St. John's University

St. John's Scholar

2022

A PHENOMENOLOGICAL STUDY EXPLORING TEACHERS' PERCEPTIONS OF VIRTUAL PROFESSIONAL DEVELOPMENT THROUGH THE LENS OF ADULT LEARNING THEORY

Mary-Ellen Montauredes-Kakalos

A PHENOMENOLOGICAL STUDY EXPLORING TEACHERS' PERCEPTIONS OF
VIRTUAL PROFESSIONAL DEVELOPMENT THROUGH THE LENS OF ADULT
LEARNING THEORY

A dissertation submitted in partial fulfillment

of the requirements for the degree of

DOCTOR OF EDUCATION

to the faculty of the

DEPARTMENT OF ADMINISTRATIVE AND INSTRUCTIONAL LEADERSHIP

of

THE SCHOOL OF EDUCATION

at

ST. JOHN'S UNIVERSITY

New York

by

Mary-Ellen Montauredes-Kakalos

Date Submitted____5/5/2022_____   Date Approved____9/30/2022_____

_____   _____
Mary-Ellen Montauredes-Kakalos   Dr. Stephen Kotok

ABSTRACT

A PHENOMENOLOGICAL STUDY EXPLORING TEACHERS' PERCEPTIONS OF VIRTUAL PROFESSIONAL DEVELOPMENT THROUGH THE LENS OF ADULT LEARNING THEORY

Mary-Ellen Montauredes-Kakalos

This phenomenological study design explored the lived experiences of teachers' perceptions of virtual professional experiences through the lens of adult learning theory. The participants were comprised of elementary educators from a suburban county in New York state. The participants in this study were all forced to shift to virtual teaching and learning during the COVID-19 pandemic. The research questions addressed were how do educators describe their experiences with virtual professional development, what characteristics of adult learning do educators value most, and how does virtual professional development compare to traditional in person professional development as it relates to educators' professional growth and/or career? Through qualitative analysis of email questionnaires, interviews, virtual observation, and document analysis, coding was conducted to discover themes to better understand the educators' lived experiences. Finding from this study were as follows: Participants preferred in person professional development experiences, the positive aspects of virtual professional development were convenience and the relevance of topics, the negative aspects of virtual professional development were lack of engagement and technological issues, and participants benefitted from in person professional development experiences as related to their careers.

DEDICATION

First, I dedicate this work to the family I came from: my mother and father and my brothers. My mother is the definition of strength, selflessness, and integrity who believed I could achieve any academic success I set out to accomplish. My father is the definition of endless support, encouragement, and humor who also believed I could achieve any academic success I set out to accomplish. My brothers are the definition of caring and solidarity; they are my biggest fans and believed I could achieve any academic success I set out to accomplish.

Next, I dedicate this work to the family I created: my husband and my three children. Due to the support I received throughout my life, I believed in myself and I want each of you to know that I FULLY believe that YOU can achieve your goals too! You make me whole.

ACKNOWLEDGEMENTS

I would like to acknowledge my cohort, which is the best cohort in the world! We took this journey together and I am grateful for each of you.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

CHAPTER 1: INTRODUCTION

In the field of education, professionals are expected to expand their knowledge to stay current about topics relating to student learning in the 21st century. Many states passed laws requiring professional development hours for teachers to retain their certification or teaching license. For example, teachers in New York State are required to maintain 175 hours of professional development every 5 years under the NYS Department of Education Commissioner's regulation (http://www.highered.nysed.gov/tcert/pdf/pdstds.pdf). In addition, many teachers' contracts include required professional development time at the school district level. For example, in the Garden City School District teacher contract, it is stated that effective for the 2018-2019 school year and thereafter, the professional development obligation shall be increased to 21 hours (GardenCity_T_moa_2023.pdf seethroughny.net). "Professional development is a strategy that schools and districts use to ensure that educators continue to strengthen their practice throughout their career" (Mizell, 2010). Society has moved into a digital age and there is value in exploring teachers' perceptions of virtual professional development as it relates to adult learning theory.

Purpose of the Study

The purpose of this phenomenological qualitative study is twofold. First, the study examined teachers' perceptions of virtual professional development as compared to traditional in person professional development through the lens of adult learning. Secondly, the study focused on how these types of professional development methods impacted the perception of the educators' careers. The study illustrated teachers' lived experiences with professional development during the time frame of the COVID-19

pandemic and thereafter using the constructs of Knowles Adult Learning Theory. An overview of research in three related areas (a) andragogy (b) professional development and (c) virtual learning were examined and their intersection noted. By reviewing the literature in these areas, a solid framework was established for this study. The ultimate objective of this study was to understand the effectiveness of virtual professional development compared to traditional in person professional development from a lens of andragogy using a phenomenological methodology.

Theoretical / Conceptual Framework

This study used the constructs of andragogy by Malcolm Knowles (1980). His theoretical framework is referenced throughout this research. Knowles outlined six practices common to adult learners, which are listed below (Knowles, 1980).

Learner's need to know: As people mature, they need to know why they need to learn something and assist in the planning and implementation of their own learning.

Learner's self-concept: As people mature, they move from being dependent toward being more self-directed.

Learner's prior experiences: As people mature, they amass a growing set of experiences that provide a fertile resource for learning.

