensated time to create content materials and preferred to use their own money to purchase what they needed. Symbiotic relationships of sites such as Pinterest led teachers' online markets, such as, Teachers Pay Teachers met teachers' needs for instant gratification. Instead of paying attention during traditional PD sessions, teachers might start using that time to search online for the relevant content to improve classroom practices traditional PD was not providing.

Theoretical Literature

Socio-cultural Learning Theory

Vygotsky (1978) thought people learned through social interactions and collaborating with other people, objects, and events. Research participants stated they sought out more knowledgeable teachers whenever they needed help with ideas for classroom instruction. This interaction between the participants and more knowledgeable teachers was how Blanton, et al. (2005) viewed ZPD worked for new teachers. However, when research participants sought PD

help through OSNs, they rarely, if ever, engaged in dialog with the more knowledgeable teachers online. This lack of interaction did not build on ZPDs as Vygotsky envisioned.

Social Networking Theory

Borgatti & Ofem (2010) stated social networking theory viewed how people interacted in different situations. Social networking theory also related the ties individuals had within a network to determine the resources available to those individuals (Daly, 2010). Borgatti & Ofem (2010) believed people were tied to various networks through communications and interactions about common interests. Moolenar (2012) believed individuals were more interdependent in their networks as opposed to being independent. Research participants mainly created networks of professionals with whom they had personal connections. They reported these networks consisted of peer teachers, teachers of other subjects, instructional coaches, and administrators. These interdependent networks did not extend fully to using OSNs for PD. Research participants sought out information and materials online and followed trusted content creators. But they refrained from engaging in two-way communications with these creators which limited the potential of the networks the participants created. Again, this may have come from a desire for instant gratification mentioned by research participants.

Communities of Practice

As research participants physically worked with other teachers, they built their needed communities of practice. Not only did research participants seek out teaching peers, they also turned to department heads, instructional coaches, or administrators when needed. Occasionally, the research participants expanded their community of practice to teachers of other subjects when needed. It was in these settings research participants shared information and did problem solving to improve their classroom practices as Yang (2009) envisioned. However, creating

COPs did not necessarily extend to OSNs because of research participants reluctant to engage with teachers they followed online. Also, they desired instant gratification when they sought information or materials online which sometimes did lead to building COPs.

<div align="center">**Implications**</div>

Theoretical, empirical, and practical implications resulted from this transcendental phenomenological study. The theoretical implications include how the results from this study effect the three theoretical frameworks guiding this study: sociocultural learning, social networking theory, and communities of practice. The empirical implications will examine how this study contributes to current research on this topic. Finally, the practical implications will provide recommendations to teachers, school and district administrators, and other stakeholders in professional development, curriculum developers, and online social and educational networking applications.

Theoretical Implications

The theoretical frameworks of this transcendental phenomenological study include sociocultural learning, social networking theory, and communities of practice. According to Vygotsky (1978), people learn through social interactions through collaborations other people, objects, and events. The participants often discussed how they often turn to their grade level or like-subject team to collaborate on various classroom needs. Vygotsky (1998) introduced a concept termed the zone of proximal development where learners solved problems assisted by more knowledgeable and experienced people. Many participants mentioned they were assigned mentors by the school district and those without mentors often sought advice from more experienced teachers within their subject or grade level. Some of the participants explained they

also followed teacher experts on OSNs, such as, Facebook or Pinterest and often purchased instructional materials from those expert teachers on Teachers Pay Teachers.

Social networking theory maintains individuals conscious of having social preferences and sociometry discovers individuals' needs for personal social companionship and fulfillment (Moreno, 1946, Northway, 1967). All participants but one reported to using OSNs for personal along with professional purposes. Those using OSNs sought groups that matched areas of personal and professional reasons. One participant discovered a unit involving one of her favorite books by following a group of English Language Arts teachers on Twitter. Rey used OSNs to follow groups focused on modern dance for both her personal enjoyment but also used what the group shared in her classroom.

According to Wenger (1998) communities of practice is where people learn their skills by supporting and sharing what they know in group settings (Trust & Horrocks, 2016). These communities often have new teachers mentored by expert teachers as they become classroom teachers after undergoing the basics of preservice instruction. Two of the participants mentioned they were assigned mentors in a district new teacher induction program. Most of the other participants shared they often turned to administrators, subject department heads, or instructional coaches, or more knowledgeable teachers for advice regarding classroom teaching.

Empirical Implications

The gap in the literature is why younger teachers 21-29 years old do not use Twitter for PD while older teachers do use OSNs for PD as Carpenter and Krutka (2014) and Visser et al. (2014) discovered. Participants reported they did not care for Twitter because it is not an OSN they often use in their personal lives. Also, adding more OSNs to observe created fatigue in attempting to check on each OSN daily whether for personal or professional reasons. Sabine

formed a bias against Twitter after observing how it consumed a massive amount of her mother's time while Sabine was growing up. Participants also believed character constraints did not allow for proper reflection and response to posts (Tang & Hew, 2016; Tur & Marin, 2015). Gama believed the constraints took more time attempting to compose tweets to posts she wanted to offer an opinion or ask a question about. Teachers should be encouraged to explore online means of seeking PD then share their unique positive and negative experiences.

Participants are also concerned about their privacy when seeking PD online. Temmin and Ezra believe Twitter is too opinionated. Looking for PD online makes Sabine nervous because she is concerned by possible opinions. administrators and parents may form if they read her tweets. School and district administrators should create policies, guidelines, and training to assure teachers seeking PD their privacy would be protected.

This study's participants did find PD valuable to improving classroom teaching (Desimone, 2009; Finn et al., 2010). Ezra reported a session on Pear Deck was helpful as he tried the application soon after a PD session on it. Also, Kath stated a session on clarifying classroom expectations to students helped her.

Desimone (2009) and Finn et al., (2010) explained PD improves teacher effectiveness leading to increased student achievement. Mackey (2017) went further by claiming effective PD motivates teachers to continuously improve their practices, leading to better job satisfaction. Some of the participants found some of their traditional PD experiences beneficial. Ezra's recollection on how a PD on Pear Deck led to its successful use in the classroom while Kath thought PDs on innovative classroom management techniques helped improve communicating expectations to her students. District PD staff, building principals, and instructional coaches need to follow-up with discussions on what participants gained from the PD and how those techniques

taught are being used in the classroom. Further, PD facilitators should observe teachers who praised the sessions to see firsthand how these teachers are using what they were taught.

While the study's participants found beneficial aspects of traditional PD, they found more problems with it. Desimone (2009) and Dingle et al. (2011) discovered traditional PD sessions lasting a day or less had little impact on classroom instruction. Rowan &Townsend (2016) found traditional PD frequently failed to meet teachers' needs, while Visser et al. (2014) discovered most traditional PD session were often disconnected from practice. The participants echoed these findings when they complained traditional PD sessions failed to meet their needs. Cadix recalled a traditional PD session provided interesting ideas but would work for a different grade level than the one she taught. Temmin admitted to leaving a district PD day early because there were no sessions for his subject and grade level. Rey, a dance teacher, explained her frustration because most traditional PD sessions are targeted to traditional academic teachers, leaving her feeling left out. Participants technology PDs often repeated applications covered in previous sessions. Sabine complained she heard about South Carolina's teacher evaluation system's 4.0 rubric constantly. This lack of relevance led some participants, such as Ezra, to seek PD on their own time using their own money. Again, follow-up discussions with teachers regarding PD sessions should provide valuable information about PD effectiveness to help plan for future sessions. Another avenue those planning future PD sessions should consider is sending frequent surveys followed-up by discussions with teachers to determine PD needs during the course of a school year.

Practical Implications

The results of this study revealed traditional PD planners need to plan and execute more effective traditional PD. Greater care should be taken to ensure traditional PD offerings are relevant and beneficial for all teachers without becoming repetitive. If not, research participants indicated they would rather use traditional PD time to search online for information and materials more beneficial in improved classroom practices. PD planners could look at OSNs with a different perspective or send surveys that ask what teachers believe they need to be successful in the classroom and then plan traditional PD sessions around the results. Planning to meet teachers' needs could improve traditional PD. Given the participants' privacy concerns, districts should adopt and share policies clearly outlining proper OSN behavior to include ground rules and training for any employees seeking PD through OSNs.

Besides better planning for PDs, the research participants demonstrated there was a market for lesson plan ideas and materials. Many of the research participants used Teachers Pay Teachers to quickly find materials for immediate classroom use. Also, research participants followed those Teacher Pay Teachers sellers on Facebook, Instagram, and Pinterest whose material participants found valuable. This demonstrates potential sources of income for teachers with creative lesson materials and ideas on how to use them and the need to use OSNs to help market their classroom materials to other teachers. This online market for teacher-made content creates opportunities for the development of other online marketplaces to compete with Teachers-Pay-Teachers.

Along with planning better traditional PD, using OSNs for PD purposes could also potentially reduce PD budgets for cash strapped districts. This may resolve administrator

frustration by providing what teacher need, could access content quickly, and create more teacher engagement in traditional PD. The research participants indicated it could be beneficial to have an instrument documenting OSN usage for PD so teachers could receive recertification credit.

Delimitations and Limitations

Delimitations

Research participants in this study were teachers age 21-29. This population demographic closely matched the demographic that dominated the usage of OSNs (Duggan & Smith, 2014). However, this same demographic of teachers used Twitter the least for PD purposes (Carpenter & Krutka, 2014; Visser et al., 2014).

Along with the age demographic, this study was a phenomenological study instead of other types of qualitative studies. A phenomenological study was used to examine how a specific age demographic of teachers viewed the phenomenon of using Twitter for PD purposes and would yield the best description to answer the research questions.

Limitations

The first limitation of this study was fifteen teachers consented to participate in this study but only twelve participated in the full study. The next limitation was only elementary and middle school teachers participated in the full study. The principals of two high schools declined to provide permission to include their teachers in this study. Also, one group of elementary school teachers started this study but later dropped out. A second middle school's teachers were invited to participate but these teachers declined to participate.

Another limitation of this study was demographics. Only white teachers participated in the study. There were no potential participants from any other ethnic group that matched the 21-29-year-old age demographic required for this study.

While the research participants provided information to address the research questions, having more participants to add more information to examine the phenomenon would have provided more solid evidence. Twenty invitations were extended to elementary and middle school teachers but only eleven volunteered. By the end of the study, only six research participants followed through in all aspects of the study.

Recommendations for Future Research

Further research using research participants of different ethnicities and from different grade levels, such as elementary, high schools, and more middle school would yield more data to corroborate this study's findings. Research participants from elementary and high schools could confirm or deny whether most traditional PD is targeted to those teachers. Also, using research participants from more diverse ethnicities would add their perceptions about using Twitter for PD along with their perceptions of traditional PD. Because the research participants reported traditional PD does not meet their content or level needs, studying what teachers are looking for may yield pertinent information for traditional PD planners.

Another potential study would examine how teachers perceived using other OSNs, such as, Instagram or Facebook to determine if those OSNs provided better classroom content than Twitter. All of the research participants stated they used different OSNs for different reasons, but few used Twitter for PD. Studies comparing different OSNs and their use to find relevant PD content along with comparing and contrasting these OSNs could determine other networking habits younger teachers have in searching for PD content.

Because a couple of research participants mentioned they were beginning to follow teacher advocacy groups, such as SC for Ed, may merit closer examination. Information from such a study would be interesting to determine if these groups were attracting teachers interested in advocating for the education profession. Also, such a study could determine if such organizations are encouraging teachers to build networks to engage with other group members such as PLNs.

Finally, all of the research participants stated they would be more willing to engage in using OSNs for PD if recertification were offered. Evaan stated "I would most definitely be more willing to participate if the PD for any type social media where to be offered. Yes, especially if recertification credits came from it." The research participants noted this would make it easier for them to get the recertification credit they need. Creating and testing an instrument for documenting OSN use for recertification purposes could determine if this is an appropriate and viable alternative to traditional PD.

Summary

This study examined the perceptions of teachers 21-29 years old about using Twitter for professional development. Based on the information analyzed, there were a number of important points from this research study. While research participants agreed PD helped them grow as classroom teachers, they saw traditional PD as irrelevant and repetitious. This forced them to seek ideas and materials online so they could be used immediately in their classrooms. However, research participants avoided using Twitter because they did not use it in their personal lives, and Twitter's chaotic feed made it hard to search for information they needed. The research participants sought instant gratification by turning to sites such as Teachers Pay Teachers or YouTube for needed content. However, as they used sites that provided content, research

participants followed content creators through more familiar OSNs including Facebook, Instagram, or Pinterest. This could point to an eventual disruption of traditional PD as research participants who valued their time indicated they were willing to turn away from traditional PD and to online content sites and possibly building networks on OSNs through the connections made on these content sites.

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APPENDIX A: APPROVAL LETTER FROM LIBERTY UNIVERSITY'S

INSTITUTIONAL REVIEW BOARD

LIBERTY UNIVERSITY.
INSTITUTIONAL REVIEW BOARD

May 24, 2018

John Woodring
IRB Approval 3245.052418: A Phenomenological Study of 21 to 29 Year-Old Teachers'
Perceptions of Using Twitter for Professional Development

Dear John Woodring,

We are pleased to inform you that your study has been approved by the Liberty University IRB.
This approval is extended to you for one year from the date provided above with your protocol
number. If data collection proceeds past one year, or if you make changes in the methodology as
it pertains to human subjects, you must submit an appropriate update form to the IRB. The forms
for these cases were attached to your approval email.

Thank you for your cooperation with the IRB, and we wish you well with your research project.

Sincerely,

G. Michele Baker, MA, CIP
Administrative Chair of Institutional Research
The Graduate School

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Liberty University | Training Champions for Christ since 1971

APPENDIX B: PEMISSION LETTER FROM RED CEDAR ELEMENTARY SCHOOL

February 21, 2018

John Woodring
7 Privet Lane
Bluffton, SC 29910
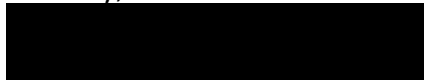
Dear Mr. Woodring:

After careful review of your research proposal entitled A Phenomenological Study of 21-29-Year-Old Teachers' Perception of Using Twitter for Professional Development, I have decided to grant you permission to conduct your study at Red Cedar Elementary.

Check the following boxes, as applicable:

☒ Data will be provided to the researcher stripped of any identifying information.

☒ I am requesting a copy of the results upon study completion and/or publication.

Sincerely,

Dr. Kathleen Corley
Principal

APPENDIX C: PERMISSION LETTER FROM BLUFFTON MIDDLE SCHOOL

March 1, 2018

John Woodring
7 Privet Lane
Bluffton, SC 29910

Dear Mr. Woodring:

After careful review of your research proposal entitled A Phenomenological Study of 21-29-Year-Old Teachers' Perception of Using Twitter for Professional Development, we have decided to grant you permission to conduct your study at Bluffton Middle School.

Check the following boxes, as applicable:

X   Data will be provided to the researcher stripped of any identifying information.

X   We are requesting a copy of the results upon study completion and/or publication.

Sincerely,

Pat Freda
Principal
Bluffton Middle School

APPENDIX D: PERMISSION LETTER FROM H.E. MCCRACKEN MIDDLE SCHOOL

"Inspiring genius thinking"

H.E. McCracken Middle School

Jerry Henderson, Principal

Pamela Maddox, Assistant Principal
Sue Madagan, Assistant Principal

2/22/18

John Woodring
7 Privet Lane
Bluffton, SC 29910

Dear Mr. Woodring:

After careful review of your research proposal entitled A Phenomenological Study of 21-29-Year-Old Teachers' Perception of Using Twitter for Professional Development, I have decided to grant you permission to conduct your study at H.E. McCracken Middle School.

Check the following boxes, as applicable:

☒ Data will be provided to the researcher stripped of any identifying information.

☒ I/We are requesting a copy of the results upon study completion and/or publication.

Sincerely,

Principal Jerry Henderson

APPENDIX E: PERMISSION LETTER FROM THE BEAUFORT COUNTY SCHOOL

DISTRICT

Application Request for Research Project

NAME: John Woodring	DATE OF PROPOSAL:
School/Location: H.E. McCracken Middle School	Principal/Supervisor: Jerry Henderson
Email address: John.woodring@beaufort.k12.sc.us	University Professor: Dr. Jerry Woodbridge

SCHOOL(S), CLASSROOM or LOCATION IN WHICH PROJECT IS BEING CONDUCTED: Red Cedar Elementary School, H.E. McCracken Middle School, and Bluffton Middle School	
APPROVAL RECEIVED FROM PRINCIPAL OR IMMEDIATE YES	RESEARCH START DATE: 3/2018 ESTIMATED COMPLETION DATE: 5/2018

Research Project Description

1.   Title of Research Project: A Phenomenological Study of 21-29-Year-Old Teachers' Perception of Using Twitter for Professional Development
2.   Describe the <u>primary purpose</u> of the research as well as the measurable objectives of the project. **Examples**: "The aim of this study is to _____ (Determine/Measure/Gather information on/ Investigate the consequences/Test the theory/Analyze the impact/Develop deeper understanding of _____. The purpose of this transcendental phenomenological study is to understand the central phenomenon of the study for 21-29-year-old public school teachers' perception of Twitter use for professional development. At this stage of the research Twitter for professional development is generally defined as using Twitter to connect with other education professionals to exchange education-related information, ideas, and resources for the purpose of improving classroom instruction. The theories guiding include Vygotsky's (1978) social learning theory, Moreno's sociometry/social networking theory (1946; Borgatti & Ofem, 2010; Daly 2010), and Lave & Wenger's (1991) communities of practice theory. These theories establish learning as a social activity where participants of lesser knowledge and experience interact with and learn from participants of greater knowledge and experience in established groups of shared interests (Vygotsky, 1978; Moreno, 1946, Borgatti & Ofem, 2010; Daly, 2010; Lave & Wenger, 1991).
3. Provide a <u>brief description</u> of the research and how it will address improvement of educational policy, programs or practices: Rarely, do independent school or schools in rural areas have the financial resources to provide quality professional development for their teachers (Finn et al., 2010). Also, distances between other rural or independent schools make it difficult for teachers to connect, collaborate (Carpenter & Krutka, 2014), and share best practices leading to better student achievement. Teachers, schools, and school districts could use Twitter, because it is free (Cho, 2015) to use and have no limitations on distance between users (Carpenter & Krutka, 2014). There are concerns regarding educational uses of Twitter. First, there is always the threat of cyberbullying among K-12 students using online social networks (Visser et al., 2014). Second there are concerns about educators blurring professional and personal lines when using online social networks where inappropriate material may be posted (Visser et al., 2014). Many school districts forbid Twitter use because of these possibilities (Carpenter & Krutka, 2014). Along with easing budget and distance restrictions, training classroom teachers and administrators seeking

Rev 12/2014

personalized professional development is beneficial because they know what they need to help improve their performance (Visser et al., 2014). One way of encouraging this practice is providing teacher license or other educator credential renewal credit when using online social networks for professional development (Carpenter & Krutka, 2014; Visser et al., 2014). However, more empirical evidence is needed linking Twitter professional development to improved classroom practices and student achievement (Visser et al., 2014).

Equipping teachers to use Twitter in seeking professional development for classroom instruction improvement may help keep young teachers in the education profession. Professional development increases job satisfaction that would keep younger teachers in teaching (Coldwell, 2017; Mackay, 2017). An estimated 54% of new teachers leave the profession within five years (Gray & Taie, 2015). Providing better professional development is one means of encouraging younger teachers to stay in the education profession (Sass, Flores, Claeys, & Perez, 2012). Connecting young teachers to expert educators online as a means of providing guidance could ease retention problems facing both public and independent schools.

As younger teachers interact online with more experienced teachers, relationships will start building that would provide encouragement to struggling, less experienced teachers. Teachers using online social networks believe them to be inspirational as they interact with their network of other educators (Forte, et al., 2012). Educators using Twitter find it to be superior to traditional professional development because it is personal and immediate (Carpenter & Krutka, 2014). Twitter is a constant source of information by teachers engaging within their networks (Forte, et al., 2012). Because Twitter relationships provide newer teachers the information they need, they are willing to engage with their networks more often (Carpenter & Krutka, 2014). These connections are more secure as teachers using Twitter build their own social capital, the expertise one brings to a social network, as they connect with teachers with higher social capital (Forte, et al., 2012). Accessing educational articles increases as Twitter members share them to their networks (Veletsianos & Kimmons, 2016).

4. How does the Research Project align with the strategic mission and vision of the BCSD, a specific school or classroom? If a section is not applicable to your Research Project, indicate N/A.
- ☐ District/School strategic plan and educational goals to improve student achievement:
- ☐ X Research-based strategies related to improving districts, schools, curriculum, instruction, assessment, and improving learning for all students:
- ☐ Improvement of learning for all students in the targeted student population(s):
- ☐ Standards-based instruction and assessment, (SC State Standards, College-Career Ready etc.)
- ☐ X Professional development and support for instructional or support staff:
- ☐ Supervision and evaluation of instructional staff (and non-instructional staff, if applicable):
- ☐ Diverse learning needs of students:
- ☐ X Use of technologies designed to enhance teaching and learning,
- ☐ Creating a safe, nurturing and orderly school environment that is conducive to learning for all students
- ☐ Engaging Parents, Community or Business partners

Data Requests: Please describe in detail any data or information that you are requesting from the District. This would include requests to administer surveys, conduct observations etc. Please be as specific as possible.

The first phase of the research will be a focus group of ten to fifteen 21 to 29 year-old K-12 teachers. Potential participants wll be asked standardized open-ended questions to provide demographic data, experience with online social media, professional development experiences, and participants' perceptions of using Twitter for professional development purposes.

The second phase of the research will be observing participants engaging on Twitter for 30 days. The researcher will be a non-participating observer of participants' behaviors but will record tweets using an observation protocol designed for this study.

The third phase of the study are individual interviews with each of the participants. These interviews will be arranged to avoid any impact on instructional time. Standarized open-ended interview questionis will ask about participants'

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demographic information, how professional development has met participants' needs, who participants seek out for any resources or information, participants' experience with online social media and what benefits they gain from participating, and sharing how using Twitter benefited participants professionally.

Other Relevant Comments:
The schools whose teachers I am requesting as participants include Red Cedar Elementary School, Bluffton Middle School, and H.E. McCracken Middle School. Consent letters from the principals of these schools are attached to this application. I am also attaching the informed consent form each participant will sign to take part in this study.

My signature below certifies that:
- I have received a copy of the *Guidelines and Procedures for Conducting Research Affiliated with Beaufort County Schools* and that I will comply fully with the policies and procedures outlined as part of my research
- I have reviewed all relevant policies and procedures as outlined in that document related to responsible conduct in research including those related to ethical conduct and confidentiality.
- I understand that while working as a researcher under the supervision of a Beaufort County School District employee, I may have access to records and files that contain confidential information and that it is the employer's obligation to protect the rights of these files and/or individuals and that
- I will follow the operating practices and procedures required while handling these records and will not inappropriately access or disclose this information.
- I acknowledge that if I misrepresent or omit any information as requested on this application I have jeopardized my continued association with Beaufort County School District and is cause for forfeiture of consideration

Researcher Name: John Woodring
                    Print or Type name

Researcher Signature_____ Date _____

Reviewed by:

Signature: _____ Date: 3/5/18
           Principal (if applicable)

Signature: _____ Date: _____
           Chief Instructional Services Officer

                    Disposition: APPROVED   DENIED

APPENDIX F: CONSENT FORM

CONSENT FORM
A PHENOMENOLOGICAL STUDY OF 21-29-YEAR-OLD TEACHERS' PERCEPTION OF
USING TWITTER FOR PROFESSIONAL DEVELOPMENT
John Woodring
Liberty University
School of Education

You are invited to be in a research study of how teachers age 21-29 perceive using Twitter for professional development purposes. You were selected as a possible participant because you are a K-12 public school teacher under 30 years-old. Please read this form and ask any questions you may have before agreeing to be in the study.

John Woodring, a doctoral candidate in the School of Education at Liberty University, is conducting this study.

Background Information: The purpose of this study is how do teachers age 21-29 perceive using Twitter for professional development purposes? Research indicates while 18-29-year-olds use online social media, such as Twitter, more than any other demographic, teachers under 30 years old are using Twitter for professional development less than older teaching professionals.

Procedures: If you agree to be in this study, I would ask you to do the following things:
1. Participate in a one hour focus group regarding your online social network uses and your opinions of professional development. I will be making an audio and video recording of this focus groups for the purpose creating an accurate transcript. Any identifying information will be deleted and replaced with a pseudonym assigned to you.
2. Participate in a one hour professional development on using Twitter for educational purposes. This professional development will take place after the focus group.
3. Participate in a 30-day observation period where you will use Twitter. Your Twitter messages will be recorded for accuracy while analyzing the data but any identifying information will be replaced with a pseudonym assigned to you.
4. Take part in an individual interview lasting about 30-minutes to one hour. An audio and video recording of this interview will be created for the purposes of creating an accurate transcript. Any identifying information will be replaced with a pseudonym assigned to you.

Risks: The risks involved in this study are minimal, which means they are equal to the risks you would encounter in everyday life. Please note: Any information shared during this study regarding child abuse, child neglect, elder abuse, or intent to harm self or others will trigger mandatory reporting.

Benefits: The direct benefits participants should expect to receive from taking part in this study are learning to use Twitter to find professional development meeting your unique needs. Benefits to society include the possibility of increasing student achievement in the classroom based on what their teachers learn through using Twitter for professional development.

Compensation: Participants will not be compensated for participating in this study.

Confidentiality: The records of this study will be kept private. In any sort of report I might publish, I will not include any information that will make it possible to identify a subject. Research records will be stored securely, and only the researcher will have access to the records.

- Participants will be assigned a pseudonym. Also, I will conduct the focus groups and interviews in a location where others will not easily overhear the conversation.
- Data will be stored on a password locked computer and may be used in future presentations. After three years, all electronic records will be deleted.
- Interviews will be recorded and transcribed. Recordings will be stored on a password locked computer for three years and then erased. Only the researcher will have access to these recordings.
- I cannot assure participants that other members of the focus group will not share what was discussed with persons outside of the group.

Voluntary Nature of the Study: Participation in this study is voluntary. Your decision whether or not to participate will not affect your current or future relations with Liberty University or the Beaufort County School District. If you decide to participate, you are free to not answer any question or withdraw at any time without affecting those relationships.

How to Withdraw from the Study: If you choose to withdraw from the study, please contact the researcher at the email address/phone number included in the next paragraph. Should you choose to withdraw, data collected from you, apart from focus group data, will be destroyed immediately and will not be included in this study. Focus group data will not be destroyed, but your contributions to the focus group will not be included in the study if you choose to withdraw.

Contacts and Questions: The researcher conducting this study is John Woodring. You may ask any questions you have now. If you have questions later, **you are encouraged** to contact him at 843-290-6514 and/or jwoodring2@liberty.edu. You may also contact the researcher's faculty advisor, Dr. Jerry Woodbridge, at jlwoodbridge@liberty.edu.

If you have any questions or concerns regarding this study and would like to talk to someone other than the researcher, **you are encouraged** to contact the Institutional Review Board, 1971 University Blvd., Green Hall Ste. 1887, Lynchburg, VA 24515 or email at irb@liberty.edu.

Please notify the researcher if you would like a copy of this information for your records.

Statement of Consent: I have read and understood the above information. I have asked questions and have received answers. I consent to participate in the study.

(NOTE: DO NOT AGREE TO PARTICIPATE UNLESS IRB APPROVAL INFORMATION WITH CURRENT DATES HAS BEEN ADDED TO THIS DOCUMENT.)

___ The researcher has my permission to audio-record/video-record me as part of my participation in this study.

Signature of Participant   Date

_____

Signature of Investigator   Date

APPENDIX G: FOCUS GROUP QUESTIONS

1. Tell us your name and what area you teach?

2. Name the online social networks you use and what you use them for? Examples include Twitter, Facebook, Google +, Instagram, Snapchat, LinkedIn, Pinterest, or any others not mentioned in this list.

3. Share your best professional development experience and how it helped you in the classroom.

4. Share your worst professional development experience.

5. Think back to when you sought professional development to help you in the classroom on your own initiative. To whom or where did you turn.

6. What do you think would make professional development offerings more helpful to your classroom teaching?

7. What are your thoughts of using online social networks to engage in professional development?

8. Explain what you believe Twitter is and how it works.

9. What other thoughts do you have about using online social networks for professional development or professional development in general?

APPENDIX H: FOCUS GROUP TRANSCRIPTS

Group 1

Researcher: Thank you all for coming and be willing to help me out on this journey. You do understand this is all confidential. Pseudonyms will be used in the actual dissertation document. That would be made public. So, I'll let you know who you are. Also, the reason I'm recording audio and video just so that I can get an accurate transcript so that I will give you each a copy, a hard copy, only send it through email for again security purposes and confidentiality and if you would go over it and let me know if any changes need to be made.

So, go ahead and get started. If each of you would tell me your name and what you teach?

Sabrine: Middle School English Language Arts

Ezra: Middle School Science.

Temmin: Middle School Social Studies

Evaan: Middle School Science

Kath: Middle School English Language Arts

Hera: Middle School Math (came late)

Researcher: Please name any online social networks you use and what you use them for and.

Sabine: Okay, I use Facebook Instagram Snapchat oh and Pinterest for personal. And Reddit for personal stuff.

Ezra: Instagram and Facebook just for personal reasons.