Learner's readiness to learn: As people mature, they are more interested in learning subjects that have immediate relevance to their jobs or personal lives.

Learner's orientation to learning: As people mature, their time perspective changes from gathering knowledge for future use to immediate application of knowledge. As such, adult learners become more problem-centered rather than subject-centered.

Learner's motivation to learn: As people mature, they become more motivated by various internal incentives, such as need for self-esteem, curiosity, desire to achieve, and satisfaction of accomplishment.

The andragogy conceptual framework guided this research design because it explored how Knowles Theory of Adult Learners related to the way educators perceived the way they learned best during professional development.

Significance / Importance of the Study

The results of this study addressed if teachers' perceptions of professional development have evolved during the COVID-19 pandemic. Will (2016) stated that 80% of training offered to educators before the pandemic did not meet the definition of quality professional learning as outlined in the Every Students Succeeds Act (ESSA) (p. 1). President Obama signed ESSA into law in the United States and it replaced the No Child Left Behind Act which was enacted in 2002. ESSA "redefines the standards for high quality professional development for teachers and K-12 leaders" (Pierce, 2017). It was recommended that professional development follow a more personalized and sustained approach as compared to one day unconnected workshops, meaning stand-alone professional development sessions. The act detailed the six criteria that professional learning should meet: sustained, collaborative, intensive, job-embedded, data-driven, and classroom focused (Every Students Succeeds Act, 2017). In addition, a high percentage of teachers in the United States were not satisfied with professional development offerings and believed they are not effective, relevant, or applicable to their professional practice according to a study published by the Bill & Melinda Gates Foundation (2014).

This study was important because it discussed new and emerging formats in which virtual professional development is administered. This study extended Knowles Adult Learning Theory and examined its relationship in the field of education. Lastly, this study contributed to the field of professional development as it relates to virtual learning.

Connection with Vincentian Mission in Education

This research is related to the Mission of St. John's University in the fact that it strives to promote global connections for educational advancement. This study was conducted in the United States, but applications of its finding have the potential to impact global learning communities in the field of education. In addition, this study assisted in improving opportunities and equity in educational systems by outlining professional development methods that best further teachers' growth and learning.

Research Questions

The objective of this research was to explore teachers' perceptions of virtual professional development as compared to traditional in person professional development through the lens of adult learning theory. The three specific research questions that guided this qualitative study were:

1. How do educators describe their experiences with virtual professional development?

2. What characteristics of adult learning do educators value most?

3. How does virtual professional development compare to traditional in person professional development as it relates to educators' professional growth and/or career?

Definition of Terms

The following list of terms have been defined for use in relation to this study. The definitions were derived from large bodies of work including theorists' definitions and meanings found in relevant literature.

Andragogy- This term is defined as "the art and science of helping adults learn" (Fogart & Pete, 2004).

Asynchronous- This term is defined as "commonly facilitated by media such as email and discussion boards, supports work relations among learners and teachers, even when participants cannot be online at the same time" (Hrastinski, 2008, p.51).

COVID-19- COVID-19 is the Novel Coronavirus Disease 2019 pandemic affecting countries worldwide from December 2019 to present, resulting in the closure of public schools (CDC Works 24/7, 2021)

Hybrid Course- This term is defined as the combination of traditional face to face classroom and online course room. Some activities, such as lectures, are completed in the traditional classroom and other activities, such as discussions are completed in an online course room. This also may be referred to as a blended class. (Garrison & Vaughan, 2008).

Motivation to learn- This term is defined as one of Knowles' (1990) adult learner assumptions. The assumption is defined as the intrinsic or extrinsic promptings that adults experience to learn (Knowles, 1990).

Orientation to learning- This term is defined as one of Knowles' (1990) adult learner characteristics. This characteristic is defined as adults' focus on life events and problems that need to be solved (Knowles, 1990).

Prior Experience- This term is defined as one of Knowles' (1990) adult learner characteristics. This characteristic is defined as adults' accumulation of knowledge, histories, and preferences that serve as a foundation on which to build new learning (Knowles, 1990).

Professional Development- This term is defined as "structured professional learning that results in changes to teacher knowledge and practices, and improvements in student outcomes" (Darling-Hammond et al., 2017, p. 2).

Readiness to learn- This term is defined as one of Knowles' (1990) adult learner characteristics. This characteristic is defined as the timing when adults have an immediate or imminent information need (Knowles, 1990).

Relevance- This term is defined as one of Knowles' (1990) adult learner characteristics. This characteristic is defined as an adults' awareness of the benefit of information before they engage in learning (Knowles, 1990).

Self-directed learning- This term is defined as one of Knowles' (1990) adult learner characteristics. This characteristic is defined as the self-concept action adults take to control their learning. (Knowles, 1990).

Synchronous Professional Development - This term is defined as professional development commonly supported by media such as videoconferencing and chat with participants online at the same time (Hrastinski, 2008).

Traditional Professional Development- This term is synonymous with face-to-face learning as is defined as an instructor meeting with students in a physical learning environment (Dziuban, Graham, Moskal, Norberg, & Sicilia, 2018).

Virtual Professional Development- This term is defined as professional development which is offered as synchronous, asynchronous, or hybrid formats (Bates, Phalen, & Moran, 2016).

Summary

This study helped to understand teachers' perceptions and lived experiences with virtual professional development as compared to traditional in person professional development as they relate to adult learning styles. Additional factors the pandemic environment played on educators' preferences of professional development formats was examined.