Kath: I mostly use Facebook to keep up with friends in Michigan because I don't ever see them in person. That's what I mostly use it for. I look at food videos, just fun videos on Facebook mostly. I use Instagram just to look at other people's pictures. I don't post anything on Instagram

ever. And then I have Snapchat that I use with my close friends. And then I do have Twitter to follow, like, celebrities and stuff but I don't ever use Twitter right now, so.

Temmin: Facebook Instagram Snapchat and Reddit all for personal stuff.

Evaan: Facebook and Instagram for personal and a little bit of Twitter for science videos.

Researcher: All right. We'll talk a little bit about your experiences with professional development. So please share with me what you felt was your best professional development experience and how it helped you in the classroom.

Sabine: I think they're going to Summer Institute days. It's been really beneficial.

Kath: Probably something to do with classroom management, cause that's one of my downfalls as a teacher. So, making expectations very clear and very easy for them to remember. Just to help me have a solid set of rules or set of expectations that they need to follow, and it's easy for them to see. Have it somewhere up on the wall for them to easily access if they forget. So that's probably the best kind of professional development that I get the most out of is something with classroom management.

Temmin: I would actually say the first seminar that I did with the PACE program was probably the best because it was basically a bachelor's degree in education condensed into two weeks. And in terms of actually learning how to teach that was very useful. But everything I've done since then has been basically just a derivative of that in some way or another.

Researcher: Now you said that seminar, just to kind of clarify, you said it was over a two-week time period?

Temmin: It was split up because partially during the December Winter Break two weeks when it was divided.

Researcher: Oh, okay but it was ongoing?

Temmin: Yes. Some people did two straight weeks during the summer, others did it over a series of weekends.

Sabine: I did a Gifted and Talented class too. That was great for learning how to handle that.

Ezra: I went to this thing called Roper Mountain, which was probably the best PD I ever went to because it was directed to just at middle school science. I got to say I want this subject, and this is what I want to learn the most about and that's what helped out the most was like it was so directed just for my content that could use everything that walked away with.

Evaan: I went to a technology conference last year or two years ago and just learning about how to use technology appropriately in the classroom. I would say that's probably the best.

Researcher: Okay now share with me your worst professional development experience and why you felt it was the worst.

Temmin: The district sponsored PD Day, not last year because I don't think we had them last year but the year before that. There was nothing for social studies specifically. And it was, I actually felt like it was such a waste of time that I actually probably should have sent some camera. I bailed on the fourth session and took my kids to the playground and that was a much better use of my time or this is going to be on this room. There was nothing out of the three sessions that was of any use to me at all. And it's rare on those days that there is anything for social studies provided. It's usually all math or ELA.

Ezra: If it's would like math or ELA like, I mean, there's some of the reading stuff that you can do but in your science classrooms or other classrooms, but other than that, if it's not directed at my content. It's usually a useless PD.

Kath: I hadn't had, like, really had any bad ones. I guess on stuff that I already know a lot about, like hmmm, like Power Point and Google stuff. Like, I'm very familiar with Google. And that I

mean there might be a couple of things that I'm like "Oh I didn't know I could do that." But for the most part, I'm very familiar with Google and having Google professional development is kinda just like I know this but that's kind of cool, but I know this.

Sabine: Some of the ones at school have not really beneficial especially being not too far out of college where you've already. They taught you all of this in your last few years of college. So, you've already been to, like a technology in the classroom ever seen it when you were student teaching your seen it during pre-student teaching. You already using it throughout that whole time and then you go to the required technology PD and the teaching how to use Google classroom and done it already and already know how to use it. I don't need it again.

Temmin: I am sure I have already done four PDs on how to do Google Classroom at this point.

Sabine: Some of my induction ones, I guess they're kind of PD, but they keep doing the same. Here's the 4.0 rubric, here's the 4.0 rubric, here's the 4.0 rubric. You just have to do it one time. You don't need to do it every single meeting with the same thing over and over and over again to some of the schools sponsored PDs have not been very beneficial.

Evaan: I agree, especially when they don't offer choice.

Temmin: How are supposed to differentiate for our students when our PD is rarely ever differentiated?

Researcher: Think back to when you sought professional development to help you in the classroom on your own initiative. Okay, who did you go to and for where did you turn to?

Ezra: The Roper Mountain one I did it was on my own like I had to sign up for when I went through during the summer and it was for my like it was directly for science. That's what I can turn to. People that do science.

Sabine: Because I'm at that age where it's like time to decide if I want a master's degree. So I just start just going online looking a master's degree programs but I haven't decided on any yet, but I just go online and research and word-of-mouth of other teachers a lot of times to say what programs are better, affordable for them.

Evaan: For every Summer Institute we get to choose. So, a lot of the ones that I choose are trying to make support science content how to teach it.

Sabine: Is this question asking us like where we go to find them?

Researcher: What it is that you look for and who would you turn to?

Kath: My own professional development. I get a lot of emails from different places. I recently got one, I get them a lot from USA TestPrep and how to use stuff on USA TestPrep and that helps. So, I've like signed up for a couple of online things and I do just like a webinar and most of the time I can't make it to the actual webinar, so they send it in an email and its fine. And I go through it on my own to help with assessments, like, preassessments, post assessments during lesson teaching and how to do it more on a computer and not USA TestPrep. So that's been helpful and that just happened through email. I don't know, I haven't really sought other types of professional development on my own. Like Google, like, professional development in Bluffton, South Carolina or something like that. Mostly, it's just if I get an email and I say "That looks interesting" I'll sign up for it but other than that I haven't sought my own professional development.

Temmin: My answer is a little different so far as I know I think I'm the only one with kids. So, Summer Institute is a no-go for me. Anything that requires a weekend or traveling is typically a no-go or requires extensive planning. So, I don't often actively seek out professional development. I am thinking about working on a master's degree, but I don't categorize that as

professional development, but it is also more than that. And also, because as we kind of said mostly professional development hasn't been super beneficial. I don't really have I don't feel the drive to go sign up for stuff that I'm not going to use. So, I don't is the answer.

Researcher: What do you think would make professional development offerings more helpful to your classroom teaching?

Evaan, **Sabine**, and **Temmin**: Offering choice.

Kath: More helpful to me. I don't know. I don't really have any suggestions about how it would be more helpful to me

Temmin: Actual social studies professional development that's actually based on the social studies not how you can incorporate reading into a classroom.

Evaan: Based on our content. Give us ideas. Stuff that we can use immediately when I walk out and plug it straight into our unit or our lesson.

Temmin: That never happens with science or social studies as far as I'm aware.

Sabine (sarcastically): Or classifying professional development as time to work on your unit plan. Which I do believe we should have one of those, but it is ELA, not the other content areas.

Researcher: Okay, what are your thoughts about using online social networks to engage in professional development?

Sabine: We were taught not to and everywhere we grew up in a generation that says your employers are watching what you use, and they will check it. So I avoid at all costs doing anything work-related as with the fear embedded in me that someone's going to find it make the connection to maybe something I personally post or its personally about me and my employer, and I just you don't want to risk that because you hear all the time in the news another employee caught doing something that they shouldn't have in it could be something as simple as having a

beer on the weekend with her friends and a kid finds it and there it is. So, you try to separate yourself as much and keep everything set as private as you can. So, I really don't connect. The closest thing I have to professional development on my social media that I follow are the @South Carolina Red people. That's probably the closest I get to professional development.

Temmin: I agree. Social media and professionalism are two distinctly different categories when we were coming up through school. And I think that's the interesting thing about people that are older than us who do use it as professional development, they didn't get that in school. So, they were introduced to social media when they were already in the middle of their careers where as we were trained on social media and then start our careers. So, for me with my being teacher and my history the federal government, I literally don't even post on social media anymore. I don't post on Facebook. I don't post on Instagram. I don't post anywhere because it's just not worth posting and then having a post potentially get misinterpreted or being dragged into a political discussion that I don't want to associate it with my professional profile.

Kath: I haven't thought much about it. When I did my student teaching in Michigan they did, like, encourage, like, this hashtag to use all year. And then the beginning of the next year they gave an award to the teacher who used it most on social media, which I thought was a pretty cool thing, and I follow my student teacher on Facebook, and she's always posting pictures of her class and what they're doing and #mountienation or whatever it is. So, I do think it's an interesting concept. I haven't done much of it myself. I do take pictures when we do fun activities in class, but I usually just send those to, like, the front office and they'll put them on the website or something. But I do think it's something that's growing and can be helpful and fun.

Evaan: I just focus on content like on Twitter, but all my other stuff….

Sabine: is like a separate account. If not, like a personal account.

Evaan: It's a separate account. So yeah, we had to make it two years ago or something for a principal. That's it. I don't do anything for professional development for like behavior and stuff because it can get misconstrued. So, I'll search science content but that's it.

Researcher: Explain what you believe Twitter is and how it works.

Sabine: I haven't used Twitter since like two thousand something. The last time I used Twitter was because I heard Patrick Stewart was doing something like if you tweeted him back, he could come visit you or something like that. So, like I quickly like revamped my Twitter and hey @PatrickStewart. I don't know what the young ones these days use it for.

Temmin: I don't think the young ones use it anymore.

Sabine: I don't think they even use it really as far as I know. The last time Twitter was a thing is really just a post about what you're doing like to pet sit like when it was still 120 characters only. My mom just told me it's not bad anymore. And that goes to show you about your age thing. Like my mom uses it for everything.

Ezra: I don't even have a Twitter account. I like to know there is a live sporting event going on. I like to hop on and just see what people are saying about the event. I always find that fun.

Sabine: I'll find those popped up on my Facebook screen capture. I don't know why people use it.

Temmin: So, technically that covers it. The intention was to follow some stuff and just keep apprised of what was going on in the world, but it just became one more thing to check. I got notifications every ten seconds and I was, like, I just uninstalled it. I think that there are plenty of other avenues to get information other than just Twitter because there's no such thing as unbiased

on Twitter. Everything on Twitter is somebody else's opinion and that's not always what I'm looking for what I'm trying to learn about what's happening in the world.

Researcher: So, what are other thoughts may you have about using online social networks in general for professional development or anything any other thought you might have about professional development in general?

Evaan: I think it's a good idea because I want to connect with other people in South Carolina to help with the content stuff. There is no reason to reinvent everything if someone else already made it, but currently I'm not really using it that way.

Kath: Well I think professional development is always helpful especially for a new teacher like myself, because there are always things I could do better. Things I could learn more about. As a social media being a professional development tool, I think it could be helpful as well. Again, I haven't used it but that allows teacher from all over the place. All over the United States. And you can also connect to people across the world. And you can get different information, different suggestions, different opinions on professional development and it could lead to a lot of, a lot more opportunity to see things that you wouldn't be able to see in your own school.

Temmin: I think using social media for professional development kind of damages the concept of the work-life balance because it becomes you doing school work at school, but then you are also doing school work at home and at some point you have to do something other than be a teacher. It is an all-consuming profession. We knew that when we signed up for it. And you got to stop and do something other than. It becomes a slippery slope because we use our professional development today and then all of a sudden that's all we ever use it for and it starts to consume our evening as well as our days and that would be my concern because I prefer to keep work

walled off from home as much as possible, especially with my kids. At a certain point. I have to be dad as well as teacher and sometimes the two can't coexist.

Hera: I want to piggyback off that. I mean literally this morning at six. I got it like an email, and it was like check out this new pin on Pinterest and it was something I was working on with my kids and it let me do that. Then I emailed it. But I need to just focus on getting ready for work, but I was literally sitting there on my phone. And so, I think that that is something like it can be a slippery slope.

Researcher: Anything else?

Sabine: I grew up with the teacher who was 100% a teacher 100% of the time and don't get me wrong, I had a great childhood. Everything is wonderful. But I saw the toll it can take on an educator and the stress it puts on somebody and she was a she is a great educator and one of the best in her school district, but I mean, I was always waiting on Daddy. Not Mommy because Mommy has schoolwork to do. she made it to the important events that she either for by she was always on that computer watching TV. She's always on that computer responding to an email on some kind of social media looking at like Pinterest looking at different activities to do reading a book doing something for school and she did a great job and you always make sure to be there when it mattered but that woman put her heart and soul into teaching and her heart breaks for the kids so much and it always felt like growing up the kids that she had sometimes mattered a little more than her own kids. Now course things have changed since then, but I don't want to be that, so it goes back to the work-life balance. I saw what it can do to a person so I'm never want to go home and sit on Pinterest looking at different things for school all the time when I should have my own identity when I leave the building. That's why for me, I put in my hours in the morning and I leave after school because I'm not doing it when I go home, unless it's a class I am taking,

if I just don't have time to do it here. So, I just I just don't think it's something we should do. I think we need to have our own identities and it's reasonable.

Ezra: I think it'd be cool instead of doing like regular PD that we go to a classroom and set for 45 minutes and listen to somebody. If we could do it on our own like in the school building during the school time that they would normally do a normal PLC instead of you this Twitter thing. I would much rather do that because.

Sabine: When Gadget has a Padlet created for us. That's something she can share with us on like our Google Classroom that we have and we could all interact and have an online discussion versus having to sign up for Twitter, you can't force anyone to sign-up for anything, but I mean, I know that's not social media. But a PD that you know what I can be doing that and doing my grading or something at the same time. Those are beneficial PDs.

Focus Group 2

Researcher: Just give me your name please and what you teach.

Nadien: 5th Grade

Garma: 3rd Grade

Sarala: 3rd Grade

Cadix: 2nd Grade

Researcher: I just need to know who-is-who for the transcript. This is basically a free discussion amongst you. Name the online social networks that you use and what you use the for. Any social network

Garma: I use Instagram a lot. I have a Facebook account, but I deleted the app because I spend a lot of time just siting and scrolling on it. So, I, kind of, got rid of that but I use both mostly just for like personal my own personal life, pictures. I guess like we go on a trip and then I follow

like other teacher accounts. Facebook doesn't really have a lot of stuff that appeals to me by

education because it is like a really old account that I've had since middle school.

Researcher: Just to follow up with what you are saying. You said other teachers. Are you

talking about other teachers who you work with and are just friends are you actually getting

some information from?

Garma: Like if I follow Steph on Instagram and she posts pictures of her cat. But like another

teacher who's like, I'm reading his blogs or something. I'll get, like, PD stuff form him that way.

So yeah, that's more of a professional network and I use it with other colleagues in other fields

and share ideas and articles all the time. I try to incorporate some of that if it's relevant to my

classroom.

Cadix: Instagram more for just personal things. Facebook for personal things. Twitter, I had but

I no longer really use it. Those are the big ones. Oh, and YouTube.

Garma: Yeah, YouTube.

Nadien: I have primarily, I guess, used Facebook but I have been trying to ween myself off of it.

I guess primarily, I do use YouTube a lot. I've never really messed around with Instagram. No

good reason. Just haven't. Twitter, I signed up for an account a long time ago for an educational

technology class in college, but I have not used it since the requirement ended.

Sarala: I use Facebook like personal to connect with my family and that kind of stuff. I do use

Instagram. I have like a personal one and then I also have one for teaching to follow other

teachers and professional development and that kind of stuff. And then, I use Twitter for my, I

coach at May River, so like the high school team.

Garma: I use Pinterest too, so does that count?

Sarala: Yeah, Pinterest for sure.

GARMA That was started because I'm bored, let's scroll and pin some stuff. But that's where I get a lot of quick, like, visual ideas and it makes me do a lot of really cool, like, stuff that way. So, Pinterest would probably be my number one professional I use professionally.

Researcher: The next few questions we are talking about the professional development experience and how did it help you in the classroom. I'm talking about some things that have been done here at school or at the Summer Institutes.

Sarala: I think one of my best ones was either Summer Institute or Best Practices but somebody from the Lucy Calkins, like the national one. She wasn't a colleague; it was somebody from there. That was my best one. I learned a lot from that one.

Garma: Was that a Summer Institute?

Sarala: It was either that or a Best Practices.

Garma: I think went to the same one and I think it was Summer Institute. I think it was great because it was actually somebody who works directly with the Lucy Calkins and knew really what is was, like, meant how to be used or how to use it in the best way, how to use it in the easiest way. It was kind of like straight from the horse's mouth. This is what we want instead of like a colleague have given us the same training. It could have been like, "Well, when I read the book, this is what I interpreted as and when you read the book you could take it this way." It was more abstract, take it as you will. She knew exactly what was expected for each thing. So it was kind of nice to get it, like, directly

Sarala: Yeah, she was really good with us.

Nadien: My PDs, I guess, are a little bit more limited. It's my first year. I did go to Summer Institute for one of the days and one class that I signed up for was how to make reading exciting. We were using, like, Legos in different strategies that I thought was pretty cool.

Cadix: We had a professor, Dr. Fred Burton, come to our school back in Ohio, and he talked about documentation of like splitting student work and that was kind of cool and I still try to do that as often as possible.

Researcher: Now share your worst professional development experience.

Garma: Can we go back to the best really quickly before we move to the next one.

Researcher: Sure.

Garma: Kristen Parson has been here like, was it yesterday or was it….

Sarala: It was last Friday.

Garma: And last Tuesday of the same week and she came in and showed us like all kinds of, like, cool, random stuff. She came in for Kami, Share to Classroom and then she showed us like other just quick tips like Bitmoji in the split screen. Like all kinds of extensions to add and that was the best because it was like really relaxed. Like if you want to do this, you could use this for that. She's like completely blew my mind and now our email is full of the Bitmojis and stuff like fun stuff that we actually use but I'm not actually going to use it right now, but it's made it more fun. Sorry to backtrack, what are the worst?

Researcher: Yes.

Garma: The worst for me has been when I went to either Best Practices or Summer Institute provided by the district. Unfortunately, it was about it said on the thing I signed up for that was about Discovery Education and like how to use the science textbook and I was like super excited about it. And then when I went, it was more like here's like some quick tips for random things you can use in like other apps and it had nothing to do with Discovery Ed and I was like, am I in the right room and everybody in the room is like super confused. Maybe they switched it on us

and we didn't know but we like had no idea it was going on and I walked out super annoyed that I had no idea, still don't know how to work Discovery Ed.

Nadien: I had an outside person invited to speak at one of my college classes and it must have been the way presented or I don't know what I was used to or what was not done but it wasn't engaging at all. I just sat there and lecture the whole time and it took me personally, I just was not invested, and I left just like feeling like it was a waste of time.

Cadix: I've had similar experiences like that were we've had guest lecturers back at my old district. We had like a week kind of like they do for Summer Institute and we were kind of mandated to go to certain trainings and there is one guy in particular with a very monotone voice all the time. It wasn't engaging at all.

Sarala: Yeah, I mean similar experiences, but I can't think of a specific one but just not engaged.

Researcher: Think back to when you saw professional development to help you in the classroom on your own initiative. Who and where did you turn to?

Garma: Can you repeat the question one more time?

Researcher: Yeah, think back to when you sought, you looked for professional development on your own. Who did you go to or where did you go to find this stuff?

Sarala: I'm going to the conference at a professional development conference on Saturday in Charleston and it's somebody I follow on Instagram. It's a literacy conference and I follow all her stuff. I wanted to go to it and I'm going to it.

Garma: And she got the whole thing funded. Tell him where you got the thing funded.

Sarala: I got the whole thing funded through Donors Choose. So, without the district's help because Gustafson is awesome.

Garma: We didn't go to the Get Your Teach On. They didn't send us, they didn't want to send us, but we were dying to go to this one conference, and we like again, we follow the people on Instagram and we saw them like all over social media. We read their books and you know, we've just been really interested in the work that they've been doing and they weren't really, I mean, they weren't really interested in sending us for all kinds of different reasons.

Nadien: I've signed up for where, I think, two different instances where I've had a tech person come into the classroom and then I just had another. Where you follow the things that are posted on the district website for different things you can sign up for professional learning plan. To learn where to acquire those sites, I guess. That's why we're here.

Cadix: Back in my old district I'd turn to our RBIS, or educational instructional service team and I had wanted to do more with progressive education as a whole or a project-based learning type of thing. So, I turned to them for guidance in that way and then with tech incorporating the Google Classroom and like every other day. Every student had an iPad or device so being able to use apps with that like Raz Kids Epic.

Researcher: What do you think would make professional development offerings more helpful to your classroom teaching. Think about all the things you've done. What would make these things helpful to what you do in the classroom?

Nadien: I guess just practical things. Stuff that you can like pick up and do tomorrow and not too much of like somebody sitting there lecturing you why you should do something.

Garma: I think that is why you should do something fun like the Quick trick things that this person is giving us because she helped us download it and ten minutes later I was sending Bitmojis to people and thinking about how I can put them in the flip charts and you know using the split screen later to you know, do two things at one time for the kids. Like it's just like you're

saying that the quicker I can implement it the easier it is to implement it the more responsive I think people are into it

Sarala: And I think realistic things like sometimes when you go to PD, they are like talking it up in that kind of time. I'm like yeah, I can never see myself doing that.

Garma: Or like the kids are not going to be able to respond to that because you know, whatever.

Sarala: I think different schools have different resources so things can't happen all the time.

Cadix: I know I've been to some that sounds like this is a great idea, but I don't think it would work very well for second grade versus fifth grade or fourth grade or seeing it tied to a standard. Like see it actually used.

Garma: Like if I remember when I think it was probably Lucy Calkins like there are some lessons are. No, who is the lady who writes the reading strategies book?

Sarala: Jennifer Serravallo.

Garma: She likes video tapes a bunch of lessons and puts them on the like website I guess when you claim the book and those are nice because she's actually modeling for you what she is doing and if it's real kids in an actual classroom and its not like somebody up there just kind of telling you what they've done. It's almost kind of like, I don't say you can't trust it but how do I know that this ever really does work whereas I've actually seen it happen for other people. Like in the classroom.

Researcher: What are your thoughts about using online social networks to engage in professional development?

Sarala: Say it again please.

Researcher: what are your thoughts of using online social networks to engage in professional development. In other words, using online social networks to do social or do professional development

Sarala: I have a separate Instagram account that I use to follow all teachers that count so that it can be separate from my personal one so that I can just do like get ideas for the classroom, see what strategies people are using and that kind of stuff. So I know I can specifically have that stuff with Instagram because you know.

Garma: I like it because I can sit on my couch and scroll through Facebook and look at crap for a lack of better words like stuff that people are doing or I can switch to my teacher account and I can look at things that are actually going to be useful or things I'm going to be able to implement tomorrow or if I'm like stuck on something, I can easily just cuz it's almost like good as Google. I can just Google like seeing activities and then I have something. Whereas long ago you would have to go to a conference or something to learn more about some of the things we have access to. So, I think it just opens a whole new door of opportunities for teachers that some people like thinking of resisting like tapping into it, but I like it personal.

Cadix: I like the idea of it but I'm kind of skeptical. I don't know which or what to trust. If it's research-based or not because I'm a stickler for that kind of thing.

Nadien: And I have to agree. I like the ease of access, but I would have to say that it's hard to find information you can for sure rely on.

Researcher: Explain what you believe Twitter is and how it works briefly.

Nadien: A text message type of thing to everyone. You can collaborate with people, start arguments with people. You can do in so many different ways cuz, I've seen it like where

someone actually has a good meaningful Tweet and some people subtweet them, I think that's

the term, but just like underneath the comments are just not very nice.

Garma: I don't know, the 140 characters thing stresses me out. Cuz if I have something like

specific that I want to say or something that I want to share, you know, Instagram or like

Facebook, or whatever. I can just easily jot it down and send it and it's done. Whereas this if it

doesn't fit, well then, snap, now I need to go back in and try to reword what I'm trying to say but

it might not sound as like compelling or more interesting or be as professional or whatever as I

would want it to be cuz I can't say indubitably because that's half of my characters is right there

in my one word. So, it's tough.

Sarala: I don't Twitter, you just put stuff out there.

Cadix: I'm not too familiar with it.

Garma: I heard isn't it like the most popular thing for teachers or the fastest growing?

Researcher: I really can't talk about that now. I can tell you this, as far as teachers over 30 it's

extremely popular and this is the reason I'm doing this study. Your age group…

Garma: Not into it.

Researcher: Your age group dominates social media in total but when it comes to using Twitter

for PD, you ignore it. And so that's what I'm here to find out. And going with that theme, a

couple of you mentioned Instagram. So, kind of give me a little more insight as to what it is

about Instagram and why you turned to that and exactly how it, be a little more specific about

how it works for you. How you get information through that.

Cadix: It's visual, you see pictures and based off those pictures you can read the caption.

Garma: Or even videos. Same thing like Pinterest, I'm easily able to like scroll through and be

like, oh, I don't like, you know, I'm not interested in it says 5th grade on here then I can really

quickly I can glance at it and just keep moving on like if it's something that I'm actually doing or something that looks visually appealing. I don't know.

Sarala: I guess I'm more open to it for me to picture it or how it's going to look in my classroom rather than just reading about it.

Garma: Recently I just saw a game on Pinterest and it was like with popsicle sticks and you put them in like the little containers for Crystal Light or whatever it's called and scrolling through it was just a picture of the Crystal Light container tipped over and the popsicle sticks filled out and you can see the math things on it and I was like, oh my God, I have popsicle sticks and a container similar to this. Boom and now I have 30 sets of games and I didn't even have to open the post; I just saw it.

Nadien: So, I personally never been on it. I am, the only way you'll see I'm occasionally scrolling through Facebook and people link to Instagram with their Facebook and you'll see, like the cross postings but I never opened them.

Researcher: So, what other thoughts do you have about using online social networks for professional development or even professional development in general? That's just the catch-all for something you want to say that hasn't been covered yet.

Garma: I think it's a good tool.

Sarala: Yeah, I agree.

Researcher: Alright, thank you very much.

Focus Group 3

Researcher: Tell us your name and what area you teach?

Boba: 8th grade math.

Rey: Middle School Dance.

Researcher: Name the online social networks you use and what you use them for? Examples include Twitter, Facebook, Google +, Instagram, Snapchat, LinkedIn, Pinterest, or any others not mentioned in this list.

Boba: I do not use social media for my classes. As I am a first-year teacher I am focusing on other resources and hope to add social media into my classroom in the future. I do Instagram, Facebook, Snapchat. I have used Twitter, but I don't use it currently.

Rey: I use a lot of social media but not for my classes, I use Facebook, Snapchat, Pinterest, TikTok, Instagram. I use them to talk to my friends and family who are hours away. High School friends from North Carolina. Look at humorous things too.

Researcher: Share your best professional development experience and how it helped you in the classroom.

Boba: My most beneficial PD was for iXL and specifically the iXL Diagnostics. It showed me how Diagnostics can be used to improve math levels and get students ready for standardized tests. It helps student catch up in class or progress past their current level.

Rey: The most beneficial PD I have been to was the ABC Conference I went to in October. I learned different ways to incorporate core subjects into dance. This was for the grant our school receives. Two that stand out was an Artist picture and interpret it through dance. The dance room was laid out with two dancers and we walked around them for different points of view. We could explain this picture from different points of view. Another one was we talked about history of immigration and discuss why they left their home country. Groups were given articles about why people left such as war, natural disasters, and religious persecution. We discussed how they got from their home to America. What hardships did they face such as not going to school, their church, or seeing their extended family? Where did they end up and what their hardships when

they arrived at their destination? Then we turned those stories into a dance that highlighted their hardships and struggles.

Researcher: Share your worst professional development experience.

Boba: I don't think I can choose the worst one, but one that would be bad would be one that doesn't have much content and could have been an email or memo. I have gained something from all of the professional development I have participated in.

Rey: The worst ones I have been to are ones that don't pertain to me, the arts, and my subject. I have been to a decent amount that the person instructing the PD has not known how to make it work in an art setting. These were PDs required but were geared to core academic classes. I sat there and twiddled my thumbs and doodled. I can't sit and stare at a board, I have to be moving most of the time or I get bored.

Researcher: Think back to when you sought professional development to help you in the classroom on your own initiative. To whom or where did you turn.

Boba: To my mentor who helps me with noninstructional routines and math department head for math related content.

Rey: I haven't yet sought out PD on my own. Being a somewhat new teacher, I have just been trying to keep my ducks all in a line, check all the boxes and jump through all the hoops. I am only a third-year teacher. I did choose the ABC sessions I attended that were related to dance and fine arts.

Researcher: What do you think would make professional development offerings more helpful to your classroom teaching?

Boba: Ones that focused on motivating students to participate and do their work. I have struggled with motivating students to engage in class. They focus for a few minutes then check out. Some of this is part of classroom management.

Rey: Ones that are geared towards the arts, or at least arts integrated, and classroom management.

Researcher: What are your thoughts of using online social networks to engage in professional development?

Boba: I think it can be very beneficial to use a platform that students are very familiar with and enjoy. It would bring bridge their out of class world with their in class world. I would look to Twitter and Instagram to connect with other educators using hashtags to find things I need to help me in the classroom and share ideas I have discovered. Also, just connecting with other teachers would be very helpful.

Rey: I think it would be awesome because you could make it to where only certain people are part of it. If you do that then you can make it more personal to their subject and really home in on what their needs are as teachers. I am part of a Facebook group of dance teachers that is for dance teachers in public schools or private studios. We ask questions about what we need help with, or ideas others have used in their classes. This allows me to pick people who will help me in teaching dance.

Researcher: Explain what you believe Twitter is and how it works.

Boba: I have used Twitter as a way to share things I have done in my life and connect with people who are not in my physical vicinity. It opens up the world to connect when it can't be done physically.