Chapter Two includes a comprehensive review of literature connected to andragogy, professional development, and virtual learning.

CHAPTER 2: REVIEW OF LITERATURE

Introduction

The purpose of this qualitative study was to examine teachers' experiences of traditional in person professional development as compared to virtual professional development through the lens of adult learning theory. A review of literature was conducted and organized into three main sections. The first section reviews the theoretical framework pertaining to this study including andragogy. The second section reviews professional development concepts and strategies and the third section reviews virtual learning and virtual professional development.

Theoretical Framework

The greatest teachers of ancient time were the teachers of adults (Knowles, 1990). Socrates, Plato, and Aristotle taught the ancient Greeks, while Cicero and Euclid taught the ancient Romans. These teachers invented ways to involve the learner in the activity of learning because they viewed learning as the process of active inquiry.

Andragogy is a concept popularized by Malcolm Knowles. Knowles' theory of andragogy created a way to differentiate learning in childhood from learning in adulthood. In his book, The Modern Practice of Adult Education: From Pedagogy to Andragogy, Knowles contrasts andragogy as "the art and science of helping adults learn" with pedagogy, the "art and science of helping children learn." Andragogy, stemming from the Greek language meaning "studies of man," can generally be described as a "model of assumptions" (Knowles, 1980) about how the characteristics of adult learners are different from the traditional pedagogical assumptions about child learners. Knowles' concept of andragogy presents the individual learner as one who is autonomous, free, and

growth oriented. Knowles initially related four basic assumptions and added a fifth and sixth in later publications. Knowles, Holton, and Swanson (2015) stated that andragogy is anchored in six main assumptions:

1. Learner's need to know

2. Learner's self-concept

3. Learner's prior experiences

4. Learner's readiness to learn

5. Learner's orientation to learning

6. Learner's motivation to learn

Knowles believes in fostering self-direction. He argues that proactive learners, who take the initiative in learning, learn more and learn better than passive or reactive learners, who wait to be taught by a teacher. "They enter into learning more purposefully and with greater motivation. They also tend to retain and make use of what they learn better and longer than do the reactive learners" (Knowles, 1975). In addition, new developments in education place much responsibility on the learner to take the initiative for his or her own learning. "Students entering into these programs without having learned the skills of self-directed inquiry will experience anxiety, frustration, and often failure, and so will their teachers" (Knowles, 1975). Grounded in a humanistic philosophy, Knowles also suggested that self-directed learning should have the development of the learner's capacity to be self-directed as its goal.

The constructs of andragogy by Malcolm Knowles is the theoretical framework referenced throughout this study. The six practices common to adult learners are outlined and described in detail below.

Assumption 1: The Learner's Need to Know

As people mature, they need to know why they need to learn something and assist in the planning and implementation of their own learning. Adults will devote time and energy to learning that is seen as relevant to their life and well-being (Knowles, 1980).

Assumption 2: The Learner's Self-Concept

As people mature, they move from being dependent toward being more self-directed. Knowles (1984) stated learners must be helped to realize the importance of learning something. Adults have the need to be seen by others as responsible and capable of making important decisions for themselves. Adult learners like to direct their own path and professional learning, so it's recommended to give adults some control and choice over their learning.

Assumption 3: The Learner's Prior Experience

As people mature, they amass a growing set of experiences that provide a fertile resource for learning. Adults have more and greater experiences than youth (Fogarty and Pete, 2004). They have lived many years and have experienced a variety of things in life. Often adults can contribute much to the learning just through their prior experiences.

Assumption 4: The Learner's Readiness to Learn

As people mature, they are more interested in learning subjects that have immediate relevance to their jobs or personal lives. Adults are ready to learn things that they need to know (Knowles, 1980). The readiness involves life situations in which the learner becomes aware of the need to know.

Assumption 5: The Learner's Orientation to Learning

Adults like their learning to be meaningful and relevant (Fogarty and Pete, 2004). As people mature, their time perspective changes from gathering knowledge for future use to immediate application of knowledge. As such, adult learners become more problem-centered rather than subject-centered. They are often task-centered and learn most effectively in real-life situations.

Assumption 6: The Learner's Motivation to Learn

As people mature, they become more motivated by various internal incentives, such as need for self-esteem, curiosity, desire to achieve, and satisfaction of accomplishment (Knowles, 1990). Adults possess internal motivation. They need to grow and develop a desire themselves to be better in life as they age.

Educators who understand and apply these assumptions will have a better chance of meeting the needs of adult learners in a face to face or an online learning environment (Cochran and Brown, 2016). Adult learning theories, such as andragogy, can provide the framework to understand how adults learn and provide insight into devising better professional development programs to teachers.

Professional Development Concepts and Strategies

Well-designed and implemented professional development should be considered an essential component of a comprehensive system of teaching and learning that supports students to develop the knowledge, skills, and competencies they need to thrive in the 21st century (Darling-Hammond, Hyler, & Gardner, 2017). It is thought that professional learning should link to educators' experiences and bridge into leadership opportunities to focus on the growth and development of teachers. Darling-Hammond (1994) believes that

teachers need to understand subject matter deeply and flexibly, so that they can help students create useful cognitive maps, relate ideas to one another, and address misconceptions. Teachers need to see how ideas connect across fields and to everyday life. It is beneficial for teachers to know about curriculum resources and technologies to connect their students with sources of information and knowledge that allow them to explore ideas, acquire and synthesize information, and frame and solve problems (Darling-Hammond, 1994). In addition, Darling-Hammond believes that teachers need to know about collaboration: how to structure interactions among students, how to collaborate with other teachers, and how to work with parents to shape supportive experiences at school and home. Professional development (PD) strategies that succeed in improving teaching share several features.

The first feature is that the professional development is content focused and supports teacher learning within classroom contexts. The second feature is that professional development incorporates active learning where teachers directly engage in designing teaching strategies. Thirdly, professional development should support collaboration and allow teachers to share ideas and collaborate in their learning. The fourth feature is that professional development uses models of effective practice to provide teachers with a clear vision of what best practices look like. Fifth, professional development should provide coaching and expert support about content and focus on teachers' individual needs. The sixth feature of professional development is that it offers feedback and reflection for teachers to think about, receive input on, and make changes to their practice. The seventh and final feature supports professional development that has a sustained duration, so teachers have adequate time to learn, practice, implement, and

reflect upon new strategies that facilitate changes in their practice (Darling-Hammond, Hyler, & Gardner, 2017). Growing evidence suggests that incorporating these features in professional development makes teachers feel better about their practice, in addition to increasing learning gains for students, especially in the kinds of more challenging learning that new standards demand (Darling-Hammond, 2017). When teachers can engage in continual learning, it is likely to inspire greater achievement for children.

Virtual Learning

Michael Hart (1974) received a "permit" to use the internet and coined the term, "Digital Age of Technology." He had the foresight to know this would change civilization. He aimed to examine how this medium plays a role in communication and education. As a result of the COVID-19 pandemic, students and educators have been suddenly shifted virtual learning environments.

Synchronous learning is learning that takes place in real-time, where a group of people are engaging in learning simultaneously (Lawless, 2020). Although learning occurs at the same time, learners don't have to be there in person, or even in the same location. Synchronous learning enables learners to ask questions and receive answers on-the-spot, while also collaborating freely with their co-learners. Some examples of synchronous learning include live webinars, video conferencing, virtual classrooms and instant messaging.

Asynchronous learning is designed to allow learners to complete courses without the constraints of having to be in a certain place at a certain time. Asynchronous learning doesn't hinder learners by place or time (Lawless, 2020). With internet, asynchronous learners have the freedom to complete course materials whenever they choose, and from

any location. Although not taking place immediately, asynchronous learning still allows the opportunity for feedback. Learners are free to share thoughts and questions with instructors and fellow learners, though they may not receive an immediate response. Some examples of asynchronous learning include online courses, email, blogs, pre-recorded video lessons or webinars, and online forums and discussion boards.

With virtual learning, the range of educational experiences for students and adults extends far beyond those offered in traditional settings. Teacher-centered classrooms may evolve into student-centered ones (Earle, 2002). The role of the teacher may change in becoming more of a coach than an information dispenser. To realize the vision of utilizing technology, school districts and colleges of education must prepare teachers to use it.

Teachers' Experiences in Online Professional Development by Bargan & Cagiltay 2006 compares teachers' experiences of traditional professional development to their online professional development experience. The sample size for this qualitative research was ten teachers. They taught various disciplines (ex. Mathematics, Computer, Biology) and had varying years of teaching of experiences (ex. 1-38 years). The grades taught ranged from first to tenth. All teachers taught in the private school setting. The researchers conducted interviews with each participant after they attended an online Professional Development course. In addition, a focus group interview was conducted to create a discussion environment about the professional development module. The data analysis process had a bottom-up procedure, where the interviews were transcribed, and the data was coded. General themes were found and organized by the researchers.

The main findings included three themes. The first theme was that online professional development with face-to-face options helped connect the teacher to participants. Many teacher participants felt like the learning was more interactive. Secondly, a benefit to online professional development was the flexibility of scheduling classes based on teachers' personal schedules. Thirdly, whether the teachers participated in traditional in person professional development or online professional development, they felt that the facilitator should make the content of the course have real world and immediate practical classroom applications.

The article titled, *The End of Boring Online PD* by Mike Flynn (2021) outlines four virtual professional development strategies based on the book, *The Power of Moments: Why Certain Experiences Have Extraordinary Impact* by business writers Chip Heath and Dan Heath: elevation, pride, insight, and connection (EPIC). The author details his qualitative findings under four EPIC areas: Moments of Elevation, Moments of Pride, Moments of Insight, and Moments of Connection. Moments of elevation include participants having an experience that produces a memory of delight. Moments of pride are described when people experience success or when they persevere through a challenge. Moments of insight refer to when participants gain a deeper understanding of both the topic session and their own capabilities related to it. Moments of connection include when participants feel a sense of community with their colleagues in a professional learning experience. When participants share something personal, their vulnerability increases and allows them to be more comfortable with one another to be pushed further in their learning (Flynn, 2021).

Flynn provides examples of ways to engage adult learners through this format, also reinforcing Knowles theory of adult learners. Virtual professional development is a relatively new format and further research is needed to find ways to make it engaging and effective for teachers to advance in their personal learning, based on adult learning practices.