Rey: Twitter is like a quick way to tell people what is going on in your life through the internet. It has kind of faded out of popularity. It allows people to quickly update someone and notify them connected through the app so they can see what is going on. It helps people stay connected with each other, share, retweet, and comment on things that are important to the individuals. And you can search hashtags to find other posts relevant to what you need.

Researcher: What other thoughts do you have about using online social networks for professional development or professional development in general?

Boba: A PD on using social media for PD would be very beneficial. I have used a lot of them, but I have never been trained on them. I have just created an account and started using them. If you use them and connect with a bunch of people, then it is fun but if you don't then it gets boring. Knowing the ins and outs of the actual platform and ways to connect more efficiently would make it all easier to operate. In general PD's, I would like to see more specific examples of how the content has been implemented in the classroom and how I can do that myself.

Rey: If we used a social network it would help connect new teachers or teachers in a district who don't have a lot of teachers who teach the same subjects. This gives a place for them to seek out others to share information, ideas. It also allows you to network with people you never meet in person because they may live in other places in the country or other countries. General PD are great for the greater good for all of the teachers in their classrooms at the schools. The students would be able to learn a lot because their teachers have learned a lot and gained more knowledge.

Researcher: Any other thoughts about online social networks for professional development or professional development in general?

Rey: No.

Boba: No.

Researcher: Thank you very much.

APPENDIX I: INDIVIDUAL OBSERVATION PROTOCOL

Participant's Name

Twitter Name

Date	Tweet (Descriptive Note)	Tweet Type Descriptive Notes (Professional, personal, statement, question, response, discussion with hashtag, sharing a link	Tweet Reflective Notes

APPENDIX J: INDIVIDUAL OBSERVATION NOTES

Date	Tweet	Tweet Type Descriptive Notes	Impression
10/30 Garma	Retweeted "Hey dissertation study peeps, don't forget to try the 2 week Twitter challenge.	Professional tweet about a district initiative increasing Twitter awareness among teachers.	Nice to see a school district attempting to increase Twitter participation among its teachers.
10/30 Sarala	Posted a picture "Ask Yourself One Simple Question Every Day on Your Way to School."	While this tweet is meant to go to teachers it could be considered a personal tweet.	Interesting motivational question regarding thoughts before each school day.
10/31 Sarala	Retweeted @JSerravallo "Oh wow. I am incredibly honored and in awe! @HeinmannPub	Personal. Retweet of a retweet of a picture "The cutest bookworms I ever did see." The teacher appears to know one of the people in the picture and follows this person on Twitter.	Picture shows two teachers in similar outfits promoting reading.
11/01 Sarala	Retweeted a school district tweet regarding a local tree management company's talk about why trees are important to students of the participant's school	Professional retweet.	The teacher is sharing activities at their school.
11/01 Sarala	Posted a picture of student STEM activity.	Sharing classroom activities with #spiderwebstemchallenge.	Sharing the participant's student activities. Hashtag shares the activity with teachers doing a similar activity.
11/02 Sarala	Retweeted from a publishing company: "Learning about the characteristics of a text will help you to know children's literature so that when you are working with students in conferences or small groups, even if you don't know that specific book the child is reading."	Professional retweet. Sharing information about working with students on reading assignments.	This would be sharing professional development information regarding helping students understand the book they are reading.

11/02 Sarala	Retweeted "I just uploaded 'Fountas & Pinnell Guided Reading Book & Lesson Sneak Peak.'"	Professional Retweeted a link to a marketing video regarding an elementary reading curriculum to share.	This tweet shares a reading curriculum to followers interested in reading curriculum.
11/02 Sarala	Retweeted a link to an article sharing 24 books to teach students kindness	Professional retweet sharing a link to reading books to other teachers interested in books to teach kindness.	Sharing reading books to followers on a specific topic.
11/03 Sarala	Tweeted "Learning lots and having fun at the #hellolitcon."	Tweet about being at a literacy conference.	The tweet only mentions being at the conference but not details beyond this. Did post the conference hashtag.
11/03 Sarala	Retweeted "And just like that, another #HelloLitCon is in the books! What a fabulous day we had together talking about literacy and books, eating tacos, taking selfies and talking and teaching with urgency @Charleston, South Carolina	Retweet about a literacy conference the participant attended.	Again, nothing was mentioned about what was learned at the conference beyond generalities.
11/03 Sarala	Retweeted "Are we developing passionate readers?" Along with a photo stating "In our pursuit to establish classrooms filled with passionate readers, we must make sure that the things we do, do not do more harm than good."	Retweet from another literacy teacher about developing readers.	The photo has information about not doing harm when teaching literacy. The original poster's question would be though provoking for literacy teachers.
11/05 Sarala	Tweeted "Look how they have the Lucy writing rubric blown up."	The tweet has a copy of a photo that might be from Instagram "1 of the best forms of PL can be found right in your own school! In the same way using mentor texts w/Ss can be powerful, observing a mentor teacher can be motivating & inspiring. Have you visited	The participant might be looking at a picture of literacy or writing curriculum organization. The tweet does not appear to be related to the idea of classroom observations. Also, this appears to be sharing something on Twitter

		another classroom lately? #lex1literacy #teachersofinstagram #literacy coach	originally posted on Instagram.
11/05 Sarala	Retweeted "Dear 1st Year Teachers, You're not doing it wrong, it's just really THAT hard. Signed, Been there, done that, made it through, and so will you.	Retweeted a pep talk from another teacher.	This might be to help the participant and new teachers who follow them.
11/05 Garma	Tweeted "No school tomorrow=late night PD reading…at least until I fall asleep #playingcathup	Personal tweet about what the participant is doing.	While the participant is reading professional development material, not sharing what was learned makes this a personal tweet.
11/06 Sarala	Retweeted "This weeks read has finally arrived! Thanks @user for the recommendation!	This retweet shares a photo of a book recommendation for students to read.	This retweet is sharing curriculum material ideas with other users.
11/06 Sarala	Retweeted "Which rule is your favorite? #TheEnergyBus	This retweet has a picture of 10 Rules for the Ride of Your Life	Another retweet of motivational/inspirational material designed for teachers.
11/07 Sarala	Retweeted "The better you know the readers, the better you can teach them. #FPLiteracy"	This tweet comes from a literacy curriculum publisher.	This retweet appears to be advice on how to connect literacy to students.
11/08 Sarala	Retweeted from the school district "Forecasting the Weather" with a YouTube Link	The retweeted link is a meteorologist showing students from the participant's school how weather is forecasted.	The participant is sharing information about what students at their school is doing.
11/08 Sarala	Retweeted from another Twitter member "I love when teachers put PD into action! @TwitterUser Thank you for the idea. I have loved sharing this idea with our teachers!"	This retweet shares a picture on what students should be doing when they are reading books.	This is sharing curriculum and professional development ideas from other teachers.
11/08 Sarala	Retweeted "Day 1 of LLI training. Wishing to share this with all my colleagues, students, and	Retweet of another teacher commenting about a literacy curriculum training with a picture with "A	This retweet is sharing the idea of how children should be viewed when assessing them.

	parents! Your child is not a letter.	Level is a Teacher's Tool, NOT a Child's Label.	
11/09 Sarala	Retweeted "Because teachers make the world a better place." With a picture and link to a website.	The website link is "55 of Our All-Time Favorite Teacher Quotes."	Another retweet to motivational quotes about teaching.
11/09 Sarala	Retweeted from another Twitter user "Reading and writing tools help increase reading and writing volume! Reading mats (Ss set up before the mini-lesson) and paper choice!	This tweet from shows how one teacher sets up for a literacy mini-lesson with photos on how the setup looks.	This professional tweet shares literacy education ideas.
11/12 Sarala	Retweeted "This is such a great reminder! Thanks! With a photo	This retweet shares the structure of a mini lesson along with how the lesson should sound.	This is a professional tweet sharing classroom teaching ideas.
11/12 Sarala	Retweeted "Today 2nd – 5th grades had the privilege to hear amazing musicians" from the local symphony orchestra!	This retweet shares an activity students at the participant's school experienced.	This is sharing information and activities students have done at school.
11/13 Sarala	Retweeted "It's conference/progress report season, so here are some unsolicited thoughts on how to make them feel empowering for every family.	This professional retweet attempts to share report card comments meant to help students' and their families. The comments are on subsequent tweets.	Good information to know but one needs to understand continuous tweets share the information.
11/14 Evaan	Tweeted "Need some ideas on how students could create a meme or gif about animal adaptions & natural selection! Any amazing free meme/gif generators that you love? #STEAM	This professional tweet is asking for ideas on classroom tools.	This is a request for what other tools teachers may use for teaching classroom content.
11/15 Sarala	Retweeted "The words we use with our students matter so much." #selchat #thursdaythoughts #teacherwisdom	This professional retweet shares language teachers should use when addressing classroom management issues. A chart of these tips is attached to the retweet.	Another helpful retweet for new teachers about helping with classroom management. The participant appears to be following a #chat group.

11/15 Sarla	Retweeted a district tweet about participating in a college career fair.	This professional tweet shares where the school district is attempting to recruit new teachers.	This tweet appears to be aimed to participant's followers attending the college the district is recruiting at. The tweet encourages readers to talk to district recruiters.
11/18 Sarla	Retweeted "Kids might not remember every lesson I taught them, but I know they all remember how I made them feel day after day. Unconditionally loved. Valued. Respected. Worthy. #Relationshipsfirst #teamkid	This professional tweet regarding how teachers should treat students.	Another tweet to remind teachers how to treat students in the classroom. Classroom management.
11/18 Evaan	Retweeted "Capable of long-distance travel and dominating most 10other animals, why they aren't Komodo dragons more widespread.	This is a professional tweet of a National Geographic article about Komodo Dragons.	This tweet shares information regarding subject content. However, it is not clear who this tweet is targeting.
11/21 Sarala	Retweeted "This may be the ultimate teacher hack." With a link on Turing Post-Its into classroom tools.	Professional tweet about tools to use in the classroom.	This retweet is about classroom organization, management, and tools for teachers to create to help them be more productive.
11/21 Sarala	Retweet "This is true. Safe travels to everyone."	This personal tweet about how to be stress free during Thanksgiving.	This tweet is about how to not allow stress to affect a holiday with family and friends.
11/23 Sarala	Tweeted an idea from another Twitter user about using books to create an Advent calendar.	This professional tweet shows how to keep students reading during Winter Breaks. The information in the tweet appears to come from Instagram.	This shares what may appear to be an Instagram post about how another teacher promotes literacy during the Winter Break season.
11/27 Sarala	Tweets : I absolutely love using the digital fluency flashcards from @Twitter User! There are SO many word lists and phrases. It's such an easy way for my students to practice	Professional tweet sharing classroom instruction ideas.	This is the first mention of Teachers Pay Teachers. It appears the idea was found in a chat room or by searching using a hashtag.

	sight words on their device. No more writing out flashcards. #techshare #digitalflashcards. A subsequent tweet provides a link to digital fluency flash cards on Teachers Pay Teachers.		
1/04

Evaan | Homemade bolognese | Showing what was for dinner. | Evaan is demonstrating her culinary skills to her followers. |
| 1/14

Evaan | I use @RemindHQ to keep my parents updated on assignments. As a personal phone service, I love @verizon, but you need to #reversethefee. My parents need these messages to stay up to date! | Explains how she uses a service to keep parents informed of class activities, but Verizon wireless must have some form of fee to use the service. | Evaan is using Twitter to advocate for a communication tool she uses to inform parents about Verizon's policies. |
| 1/26

Evaan | Thank you @verizon for listening to #ReverseTheFee. I can continue contacting parents easily! | Evaan's previous tweet about Verizon's policy led to an elimination of a fee that kept her from using Remind HQ. | Evaan's earlier advocation Tweet was successful in getting Verizon to change its policy regarding the use of a class communication tool. |
| 2/4

Evaan | The last time I learned about #DopplerEffect was in my middle school years. Suggestions to easily show this in a classroom? #STEM | Looking for updated ideas to teach students about the Doppler Effect. | Evaan wants to teach about the Doppler Effect but is looking for updated ideas because she last did the lesson as a middle school student. |
| 2/8/19

Evaan | Retweeted from @NatGeo
Did you know sea turtles use Earth's magnetic fields to navigate? | Sharing an interesting bit of trivia regarding sea turtles and how they navigate. | Sea Turtles are important to the area Evaan lives in. So she shared how sea turtles are able to return to the same nesting grounds each year. |
| 2/10

Evaan | Retweeted @teachergoals Dear newer teachers…#teachergoals Shared a picture depicting the stages of development of a butterfly. | Sharing a picture of butterfly development. | Evaan is sharing a picture that teachers could use to teach metamorphosis. |

2/17 Evaan	Retweeted @NatGeo How does an animal that spends most of its life in saltwater quench its thirst? An article about how sea snakes, surrounded by water, quench their thirst.	Shared an article about how ocean animals stay hydrated in a saltwater environment.	Students probably have asked how marine animals stay hydrated in saltwater. Evaan shared an article explaining how this is done with teachers who probably have been asked the same question.
4/6 Evaan	Retweeted from school Twitter feed Come out and support the girls' soccer team in their playoff game. Good luck	Sharing a school's tweet about Evaan's soccer team's playoff match.	This tweet was edited to redact identifying information.
4/12 Evaan	Congratulations to the Lady's Soccer Team as they clinched their second District Championship in a Row!!	Evaan is informing followers about her soccer team's championship.	This tweet was edited to redact identifying information.
5/10 Evaan	Retweeted @teachergoals We can make it until summer! #StayStrong #teachergoals Picture with "It's okay to fall apart sometimes. Tacos do it all the time and we still love them."	Sharing a moral boosting picture to help followers finish the school year strong.	Evaan probably found this picture funny but helpful as the school year winds down.
6/14 Evaan	Love one-pagers and so do my students. Cant't wait to use this next school year!	Shared an Edutopia link to creating one-page assignments.	Evaan saw an article in Edutopia and shares how she believes it would be helpful with the next year's students.

APPENDIX K: INTERVIEW QUESTIONS

1. Please introduce yourself and what would you like people know about you as a person and teacher?

2. What are your roles in your current position?

3. How long have you been teaching?

4. Recall how professional development offerings have met and not met your needs as a teacher?

5. Share the people and resources you turn to when you need to improve your classroom practices.

6. What online social networks do you use besides Twitter and how long have you used them?

7. What aspects of online social networks do you find most valuable?

8. How were OSNs used in your preservice courses and student teaching?

9. Share how your recent use of Twitter benefited you professionally.

10. How do you feel your teaching workload affects you using Twitter or other online social networks for professional development?

11. How do you see using Twitter for professional development for future professional development needs?

12. What other thoughts do you have regarding using Twitter or other online social networks for professional development?

APPENDIX L: INDIVIDUAL INTERVIEW TRANSCRIPTS

Boba

Researcher: Please introduce yourself and what would you like people know about you as a person and teacher?

Boba: Boba, I have a caring heart.

Researcher: What are your roles in your current position?