Online professional development: Lessons from the field, written by Charalambos, Vrasidas and Zembylas (2004), suggested that three interrelated areas: constructivism, situated and distributed cognition, and communities of practice, should be used in asynchronous online professional development. The researchers reviewed two e-learning projects: Teaching and Learning Online (TLO) and STAR-online. The general themes found by the researchers while working on the two projects were based on their previous systemic research, evaluation work conducted over the past five years, and their reflection and involvement in online education.

The main findings where that in each platform, success was demonstrated when there was a self-sustaining online community that supports the professional growth of its members. Most participants shared a common sense of responsibilities they engaged in over the modules they attended. Secondly, the online design must provide relevance to the nature of the chosen tasks and activities. For example, if a family and consumer science teacher is taking an online course, she should be engaged in designing online activities for her students that perhaps require students to work in groups to research bank accounts and decide which bank account would be best for them. These types of professional development activities have a direct link to her daily teaching and the teacher would have the opportunity to authentically use some of the ideas she was

learning. Lastly, the evaluation and assessment issues for asynchronous online learning

may present an issue. During face-face interactions, verbal and nonverbal exchanges are

provided for feedback for both the teacher and the learner. Interactions that take place in

e-learning programs are lost, so the researchers discovered the importance of written

immediate and specific feedback to each participant based on their work submissions.

Mastering the Blend: A Professional Development Program for K-12 Teachers by

Moore, Robinson, Sheffield, & Phillips (2017) focused on the need to assist K-12

teachers in developing the skills needed to design, develop, and facilitate student-

centered blended learning environments by taking a 16-week course that is modeled on

those techniques. The participant sample included in-service teachers in Grades K-12

from school districts in Texas. An exact amount was not indicated in the study. This was

a mixed methods study which used surveys and reflections logs for data collection. The

Technology, Pedagogy, and Content Knowledge (TPACK) survey was used to measure

self-efficacy and confidence levels. It was administered at the beginning and end of the

16-week course taken by the participants. In addition, evaluations were completed at

intervals throughout the course. The evaluations were based on iNACOL (National

Standards for Quality Online Courses) rubric. Lastly, the participants completed

reflection logs at the end of each of the four sessions. The researchers used qualitative

phenomenological coding schemes to analyze these reflections.

There were positive and negative main findings of this study. A positive finding

included the fact that the instructional design component of the course received the

highest score at a 3.5 on a 0-4 scale. It was also noted that the communication and

interaction subcategory was rated high at a 3.8, which reinforced the design of the course

using social constructivist principles. This aligns with the notion that group interactivity was important, as well as the need for participants to build relationships with peers before collaborating in groups. A negative finding was that the assignment instructions and grading criteria of the course needed improvement after receiving a score of 2.3. The researchers took this into account and planned to revise a section of the course moving forward. Group interactivity is deemed important through this article and further research is needed to explore this factor through virtual and traditional professional development.

Facilitating Scientific Engagement Online: Responsive Teaching in a Science Professional Development Program written by Watkins, Jaber, and Dini (2020) relates to the topic of teachers' perceptions of professional development. The purpose of this study is to explore the need of additional professional development to address practice-based visions of science learning due to the adoption of the Next Generation Science Standards in the United States. The researchers explored responsive teaching as an approach to facilitating scientific engagement in asynchronous online learning environments. The participants in this case study analysis were eleven science teachers from upper elementary school and middle school. The research method requires the participants to complete the first course, which met in person, and the case study then focused on the second part of the course where the participants engaged in asynchronous online learning with two facilitators who guided individual posts and discussion threads between participants based on the scientific inquiry questions used as prompts. Throughout the study, the researchers collected data on both the participants' experiences and the instructors' facilitation. The researchers used the participants' posts on the Community Forum and email communications between the instructors and participants to track ideas

and consensus of the inquiry question. The comments (89 in total) were summarized into short descriptions and then analyzed for patterns. The researchers discovered themes emerging across the patterns. There were an additional 68 replies from participants that were coded to see the scientific engagement. The researchers triangulated the data and developed illustrative cases that exemplified each theme.

The main findings were that the instructors were responsive to participants' scientific work both in their posts to the whole class and in their comments to individual participants. Also, the instructors were responsive to the scientific work in the following categories: conceptual, epistemic, social, and affective dimensions of "doing science." The researchers showed that a responsive approach is possible in asynchronous, web-based environments, and documented patterns of instructors' responsiveness for supporting different aspects of scientific engagement. The article affirms researching the effectiveness of virtual professional development, namely the asynchronous format.

Gap in the Research and Significance of Study

The theoretical framework and research articles in this review of literature provide a solid foundation for this study of teachers' perceptions of virtual professional development as compared to traditional in person professional development through the lens of adult learning theory. This study addressed a gap in the research that was created quickly due to the abrupt entrance into the world of virtual teaching and learning because of the COVID-19 global pandemic.

Summary

Chapter Two reviewed the relevant literature for this research. The main topics included andragogy, professional development, and virtual learning.

In Chapter Three, the methodology for this study is examined. A brief overview of the problem and purpose is presented accompanied by the research questions. The population, sample, and instruments are outlined, and the data collection and analysis methodologies are described. Ethical considerations and the role of the researcher are also presented. Chapter Three concludes with a chapter summary.