Boba: 8th math teacher, Girls basketball coach, induction 1 teacher. Induction 1 means a first-year teacher.

Researcher: How long have you been teaching?

Boba: Less than one year. This is my first teaching position.

Researcher: Recall how professional development offerings have met and not met your needs as a teacher?

Boba: PD has taught me something from everyone. They have he3lped me develop pretty quickly. As a first-year teacher it has been beneficial because they help me deal with issues, I experience for the first time. Being an induction teacher, every PD has been beneficial, so I have had no bad experiences yet.

Researcher: Share the people and resources you turn to when you need to improve your classroom practices.

Boba: The other 8th grade math teachers, including my mentor, and the head of the math department. For resources I use Teachers Pay Teachers a lot.

Researcher: What online social networks do you use besides Twitter and how long have you used them?

Boba: Instagram six years, Snapchat two or three years, Facebook ten years.

Researcher: What aspects of online social networks do you find most valuable?

Boba: Their ability to connect with people all around the world. The biggest reason why I use them is for the immediate connection friends, family, news, sports.

Researcher: How were OSNs used in your preservice courses and student teaching?

Boba: We used Facebook to stay connected with a group of classmates and the teacher to share information. The district I student taught had an active Twitter account where te3achers shared class activities where I sent information about my classes to be posted.

Researcher: Share how your recent use of Twitter benefited you professionally.

Boba: I did not use Twitter because I was busy with basketball and teaching so I couldn't fit it in. However, I believe Twitter could be beneficial in the future and I would be interested in exploring Twitter when I get into the rhythm of everything.

Researcher: How do you feel your teaching workload affects you using Twitter or other online social networks for professional development?

Boba: As a first-year teacher, it affects it a lot. I feel overwhelmed and I am still learning teaching in general. This limits my comfort ability to use Twitter or other OSNs. The time piece is the biggest issue.

Researcher: How do you see using Twitter for professional development for future professional development needs?

Boba: I think that's it could be an avenue that I could explore in the future. A training on using OSNs, like Twitter, would be beneficial to find sources of PD. Also, I would be interested in learning how to use OSNs with my students as well.

Researcher: If using OSNs, such as Twitter, provided recertification credit would you be willing to participate?

Boba: Yeah! I think that would be a double positive having that resource for the classroom and the incentive of gaining recertification credit.

Researcher: What other thoughts do you have regarding using Twitter or other online social networks for professional development?

Boba: I think that's about it.

Evaan

Researcher: Please introduce yourself. And what would you like people to know about you as a person and teacher.

Evaan: I teach Eighth Grade Science. I have taught all middle school levels of science.

Researcher: So, your role is eighth grade science teacher. How long have you been teaching?

Evaan: This is my sixth year of teaching. Ending my sixth.

Researcher: Recall how professional development offerings have met and not met your needs as a teacher?

Evaan: So, we have a lot of professional development in the district and there have been some really good meetings where we've talked about mostly how to incorporate labs and we are given the materials in these are ways that you can use it. I've had some good classroom management professional development. There's a lot of professional development of computer apps and technology that have not been very helpful. It's kind of repetitive. So, there have been I'd say I'd say more professional developments that have not been very helpful.

Researcher: Most have not been.

Evaan: Most have not been.

Researcher: What kinds actually do you think have been helpful?

Evaan: That's a good question. Technology-Wise?

Researcher: Anything.

Evaan: Mostly the science-based ones have been very helpful pertaining to standards new subject.

Researcher: Share the people and resources you do turn to when you need to improve your classroom practices?

Evaan: I mostly turned to my peers when I need to prove something going to my content Learning Partner and saying I am struggling with this. What do you suggest? I do look a lot on the district website. They have an entire unit planned out for every unit. I like to use Teachers Pay Teachers a lot. That's all I can think of right now.

Researcher: What online social networks do you use besides Twitter and how long have you used them?

Evaan: For social reasons?

Researcher: It's professional, social, whatever.

Evaan: I probably use Facebook since high school. I used Instagram since college. Pinterest since college. Honestly, I think that might be it.

Researcher: Why do you use them?

Evaan: I would say Pinterest is more for classroom-based stuff trying to come up with clever ideas on how to set up a model or creative way to decorate my classroom. Facebook mostly social. Instagram, a lot of social but I follow a lot of like zoos and scientists that will give, like, articles that are relatable to our content. So, I'll use that sometimes too.

Researcher: What aspects of online social networks do you find most valuable?

Evaan: I guess most valuable just being able to share resources share articles sharing videos of things that are happening in the world whether it's content-related for me or not content related.

Researcher: How are online social networks used in your pre-service courses and student teaching?

Evaan: Guess six years is a long time or seven years. All right. Yes, how were online social networks used in your pre-service course and student teaching. Honestly, we didn't really use like any kind of social websites or anything. I am trying to think. Can you give an example?

Researcher: I mean Twitter, Facebook.

Evaan: We used Twitter in my senior year. They wanted us to setup a Twitter account and just kind of put herself out there and I guess same for LinkedIn which I forgot earlier. They wanted us to set up LinkedIn accounts and make sure that we put like a professional face forward. But other than that, I honestly can't think of any other time that we used.

Researcher: Okay. Now when you were talking about putting your professional self out there know through Twitter and LinkedIn. Did they have you do anything with it? Or they just say just get yourself out there.

Evaan: They pretty much said get yourself out there. Just start like trying to follow people that are related to your content that you're going into or people that are related to what you're going into. But other than that, it wasn't like a push to use it all the time. It was more just make sure your name is there and if you want to start using it once you graduate to find. They didn't really say this is what you need to be doing with it.

Researcher: Share how your recent use a Twitter benefited you professionally.

Evaan: I started to follow a lot more people within not just like the content that I teach but also just other teachers and honestly, I found some really good videos and articles, but I think what I found more of is like kind of on the creative side of teaching like here are some project ideas that we came up with and you could try and apply it to your content or here are some classroom

organization tools. I feel like those are more what I found instead of what I was trying to look for was like I'm struggling with coming up with a project idea for this specifically: 8th grade science first place in the unit. I wasn't able to find that, but I have been able to find organizational things for the classroom. Just small videos and things that we can connect to what's happening now, but what I'm teaching as well.

Researcher: How do you feel your teaching workload affects you using Twitter or other online social networks for professional development?

Evaan: I would say my workload is a lot and I find that I will put something out and then maybe have time to. look back at it or maybe not or I'll look back at it and it's too late to find I just everything has been really busy really crazy. But also, we don't put the time out there to do it during professional development. Trying to find my own time.

Researcher: How do you see using Twitter for professional development for your future PD needs?

Evaan: So, I definitely need to find more teachers that teach the same curriculum that I do not just like following scientists and Discovery Ed and stuff because I think it would be a great resource to try to connect with different counties with in South Carolina and say I have this great project that we worked on and here's what we did and then just being able to connect that way just seems so much easier and then you can you know. Share and collaborate with other.

Researcher: Same question but with other social networks.

Evaan: Honestly, I feel like the only way I would use it as to try to collaborate with like Greenville and Fort Mill and all those schools and I can't see that happening on any other social media. For myself at least.

Researcher: Because you don't see yourself using anything else for professional development or learning.

Evaan: Honestly, I haven't really thought about it or how it would work. I would be open to doing it but I feel like for me Facebook and Instagram are more like a personal connected with friends and family and not I mean Instagram a little bit more to connect trying to connect with learning, but I feel like Twitter for me as less personal and more trying to get info.

Researcher: Alright, one last question. If using online social networks such as Twitter provided recertification credit. Would you be more willing to participate?

Evaan: I would most definitely be more willing to participate if the PD for any type of social media where to be offered. Yes, especially if recertification credits came from it.

Researcher: What other thoughts do you have regarding using Twitter or other online social networks for professional development?

Evaan: Honestly, I feel like I need some training on how to use it or I need some ideas on how I can connect with people that I would want to connect with. I don't know how I find that.

Ezra

Researcher: Please introduce yourself. And what would you like people to know about you as a person and a as a teacher?

Ezra: I'm Ezra. I am a Seventh-Grade Science teacher. As a teacher I would like people to know that I like to make connections first with the students. I feel like that's the most important thing because they're not going to learn for somebody that don't connect with or care for.

Researcher: And you said you are currently a seventh-grade science teacher and you're going to stay that way next year. How long have you been teaching?

Ezra: I am in my fourth year.

Researcher: Can you recall how professional development offerings have met and not met your needs as a teacher?

Ezra: Professional Developments that meet my needs are ones that are really specific to my standards or am I subject science or a technology course that I can plug into my classrooms right away. We did pear deck which was a PLC that I used in my classroom almost immediately after I learned about it. And then there are some things I just don't need. How to, classroom management stuff. How to make connections. How to be nice to kids are those don't really affect me much. They're nice to have but sometimes they just don't really relate to how I do things in my classroom.

Researcher: Share the people and resources you turn to when you need to improve your classroom practices.

Ezra: I typically go to other teachers. So, I will go to my other two content teachers. People who have been doing it longer than me. I'll go ask people that have done it or been through it or if I feel like someone does a better job than me at something. I'll go talk to them and ask them. But usually I just go talk to my teammates that is you know this job for ten-twelve years longer than I have, and it typically helped me out a lot.

Researcher: What online social networks do use besides Twitter and how long to use them?

Ezra: For education?

Researcher: In general.

Ezra: YouTube, Instagram, Facebook. I've used Facebook since I was in Middle School so several years now. Instagram, I got on to when I was in college, so I have been on that for about four years. YouTube, I used but not like. Not effectively. I just used to listen to music videos on

stuff like that. But now I use YouTube almost every day. I've been doing that for about two or three years now.

Researcher: What are you looking for on that or are you creating content on there.

Ezra: I use it to put on their use it every day in the classroom. I find a YouTube daily video that has something to do a science content. I use it for instruction. So, if you have something breaks the house I go straight on YouTube and go how do you fix microwave and pull it up that way. But now I am creating my own content on YouTube now.

Researcher: Is it educationally related or personal?

Ezra: It's all personally related. I haven't done any educational stuff with it I thought about doing some educational stuff with it but of right now I want to keep it a personal thing.

Researcher: What aspects of online social networks do you find most valuable?

Ezra: Meaning?

Researcher: What do you get out of it? What things do you enjoy, or you think that you get some value out of it?

Ezra: I really like YouTube. That is probably the most valuable one for me. Because I use it for things that help me. So, like when I need it need help in the classroom, I can Google how to do this lab and it pulls up 15 videos of people do it all the same way. It is so easy and so available; it takes a lot of work out of it.

Researcher: How were online social networks used in your pre-service courses and student teaching?

Ezra: Little to none. In student teaching the mentor that I had didn't do anything with technology. My college didn't do anything with technology. The only technology class that they had was Google Classroom and Google Docs. Google things has been around, but my college

was just getting into it. They made us setup a Gmail account and I how do I share documents and slides and stuff like that on it. But hardly any.

Researcher: Did you get into teaching right after graduation from your college?

Ezra: I did. That year I graduated and moved to our county and started teaching.

Researcher: Share how your recent use of Twitter benefited you professionally.

Ezra: Not really at all. I didn't really use it. I don't really use it professionally, so.

Researcher: Can you tell me why you didn't like it or didn't use it too much?

Ezra: I found YouTube much easier for me to use. With Twitter I was trying to search something with it and it just wouldn't give me the instant answer that I was looking for like YouTube would. And there's just so many different views and takes on it that you know, you can search up one question and get 23 different answers for it because people have different opinions on it.

Researcher: Do you use Instagram out of curiosity?

Ezra: I do but for personal uses. I follow a couple of educators on it and I get some things off of that.

Researcher: So, do you find that particularly beneficial? I know you seem to prefer YouTube.

Ezra: I do but I like Instagram too because it catches my attention with the pictures. I'll be scrolling and see something and say, "That's really cool." And so, I click on that and it takes me to their website to buy what I need to get or do what I need to do.

Researcher: How do you feel your teaching workload effects, you using Twitter or other online social networks for professional development?

Ezra: I mean, I feel like I have time to do that stuff, especially recently since I mean, we haven't had any PLCs of late. I actually have my planning to do different things and I actually search and get what I need you out of it.

Researcher: So, you mostly do it here at school?

Ezra: Yeah, I hardly ever work at home. I try to keep it completely separate. So, I either do it in the morning when I get here or during my planning time or do, I try to spend a couple minutes after school. Try to get everything ready.

Researcher: How do you see using Twitter for professional development for future professional development needs?

Ezra: It could be useful if you know the right people are on Twitter. Because Twitter is one of those places you can go and just get any type of answers or you can answer all the questions you want. But you're going to get several different answers from several different people. I think that's why I like Instagram is because I follow the certain people that I trust the people that I follow. Which, I know you can do the same with Twitter, but I typically know just type in the search bar, whatever I'm looking for and then it comes up with a million different results.

Researcher: Okay, one last question if using online social networks such as Twitter provided recertification credit. Would you be more willing it to participate?

Ezra: Yes, of course. That is an easy question. I feel like everyone needs the recertification and if you could do it on your own time on social media and still get a lot out of it. Yeah, I would love to use it for recertification purposes.

Researcher: What other thoughts do you have regarding using Twitter or other online social networks for professional development?

Ezra: I think, I really don't know about Twitter. Twitter was questionable. But I love Instagram and I follow five or six teachers on Instagram. And YouTube, I use it almost every single day professionally trying to get something out of it because there's so many good things on YouTube that you can find professionally.

Researcher: Thank you very much.

Hera

Researcher: Please introduce yourself. And what would you like people to know about you as a person and a teacher?

Hera: This is my sixth year just finishing up. I am a math teacher and think my biggest reason for doing this is just to help children change their lives and have them be better people.

Researcher: So, what are your roles in your current position? Because I know you're not just a math teacher.

Hera: So, I teach Seventh-Grade Math, but I am also the RTI coordinators at our school.

Researcher: Can you explain that?

Hera: So I work with kids who are considered at risk for academics as well as behavior and I put them on a plan if necessary, but I work with the teachers and School administration counselor to create set plans so that we can get the student on the right track to being successful.

Researcher: How long and you said you were six years…

Hera: Yeah, this is my sixth year

Researcher: Recall how your professional development offerings have met and not met your needs as a teacher?

Hera: So the most engaging I guess professional development has helped me the most are things that I can apply in my classroom or work on at a professional development that I can then later

use in my classroom, whether it's tangible or you know, it's electronic or something that I can actually make and take with me. Those have been really, really helpful. I feel like a lot of times I sit, and professional development and they just don't apply getting Middle School professional development stuff. But getting middle school math professional development is even more tough. Everything seems to be geared to either high school or Elementary.

Researcher: Share the people and resources you do turn to when you need to improve your classroom practices?

Hera: So, funny enough, I use something that is called maneuvering the middle. It's another teacher and she run her website through Teachers Pay Teachers and Pinterest. She makes a lot of tangible games, activities, guided notes, things like that that I can then turn around and use and modify myself to then use in my classroom, and she's got a whole website that I can go and visit whenever I need to. I use it most every day in my classroom as far as at like the district in school-wide level. We have math coaches here that we can go to and she its really her job just to figure out different ways to support us and help us better our craft.

Researcher: You mentioned this website called Teachers Pay Teachers. Explain a little bit about what that is.

Hera: So, Teachers Pay Teachers is literally a website for teachers to upload say a game that they used in their class and they can sell it and other teachers can go and purchase and there are free things. There are some things that like are for the whole year and it's the whole curriculum or it could just be like one unit or one lesson, but it is definitely helping lots and lots of teachers. I think everywhere.

Researcher: What online social networks to use besides Twitter and how long have you used them and I'm talking not just professional but personal

Hera: Facebook, I have used that since probably in high school and then Instagram since I started college. I use Pinterest and I've used that since I was in college and that's it, I think as far as social networking goes.

Researcher: How do you use them?

Hera: So, for Facebook and Instagram, it's just social keeping up with family, friends, news, things like that. Pinterest is usually school-related, getting stuff for school. Whether it's creating a lesson or finding a new bulletin board to create in my classroom, but I can also use it for like personal hobbies and cooking and things like that.

Researcher: What aspects of online social networks do you find most valuable?

Hera: I think a lot of time specially for teachers. We just don't have enough time in the day. I think all teachers it's probably say that and feel that way so being able to go and just like find something feel like a hashtag will connect a whole bunch of things online so if I can type in the number system and there's a tag I can find something very easily to then go and put in my classroom or in my instruction or whatever. I need instead of just looking up 7th grade math. I think that tag and hashtags really helped kind of narrow searches down so that we can save time.

Researcher: How were online social networks used in your pre-service courses and student teaching?

Hera: I didn't, I mean as far as like for professional they weren't used really there were some things that were like kind of like knock-off Facebook. If you would that you could use with your students. I know there's like apps like remind that you can use to remind your students like hey we have a big test coming up but never really used any of it in my free service in the only thing that I used in my student teaching was Edmodo and that's kind of like the knockoff Facebook if you will for students and teachers.

Researcher: Can you tell me what you did with Edmodo just briefly?

Hera: So Edmodo is very similar to Google Classroom and you can make your individual classes there, you can put up your notes, you could put up messages to students, reminders to students and it literally it's funny cause it's like Facebook with the same colors and it has like a feed and students can scroll through it and get the information you need for your class.

Researcher: So, it's like a classroom management tool.

Hera: Yep.

Researcher: Share, how your recent use of Twitter benefited you professionally?

Hera: I would say it didn't because I didn't really use it. I used to use Twitter like a long, long time ago, but then I just kind of got out of it. I just don't think it's very organized. The feed is very sporadic and updates very quickly. So, it's sometimes hard to follow certain things. I mean, yes, if you go to an individual profile or things like that, you can follow I just I don't know. I don't feel like it has all the capabilities that I would want as far as like professional development and more just like reading things maybe get some links to websites here and there but I feel like I get those from the website I already use so I just don't have that in my toolbox as well, which is not something that I use in addition to accept. It. Just be one more thing.

Researcher: How do you feel your teaching workload affects you using Twitter or other online social network for professional development?

Hera: Because I mostly use social media for personal. It doesn't affect me very much. I do follow a couple of people on Instagram. Like there's a couple teachers. I follow that are well-known if you will and a lot of times it's just, I wouldn't say its professional development more. Is there just sharing in like cool stories that have happened in the classroom or cool ways they've affected kids. So, I don't know if it really professionally develops me other than just maybe like

motivating me and reminded me why I'm here to do this job in the cool things that can happen. Even when we have really bad days, too.

Researcher: How do you see using Twitter for professional development for future professional development needs?

Hera: I am a big proponent of face-to-face and paper to pencil. I think that technology is really taking away from a lot of our basic needs of education and I think that it's probably because I'm a Math teacher going old school. If they gave me a dry erase board, I would be totally okay with that. I would totally be okay with a Math book and they write their problems on a piece of notebook paper. So, I'm very different than most of my colleagues in that sense. For me. I don't think that it would better my craft or make professional development that much better cuz I still am a big believer in face-to-face paper to pencil. I do think some very cool things can happen with you know Twitter and other social media sites for other classes. But just for me it doesn't work very well.

Researcher: Would that feeling extend to another online social networks Instagram Pinterest

Hera: Oh yeah, it's not just Twitter. It would be all social media. Even Google Classroom? It doesn't I mean I can only do so much with it as a math teacher.

Researcher: All right one last question. If using online social networks such as Twitter provided recertification credit, would you be more willing to participate?

Hera: Yeah, I feel like it would be an easy way to get recert credits. So, yes.

Researcher: What other thoughts do you have regarding using Twitter or other online social networks for professional development.

Hera: I think it's a good way of getting information out as far as reminders to sign-up for professional development or information you may need to know about specific conferences and

things like that but using it as the main source of providing the information to people going to professional development. I just think it's a tough whether it's Twitter, Facebook, Instagram, whatever it is. I think that just goes back to my personal belief and you know face-to-face paper pencil kind of thing, but I think it's good as far as reminders especially because we're on social media all the time nowadays. It's a great like, oh, yeah, I got to remember to sign up for that conference or oh, I got to remember to you know get this over there. So.

Kath

Researcher: Please introduce yourself and what would you like people to know about you as a person and a teacher?

Kath: I'm Kath. I just finished my second year of teaching and I'm originally from Michigan.

Researcher: What are your roles in your current position?

Kath: Sixth Grade English Teacher. Advanced classes and standard classes. I'm a coach for the track team. Next year I'll coach volleyball and soccer.

Researcher: How long have you been teaching?

Kath: Two years. This is the end of the second year.

Researcher: Recall how professional development offerings have met and not met your needs as a teacher?

Kath: They've met my needs as a teacher. There's been a lot of your just beginning as a teacher, here's some advice and here's some things to do. So that's been really helpful, those kinds of professional developments just like with getting things started on the computer, dealing with parents, dealing with students. Not helpful, I'm pretty good with technology. So, a lot of the Google trainings and stuff are a little bit not helpful. They are like uhh I got to do this again?

Researcher: Share the people and resources you turn to when you need to improve your classroom practices.

Kath: My fellow teachers, my peers, my building mentor has been helpful, my district mentor has been really helpful, or administration. I really turn to anybody that is willing to help.

Researcher: What online social networks do you use besides Twitter and how long have you used them?

Kath: Facebook, I've been on Facebook since 2009, so ten years now. Instagram since 2011, 2012 maybe. Facebook is the biggest one I use. I use Facebook most.

Researcher: What aspects of online social networks do you find most valuable?

Kath: Keeping up with friends. I'm from Michigan. Keeping up with all my friends there. A lot of times they have moved to different places around the country or around the world. And I like to keep up with them and see what they are doing in their lives. That's the part I use social media for the most is just keeping up with people I don't see on a regular basis.

Researcher: How were OSNs used in your preservice courses and student teaching?

Kath: Not much. It was not a, it wasn't something that was pushed heavily in my teaching, during student teaching or anything. My student teacher used Twitter a little bit, she had like a teacher Twitter. Which is why I made one. I was okay with making one. And she kept up with her students through that. It was never something that my professors were saying "you should be on social media with your students." So, there wasn't a big push for it.

Researcher: Share how your recent use of Twitter benefited you professionally.

Kath: I started following like politicians like Joe Cunningham who's the representative for our district and everything or the district I'm in on Hilton Head. I started really keeping up a lot more with that political environment. Its kind of helped me there because I never thought to follow

professional things on my own Twitter. Then when I made the teacher Twitter, I really started following more professional kinds of people and groups and organizations. So, it was really cool to see the different side of Twitter, the other side of Twitter.

Researcher: So, can you give me specific examples where something has benefited you?

Kath: I've seen ELA chats. Like they have these chats on Twitter and that's where I got the idea to read *The Giver* with some of my students this year. They were talking about how *The Giver* was a fun book to read with the kids and it represented a lot of the environment and the world that they're living in now. It's this dystopian kind of novel. So, they can relate to it in a different way that previous classes might not been able to. I read *The Giver* with my eighth graders last year but I didn't think that it would be appropriate for sixth graders but I was reading teachers that read *The Giver* with their Sixth Grade students or maybe their 7th Grade and they said it went over really well. So, I was excited to do that this year.

Researcher: How do you see using Twitter for professional development for future professional development needs?

Kath: I think it's definitely a personal thing for teachers to use it for professional development. Because you could spend hours trying to scroll through things trying to find something and you might be finding something for yourself. But that was an ELA specific chat that I was looking at so it wouldn't help the science teachers or the social studies teachers. And I would not follow a science or social studies kind of Twitter. So, I stuck with ELA and the reading and the writing. So, it's definitely like a personal thing that you could figure out how to do if you really wanted to

Researcher: What other thoughts do you have regarding using Twitter or other online social networks for professional development?

Kath: Again, I think it's a very personal thing, like I'm on social media but I've never been one to participate in social media. I kind of just look at other people and see what they are talking about and what they're doing. So, I'm not one to do it myself but I like using it, if that makes sense.

Researcher: Do you use any other online social networks for professional reasons?

Kath: Um uh. Facebook, I found some professional things on Facebook. And pages that I follow are people that I like. But I'm on Facebook a lot more than I am any other social media. So, I have found some stuff on Facebook.

Researcher: Can you give me an example there?

Kath: There's the SCforEd Facebook page that I'm following and there's a specific Beaufort County SCforED. There's teachers that I found on Teachers Pay Teachers that have Facebook pages that I like, and they start posting things there and I said "That's pretty cool, I'll go look on Teachers Pay Teachers and see if I want to buy it. And Teachers Pay Teachers has a Facebook page, it's a lot of pages of things that you like. Then you find their pages and they start posting a bunch of stuff and then you can find it on their website. So, it's pretty cool.

Researcher: If using online social networks, such as Twitter, provided recertification credit would you be willing to participate?

Kath: I would probably be willing to participate a little bit more if it did recertification hours. Yeah!

Nadien

Researcher: Please introduce yourself and what would you like people know about you as a person and teacher?

Nadien: Declined to answer.

Researcher: What are your roles in your current position?

Nadien: Core instruction for 4th and 5th grades.

Researcher: How long have you been teaching?

Nadien: Two years.

Researcher: Recall how professional development offerings have met and not met your needs as a teacher?

Nadien: Often, I feel as though trainings, especially during induction, cover topics I remember seeing during early semesters of college. I do not feel engaged in the training during these low sessions.

Researcher:Share the people and resources you turn to when you need to improve your classroom practices.

Nadien: I will talk peers and see what is working for them. Sometimes, Google ideas and modify to work in my room.

Researcher: What online social networks do you use besides Twitter and how long have you used them?

Nadien: Facebook, Youtube, SnapChat.

Researcher: What aspects of online social networks do you find most valuable?

Nadien: Immediate responses from those you are trying to contact.

Researcher: How were OSNs used in your preservice courses and student teaching?

Nadien: I have looked up interesting ways to present an otherwise dull topic, or different ways to extend student learning.

Researcher: Share how your recent use of Twitter benefited you professionally.

Nadien: When I got on, I usually only scrolled for a few minutes and browed. Found some interesting ideas. Did not use the site frequently.

Researcher: How do you feel your teaching workload affects you using Twitter or other online social networks for professional development?

Nadien: Declined to answer.

Researcher: How do you see using Twitter for professional development for future professional development needs?

Nadien: I feel like it could provide a more flexible option for those with hectic lives (most teachers).

Researcher: If using OSNs, such as Twitter, provided recertification credit would you be willing to participate?

Nadien: Yes.

Researcher: What other thoughts do you have regarding using Twitter or other online social networks for professional development?

Nadien: I see the benefits, and ease, of using social media for PD. It would be nice to be able to complete the majority of PD from my home or at my convenience. I am curious about how much it would take to get districts on board with using this method.

Researcher: Thank you very much!

Rey

Researcher: Please introduce yourself and what would you like people know about you as a person and teacher?

Rey: I'm Rey, I teach dance at a South Carolina middle school. I also am a cheer coach there and I teach dance at a local studio.

Researcher: What are your roles in your current position?

Rey: Dance Teacher, Cheer Coach, Induction Teacher.

Researcher: How long have you been teaching?

Rey: This is my 3rd year teaching.

Researcher: Recall how professional development offerings have met and not met your needs as a teacher?

Rey: With me being an arts teacher there have been a good many PD meetings I have had to attend that did not pertain to me and only left me confused as to what they were talking about. PDs talking about how to do lessons or do lectures. If I tried to lecture or do assigned it would not work for dance. Dance is meant for students to move in open spaces. Also, I don't have any curriculum. I have to create my own curriculum and I have gotten no training or advice on creating the dance curriculum. What I have has come from trial and error. I also have been to many that have helped shape and mold me into becoming a better teacher. The ABC conference and one that taught how to manage behavior.

Researcher: Share the people and resources you turn to when you need to improve your classroom practices.

Rey: My building mentor and my principal. I also get a lot of help from the previous dance teacher as well as the dance teacher at the closest high school. My mentor helps with questions about the school or I can vent frustrations to her. I go to my principal for help with questions my mentor can't answer or how to work with students. She is the one I go to for my student concerns. I also go to the previous dance teacher about students because she knows the students and what they can do. The nearby high school dance teacher helps me with how to prepare students wanting to participate in high school dance.

Researcher: What online social networks do you use besides Twitter and how long have you used them?

Rey: I use snapchat since 2016, Instagram since 2012, Facebook since 2008, Pintrest since 2016, and TikTok since 2019.

Researcher: What aspects of online social networks do you find most valuable?

Rey: You can connect with people you don't get to see that often. And for a good laugh and to be nosey. I also use it for keeping with the news. That is how I learned Kobe Bryant died last night, through Facebook.

Researcher: How were OSNs used in your preservice courses and student teaching?

Rey: I never used them. We never used them for teaching anywhere.

Researcher: Share how your recent use of Twitter benefited you professionally.

Rey: I learned our superintendent likes Twitter a lot. I really don't use Twitter. I never really post anything on any social media. I just like to watch stuff.

Researcher: How do you feel your teaching workload affects you using Twitter or other online social networks for professional development?

Rey: I've never really look at social media for stuff. I do look at Pinterest for cheer and sometimes for dance. I do look at the Dance Teacher Network to see what other teachers are doing in their states. I really forget to check my social media. Sometimes I go for days without answering a text message because I forget. I do look at dance videos on Instagram and YouTube. And I have to watch TikTok to keep up with the latest dance moves, but I often forget to watch that too.

Researcher: How do you see using Twitter for professional development for future professional development needs?

Rey: I think it would be awesome. I have never used or saw it used. I've only used it for NASCAR.