CHAPTER 3: METHODS AND PROCEDURES

Introduction

In this chapter, the methodology to obtain educators' perceptions of virtual professional development and adult learning characteristics is described. There is an overview of the problem and the purpose, a review of research questions and design, as well as the details for selecting the population and sample participants. In addition, validity and reliability of the interview questions and document analysis are evaluated. Furthermore, an analysis of data and ethical considerations are described.

Research Questions

Phenomenological research relies on subjects' accounts that are discovered through in-depth interviews, noted conversations, observations, and multiple documents, which can include letters, journals, diaries, or emails (Creswell & Creswell, 2018). The purpose of this study is to explore teachers' perceptions of virtual professional development through the lens of adult learning theory. The three specific research questions guiding this phenomenological study are:

1. How do educators describe their experiences with virtual professional development?

2. What characteristics of adult learning do educators value most?

3. How does virtual professional development compare to traditional in person professional development as it relates to educators' professional growth and/or career?

Setting

This study was conducted in a school district located in a county of New York state. The study included eleven elementary school teachers working in grades K-5. There are 3 or 4 sections on each grade level. Permission was granted by the school district superintendent for the researcher to access the site.

From March of 2020 through June of 2020, the schools in this district were closed to in person learning during the COVID-19 pandemic. During the 2020-2021 school year, families had the option of in person or remote instruction. For that school year, most families chose in person instruction, with less than 10% of each building opting for remote learning. During the 2021-2022 school year, in which this study was conducted, the district operated with only in person instruction, with the only exception being for when a student was in quarantine and was assigned a short-term remote educator. The elementary schools in this district are relatively small in population, with a total of approximately 1,000 students. The total district population is about 2,200 students (https://data.nysed.gov/enrollment). The ethnicity enrollment is Caucasian 88%, Hispanic 8%, African American 2%, Asian 2%, and Multiracial 1%. (https://data.nysed.gov/enrollment). Per pupil expenditures are approximately $25,000 and the percentage of economically disadvantaged families ranges is 11% (https://data.nysed.gov/essa.php).

The researcher considered the demographics of the area specifically noting median family income and teacher salaries to recognize and address biases related to the setting. When learning about teachers' experiences with virtual professional development, it is pertinent to recognize that more affluent areas may have a greater

number of resources (e.g. internet access, devices, Wi-Fi access) than areas with a lower social economic standing. While access to computers and the internet were important to education prior to the pandemic—as tools for word processing, research, and communication after school hours, or even as the primary means of schooling—they became essential tools for students to remain engaged during the 2020–2021 academic year. (https://nces.ed.gov/blogs/nces/post/students-internet-access-before-and-during-the-coronavirus-pandemic-by-household-socioeconomic-status).

The following example is from the National Center for Educational Statistics:

> Even with this assistance from schools and districts, however, socioeconomic inequalities in students' access to computers and internet were not eliminated. For example, in September 2020, the percentage of adults reporting that computers were always or usually available was highest for the two household income levels at or above $100,000 and lowest for the two household income levels below $50,000.

Participants

The participants include eleven educators that represent the six grade levels in elementary school, starting in Kindergarten and concluding with Grade 5. This allowed the researcher to have representation from teachers at every grade level. The participants have a variety of teaching experiences with about half identifying as new teachers (teaching 4 or less years) and half identifying as experienced teachers (teaching 5 or more years). Each participant signed a Consent Form for Research (Appendix B) and was assured that participation in this study was voluntary and anonymous. Pseudonyms have been used in this study to protect the identity of the participants. The participant's

certification area, years of teaching experience, and level of education are outlined in the table below:

Table 1

Description of Participants

Participant	Certification Areas	Years of Experience	Level of Education
Ellena	General Education Nursery-6th grade and Literacy	23 years	Master's Degree
Pauline	General Education Grades B-2 and1-6 and Literacy	9 years	Master's Degree
Georgette	General Education Grades B-2 and 1-6	2 years	Master's Degree
Petra	General and Special Education Grades 1-6	3 years	Master's Degree
Anna	General Education Grades B-2 and 1-6 and Literacy	7 years	Master's Degree
Jonna	General Education Grades B-2 and 1-6	2 years	Bachelor's Degree
Artura	General Education Nursery-6th	32 years	Master's degree
Marilyn	General and Special Education Grades B-2 and 1-6	8 years	Master's Degree
Beth	General Education	2 years	Master's Degree

	Grades B-2 and 1-6		
Deb	General Education Nursery-6th	20 years	Master's Degree
Michaela	General Education Nursery-6th grade and Literacy	17 years	Master's Degree

Purposive sampling was used to select the participants from the population. This sampling logically assumed that the participants are representative of the population (Sharma, 2017). The purposive sample was generally a homogenous sample since all participants had the same occupation and preparation, with a difference being the years of experience teaching in the field. A key advantage to using purposive sampling is time efficiency while a disadvantage is the potential for researcher bias (Mills & Gay, 2018).

Data Collection Procedures

For this qualitative phenomenological research study, four main types of data collection methodologies were used to analyze teachers' perceptions of virtual professional development as it relates to adult learning theory. The data collection methods were email questionnaires, interviews, observation, and document analysis.

James (2005) discusses the possibilities of using the email interview method in educational research as it opens possibilities for increasing reflexivity by providing both the time and space for academics to construct, reflect upon and learn from their stories and experiences. James also stated that "email interviewing created an arena in which the academic self could be articulated and explored, and in which the researcher could understand and study their lives." In addition, Mann and Stewart (2000) have shown how

internet technology can be used to adapt qualitative methods of data collection in order to obtain rich, descriptive data and understand the human experience. Educational researchers who made use of the narrative approach to interview teachers found their interviews included a level of performance from the teachers that involved a genuine representation of their lives (Weber, 1993).

The email questionnaire protocol was designed by the researcher based on the characteristics of professional development and Knowles adult learning theory (Appendix C). Each section of the questionnaire corelates to each of the three research questions. To address Research Question 1, the following questionnaire items were included:

1. Please share some background information about yourself.

2. Please provide a brief description of the professional development opportunities have you participated in over the last 12-18 months?

3. Please comment on any positive aspects of virtual professional development sessions you've attended.

4. Please comment on any negative aspects of virtual professional development sessions you've attended.

5. How did the pandemic influence your views of virtual professional development?

6. Please share some of your positive traditional (in person) professional development experiences.

7. Please share some of your negative traditional (in person) professional development experiences.

8. Do you prefer traditional or virtual professional development? Why?

9. What instructional methods make for an effective professional development session (either virtual or traditional)?

To address Research Question 2, the following questionnaire items were included:

10. How do you learn best as an adult learner?

11. From the choices below, what characteristics of professional development do you value most and why? Please rank your top 3 choices.

- I learn best with PD courses that I feel that I have a need to know.
- I learn best with PD courses that are self-directed.
- I learn best with PD that add to my specific experiences.
- I learn best with PD courses that have immediate relevance.
- I learn best with PD courses that have immediate application.
- I learn best with PD courses that I am internally motivated about.

To address Research Question 3, the following questionnaire item was included:

12. How would you compare virtual professional development and traditional in person professional development as it relates to your professional growth/career?

The carefully crafted email questionnaire was field tested for clarity prior to this study. The questionnaire was also reviewed by two experts in the field to increase the validity and credibility.

Interviews are a preferred source when collecting data using a phenomenological approach because they allow the researcher to ascertain the vicarious experience of being there (Creswell, 2018). Interviews help in obtaining the essence of the experience the individual has volunteered to share. According to Seidman (2006), it is important for the interviewer to listen to participants on three levels (page 78):

1. Listen to the spoken word to internalize the meaning

2. Listen to hear the unguarded intent and terminology when describing the experiences

3. Watch for non-verbal cues and keep the speaker on schedule for the interviews

Seidman provides directions for how to best direct the interview. He suggests not to ask questions that lead the participant and not to interrupt the participant when he/she is speaking. Additionally, Seidman suggests asking the participants to tell a story or give an

example about a particular part of the experience. Lastly, Seidman recommends asking for specific details but do not agree or disagree with the participant.

A follow up virtual interview with each candidate was conducted. This data collection method allowed for member checking, increasing the trustworthiness of the study (Saldana, 2016). The researcher ensured that the interpretation from the questionnaire responses were the participants' intended meaning. By first collecting data via email questionnaire and then conducting virtual follow up interview sessions, the researcher was able to obtain a complete picture of the participants' lived experience.

The next data collection method was an observation conducted by the researcher of a virtual professional development session that included two of the study's participants. The goal of using observation as a data method is to better understand the perceptions and behaviors of the participants in an authentic virtual professional development environment. According to Maxwell (2013), "observation can enable you to draw inferences about this perspective that you couldn't obtain by relying exclusively on interview data" (p. 234). Observations reveal individual interactions between colleagues and the professional development instructor, that may have not been noted through the interview process.

Document analysis was the last data collection method that was used in this study. As Charmaz (2015) states, "People create documents for specific purposes, and they do so within social, economic, historical, cultural, and situational contexts." For this study, Professional Development Feedback Forms were analyzed. Analyzing these documents gave the researcher data regarding each participant's natural experience with their individual virtual professional development sessions.

Trustworthiness of the Design

Trustworthiness is a key component of qualitative research (Creswell & Creswell, 2018). The researcher put the following measures into effect to increase the trustworthiness of this study: conducting questionnaires off-site via email and scheduling virtual interviews. The researcher wanted to maximize the teachers' comfort level to ensure the most honest data.

Credibility and Dependability

Validity and reliability are the standards most frequently used for good and convincing quantitative research (Bloomberg & Volpe, 2019). Valid research clearly reflects the world being described and if work is reliable, then two researchers studying the same phenomenon will arrive at similar observations. Lincoln and Guba (1985, 2000) propose specific criteria for qualitative research using the terms credibility, dependability and generalizability. Credibility refers to whether the participants' perceptions align with the researcher's portrayal of them. The researcher employed the use of member checking to ensure credibility. By member checking, the researcher ensured that the data was interpreted in the manner that the participants intended. In addition, member checking interviews are a common strategy to strengthen the trustworthiness of the findings.

Dependability must ensure that the research process is clearly documented, logical and traceable (Bloomberg & Volpe, 2019). Dependability also refers to the stability and consistency of data over time. To account for this, the researcher maintained detailed explanations of how data were collected and analyzed as well as maintain field notes (Lincoln & Guba, 2000).