Researcher: Would you be willing to use online social networks, such as Twitter, for professional development if recertification credit was provided?

Rey: I would use it for any PD because it would be awesome. I don't really understand recertification. It would be better for me because I don't have time to sit in classes when I work three jobs. Using social media would allow me to get PD on my own time.

Researcher: What other thoughts do you have regarding using Twitter or other online social networks for professional development?

Rey: It would be appealing to teachers in younger generations because we use social media so much in our daily lives.

Sabine

Researcher: Please introduce yourself. And what would you like people to know about you as a person and teacher?

Sabine: I'm Sabine. I'm a Seventh-Grade ELA teacher.

Researcher: All right. What are your roles in your current position?

Sabine: Teach. I teach ESL and standards ELA. So, yeah.

Researcher: How long have you been teaching?

Sabine: This is my second year in South Carolina. Three in total, one year in Chicago and two years down here.

Researcher: Recall How professional development offerings have met your needs as a teacher.

Sabine: Not too many meet my needs and the ones that would meet my needs tend to get cancelled or moved. It's been very few that actually I've interested in going to or I had to go out of my own time find them.

Researcher: Alright, so when have any professional development offerings not met your needs as a teacher?

Sabine: I feel like none of the ones here at our school have really met any needs I've had and until we got our new principal which we had some interesting professional developments, but we haven't had that many.

Researcher: Can you give me any examples?

Sabine: Like, I'm trying to think of any we had this year and blanking out on all of them. I know this year I had to seek my own that's good and I am going to literacy camp in, Michigan. That's good. And I was offered another literacy Camp that's out here on Hilton Head. So that's two great opportunities for me to attend that actually pertain to what I do. And then I know, for instance, I had to go out of my own and find my master's program, which in a way its own form of professional development, which is my career. But there's nothing I know our district specifically offered me like specific while I'm in school things. People have offered me. I've always been on my own.

Researcher: All right. Can you now give me some examples when it didn't meet your need anything specific?

Sabine: We might, for instance, my induction programs, and I've had to go through some of it like having a mentor in the building is beneficial. But the majority of the meetings are just things you already know. We've been through we just have to call if you've already heard about that.

They don't need my needs. I don't need to hear that stuff again. I've already heard it about a million times at this point.

Researcher: Share the people and resources you turn to when you need to improve your classroom practices.

Sabine: Other teachers, our grade levels really great at that, but I really to Name redacted next door for help a lot. Our department chair go to our department meetings are great and I'm getting help. So other teachers usually.

Researcher: What online social networks do you use besides Twitter? And how long have you been using them? And this is both personal and professional?

Sabine: Facebook, Snapchat, Instagram, LinkedIn, Pinterest. Those are the big ones that I have right now. Facebook is probably the only one I use both personally and professionally.

Researcher: Okay, what aspects of online social networks, do you find most valuable?

Sabine: Keeping up with family and friends. I liked Facebook for our SC Red for Ed keeping up with people in our district that I don't know of it across the state that I don't know of things going on. Beyond that I like it for just being able to have a place to like Instagram share photos of my animals other than the social aspects that's probably it.

Researcher: How are online social networks used in your pre-service courses and student teaching?

Sabine: College, where we had to create a Twitter account. Try to use it use it in the classroom trying to connect, but I didn't really do a lot with it. I didn't really like Twitter that way and then other than that we used it in one college course, the teacher had her own Facebook page for stuff for like class content.

Researcher: Can you explain why you didn't use it or care for it?

Sabine: For the Facebook one for that was a geology course. She had other there was a required website that she also had to use. So, I just was more familiar with the other one. All my other classes are on that same website. I just about all the time. So, Facebook is good for getting alerts every once in a while, but I just didn't follow it. She also didn't update it as much. Twitter I'm just I've never been a Twitter fan. It wasn't something they wanted us to use in the classroom. And I know the kids that were following, and they didn't use Twitter as much, so it just didn't make sense to use it. They are more familiar with Snapchat. Snapchat was the big one in that classroom.

Researcher: Share how old your recent use of Twitter has benefitted you professionally.

Sabine: Use Twitter recently? So, I can say it hasn't benefitted me at all. I just haven't used it at all. I wouldn't its negative or positive.

Researcher: By chance have you used any other online social networks for any professional purposes.

Sabine: Only that SC for Ed site to keep updated on what is going on in our state.

Researcher: How do you feel your teaching workload affects you using Twitter or other online social networks for professional development?

Sabine: Kind of because you know, you got to work you got to get stuff done. You can't use social media, but also, I know it's our induction people always tell us not to use social media for this stuff. Because you don't know what is posted or who is going to see it. Who's going to see it or what's going to be said? You say one little thing wrong on social media and everybody hears it so I don't know if that's my workload or not or just I hear that voice in my head but that definitely impacts it.

Researcher: So how would you see using Twitter for professional development in the near future professional development needs?

Sabine: If Twitter made a comeback in popularity with the kids? I might consider making something but I just I know kids don't really besides mainly celebrities that use Twitter. I know my mom used it once in her classroom to update parents as I told her parents could fall and that sounded really cool and she brought that up to me just the other day. We were talking about this. I didn't I never thought about it using it like that, keeping parents in the loop. It's an easy, free way to do it, but I know it's not the most

Researcher: Have you even thought about using it to follow other teachers or check in on maybe things are ask them things that questions you might have?

Sabine: I know I probably wouldn't do it because I've had a Twitter and I never will go read and follow people. It's really not different when you boil it down its not much different than what Facebook is doing. It's just it's another out that I have, and I could I don't know why Twitters is one of those ones. I don't know

Researcher: If using online social networks such as Twitter provided you with recertification credit. Would you be willing to participate?

Sabine: Probably. Definitely need those hours so probably yeah.

Researcher: What other thoughts do you have about using Twitter or other online social networks for professional development. What other thoughts do you have regarding using Twitter or other online social networks for professional development?

Sabine: I don't think they should be required at all for anybody for any reason whatsoever. It makes me nervous just because I see the kids always on social media. I get the ads every once in a while, from the students I always check when I get one if I have everything set to private the

best I can but you always have the one trying to sneak in and that's what makes me nervous.

when you always see the horror stories of social media. Someone said one thing and then it

administrator or someone somewhere in the district takes it the wrong way or some parent takes

it the wrong way so very nervous, but I see the benefits of it and that's the future social media so

it's there. There's got to be waiting for creating into the professional life of a teacher in the

classroom length of a teacher and in their daily lives. There's got to be a way and it works. My

mom used it and it works for her. She follows, just exactly as you say, she follows people. She

used it for school, but I don't know why it's just it's never clicked with me.

Researcher: If I say Instagram or SnapChat, would that appeal to you more?

Sabine: Probably Instagram because I do follow more cool classroom on Instagram more. People

who have their Teachers Pay Teachers still have their account there and they have their own

Instagrams where they post classrooms they renovated or cool new tool kits to look at. If they

have that I do that so it's not far off from where he had asked her.

Researcher: So, in a sense you do use online social network for professional development, just

not Twitter.

Sabine: Just not Twitter. I had one in high school and then it just disappeared on me.

Researcher: Is there anything else you'd like to add to?

Sabine: No.

Researcher: Thank you very much.

Sarala

Researcher: Please introduce yourself and what would you like people know about you as a

person and teacher?

Sarala: My name is Sarala. This is my 5th year teaching. I've taught 2nd and 3rd grade. This year I

am a Gifted and Talented teacher, working with 3rd grade. I also coach soccer.

Researcher: What are your roles in your current position?

Sarala: My current position is a Gifted and Talented teacher. I work specifically with 3rd grade this year. I teach a 3rd grade ELA class and a 3rd grade Math class. I also do math talent development with a group of 1st grade students.

Researcher: How long have you been teaching?

Sarala: This is my 5th year teaching. I have taught 2 years in 2nd grade and 2 years in 3rd grade. This is my first year as a gifted and talented teacher.

Researcher: Recall how professional development offerings have met and not met your needs as a teacher?

Sarala: Professional development offerings have met my needs when I get to choose. When I get to choose the PD sessions that interest me I usually get a lot more out of it rather than when I am told I have to do certain PD. Example, I chose to go to the Get Your Teach on conference and HelloLitCon with Jen Jones last year but I had to do the Teacher's College training with my school.

Researcher: Share the people and resources you turn to when you need to improve your classroom practices.

Sarala: I rely on my GT team, 3rd grade team, and instructional coach when I'm looking to improve my classroom practices. I ask for advice, tips, and tricks from them. I also have relied on different instructional books for resources. One of the best for engagement is *The Wild Card* by Hope and Wade King. I also have read some of Carol Ann Tomlinson books. I also have an Instagram account specifically for teaching. I follow other educators to get ideas and share knowledge.

Researcher: What online social networks do you use besides Twitter and how long have you used them?

Sarala: I use Facebook for personal things for about 10 years. I also use Instagram in which I have 3 accounts, 1 for teaching, 1 for personal, and 1 for coaching. I started using Twitter when I started this study a year ago.

Researcher: What aspects of online social networks do you find most valuable?

Sarala: Connecting with people all over the country or even the world. I follow some people that teach in Australia. The fact that you can send quick messages to ask questions or get feedback from other people.

Researcher: How were OSNs used in your preservice courses and student teaching?

Sarala: I only used OSNs in my student teaching for personal use.

Researcher: Share how your recent use of Twitter benefited you professionally.

Sarala: I was able to find some people from the district to follow. I was also able to find some new people to follow and get ideas from. It was hard for me to find the time to use Twitter.

Researcher: How do you feel your teaching workload affects you using Twitter or other online social networks for professional development?

Sarala: It is very hard to find the time to use OSN for professional development based on my teaching workload. I usually only get on the social media for PD if I know a person or thing I am interested in is being shared or if there is something specific that I want to look for.

Researcher: How do you see using Twitter for professional development for future professional development needs?

Sarala: I'm not sure if that I will continue to use Twitter for PD. I participated in a couple of Twitter Chats that I gained somethings here and there. Instagram is easier for me to use for PD

because of the picture aspect. It's quicker to find people to follow based on pictures and for me it takes less thinking to search for pictures rather than reading the words and hashtags on Twitter.

Researcher: If using OSNs, such as Twitter, provided recertification credit would you be willing to participate?

Sarala: Yes!

Researcher: What other thoughts do you have regarding using Twitter or other online social networks for professional development?

Sarala: I think that using online social networks for PD is what PD has sort of come to. I watch lots of webinars or FB lives that are PD. I watched an entire Literacy series by Jen Jones one summer and they were all FB lives. That is how I learned about the 2 conferences I chose to go to (mentioned earlier) I follow them on Instagram, and I wanted to experience it firsthand.

Researcher: Thank you very much!

Temmin

Researcher: Please introduce yourself and what would you like people know about you as a person and teacher?

Temmin: I'm Temmin. I teach seventh and eighth grade social studies.

Researcher: What are your roles in your current position?

Temmin: I teach seventh and eighth grade social studies and coach baseball. And, I would argue that many students consider me a mentor as well.

Researcher: How long have you been teaching?

Temmin: This is my fifth year.

Researcher: Recall how professional development offerings have met and not met your needs as a teacher?

Temmin: As a teacher, I was a lateral entry teacher and so the professional development that went along with the PACE program in South Carolina was for the most part beneficial in terms of covering the pedogogy, in terms of teaching one how to actually teach. That being said, most professional development offerings during the school year and within the school building has not been beneficial as a general rule.

Researcher: Share the people and resources you turn to when you need to improve your classroom practices.

Temmin: Other teachers, occasionally Internet websites, Teachers Pay Teachers for classroom resources. But for the most part in terms of classroom practices I consult veteran teachers that I know maybe have delt with the issue I'm dealing with.

Researcher: What online social networks do you use besides Twitter and how long have you used them?

Temmin: I have a Facebook. I've had a Facebook for, I think, twelve years now. Rarely used. I have an Instagram. I have a Twitter account and I believe that's all.

Researcher: What aspects of online social networks do you find most valuable? And, you mentioned you don't use them.

Temmin: I don't use social media very often for personal use.

Researcher: Is there any reason why?

Temmin: The real reason why and this is going to sound incredibly callous is I just don't care. Most of the people I keep in touch with I actively keep in touch with so seeing a bunch of people that I'm not in touch with anymore on social media just doesn't really have a draw to me. If I want to know what they are doing, I'll start talking to them.

Researcher What aspects of online social networks do you find most valuable, but I think you answered that question.

Temmin: I might have. There's definitely some value in being able to find some people you have lost a connection with. There is some value being able to communicate with people whose phone number or email address you don't have. But I don't know if there is another question coming up that will ask this but I'm starting to be more concerned with social media than I am pleased with it. I'm starting to see more negatives than positives if that makes sense.

Researcher: How were OSNs used in your preservice courses and student teaching?

Temmin: I didn't have student teaching because I was a lateral entry, but social media was not used in the PACE program.

Researcher: Share how your recent use of Twitter benefited you professionally.

Temmin: I would argue with you that has not. Because I'm not an avid social media user. I rarely use Twitter. I have a Twitter I don't tweet, and I don't follow very many people, but I haven't seen anything beneficial for professional purposes.

Researcher: How do you feel your teaching workload affects you using Twitter or other online social networks for professional development?

Temmin: That's actually a big part of it. One, because I'm a teacher but because I worked for the federal government before I became a teacher my use of social media kind of died off at that point because it's not appropriate post some things when you are in a position of authority like a teacher or when you are working for a government entity like I was before. So, I kind of stopped posting because political argument I don't think are professional to get into when you are a role model in the community or when you work for a political person. So, my use of social media kind of died off eight years ago when I got my first job within the government.

Researcher: How do you see using Twitter for professional development for future professional development needs?

Temmin: I can see how it can be valuable to some people. Myself, I don't see my social media habit shifting that much at this point. Just because, especially with current events. Like I said, I see more negatives with social media than I see positives at this point. So, I don't really see myself going out there and actively searching for professional development resources on Twitter not to mention I don't really search for professional development resources outside of the school building anyway. Because when I'm outside of the school building, I'm dad, not Mr. Temmin

Researcher: If using online social networks, such as Twitter, provided recertification credit would you be willing to participate?

Temmin: Yes. If that counted toward the hours I need, I would probably go out of my way.

Researcher: What other thoughts do you have regarding using Twitter or other online social networks for professional development?

Temmin: I think there's a balance to be struck. I've worked with people who, like myself, don't use social media, and I've worked with people who, in my opinion, use it in an unprofessional manner and post political opinions or workplace gossip on Facebook or on Instagram. So, I think there's a balance if someone is going to use it for professional development then it needs to be used for that. It might even need to be a separate account from a personal account. I think it is very important to keep, especially in a position of authority like a teacher or a role model position within the community, you need to keep your professional life a personal life somewhat separate. Because it's not our job to preach our own opinions in a public forum like that at this point.

Researcher: Thank you very much.