Triangulation strategies were used to address the trustworthiness in this study. The triangulation of qualitative data allowed the researcher to understand the nature of to the participants' experiences, which may assist in providing deeper meaning into the narrative data. Triangulation increased the validity of the findings. Patton (2015) discusses four types of triangulation that the researcher has an option of using to strengthen their study. They are triangulation:

- of data sources (data triangulation)

- among different researcher (investigator triangulation)

- of perspectives (theory or disciplinary triangulation)

- of methods (methodological triangulation)

This study was triangulated by data sources and of perspectives. The data sources, namely, the questionnaire and interviews were member-checked. Triangulation has also been viewed as a way to test validity through the merging of information from different sources. Using the detailed questionnaires and interviews, observation, and document analysis, the researcher developed a comprehensive understanding of phenomena. Lastly, by using these combined data sources, the researcher triangulated the data by viewing the data through both the participants' and researcher's lens. This combination increased the generalizability and authenticity of the study.

Research Ethics

The protection of the research participants and the site of the research were an important part of this research study. All levels of consent and permissions were sought and collected prior to any data collection and analysis. Research participants willingly

participated, and any amassed information remained confidential, as per the guidelines of

the St. John's University Institutional Review Board. Participants were also verbally

reminded that participation was completely voluntary and there were no risks associated

with the process. After the data was collected, it was stored electronically, labeled by

number, not name, and safeguarded by a password protected program. Documents

reviewed for analysis were kept in a safe guarded location. Pseudonyms were used to

maintain the anonymity of the participants.

Data Analysis Approach

To ascertain the essential meaning of the experiences, the researcher described

the core themes that emerged from the narrative data. These essential themes served as

the defining characteristics of the lived experiences. In phenomenology, there are two

main types of themes that can emerge: common (shared) themes that occur across

participants and individual themes that are unique to one or two participants but not all

participants.

The researcher compiled field notes from the email questionnaires, interviews,

observation, and document analysis during first cycle coding. The researcher also noted

the participants' expressions and non-verbal cues during all interviews and the

observation. As stated by Saldana (2016), first cycle codes are based on placing the data

into categories. The researcher analyzed the data for words and phrases that became

codes. Then, the six categories from Knowles Assumptions of Adult Learning were used

to analyze the data and themes that emerged in the second coding analysis. The themes

were as follows: learner's need to know, learner's self-concept, learner's prior

experiences, learner's readiness to learn, learner's orientation to learning, learner's motivation to learn.

As the second cycle of coding continued, the researcher added examples of in vivo quotes based on the reoccurring wording from the participants' email questionnaires. The researcher also used patterns codes to categorize the data into more meaningful units of analysis, sort of a meta code (Saldana, 2016). The researcher applied this method to see how categories were related. The researcher noted themes emerging from the data (Creswell & Creswell, 2018) and organized the findings into three categories: findings related to virtual professional development, findings related to Knowles Adult Learning Constructs, and findings related to educators' professional growth.

Researcher Role

The researcher was mindful not to impose bias onto the teachers during the interview process and observations. The researcher has experience in the field of professional development and was conscious to make sure that these experiences did not steer the findings of the study. The researcher was sensitive to the fact that teachers had to face many obstacles relating to the reopening of schools for in person learning during the COVID-19 pandemic, so it was emphasized that participation in this study was optional and voluntary. It is the belief of the researcher that the participants knew the importance and relevance of this topic to their field, especially because of the rapid growth related to virtual learning. Trust and rapport were created with the participants, yet the researcher did acknowledge that perhaps some teachers might have been reluctant to offer negative perceptions.

Summary

In Chapter Three, the methodology and procedures for this study were explained. A brief overview of the problem and purpose was presented accompanied by the research questions. The population, sample, and instruments were outlined, and the data collection and analysis methodologies were described. Ethical considerations and the role of the researcher were also presented.

Chapter Four begins with a review of the problem and a descriptive overview of the results findings. A figure and chart with interpretive themes are included in addition to a detailed analysis of the qualitative data. The findings that emerged through data analysis are presented in Chapter Four.

CHAPTER 4: FINDINGS

Introduction

In this phenomenological study, eleven elementary educators in a suburban school district in New York State shared their lived experiences with virtual professional development over the last eighteen months. The purpose of Chapter 4 is to provide an overview of the findings from these research participants as it relates to the data analysis and key constructs to answer the three research questions.

The data sources (email questionnaire, interviews, observation, and document analysis) were thoroughly reviewed so key details could be summarized and categorized as findings based on what the researcher has interpreted from the data. The data analysis from this chapter lead to the discussion and conclusion in Chapter 5.

Restatement of the Research Questions

The purpose of this phenomenological study was to develop an understanding of teachers' perceptions of virtual professional development through the lens of adult learning theory. In order to accomplish this, the following research questions were asked:

1. How do educators describe their experiences with virtual professional development?

2. What characteristics of adult learning do educators value most?

3. How does virtual professional development compare to traditional in person professional development as it relates to educators' professional growth and/or career?

To answer these three questions, email questionnaires were distributed to a purposeful sample of participants which were followed by individual interviews with each of the

eleven participants. In addition, the researcher conducted a virtual observation of a virtual professional development session and analyzed data from Professional Development Feedback Forms.

Participants

The eleven participants in this study were selected with a purposeful sampling approach as is frequently utilized in qualitative research studies. Phenomenological methodology was used as it was best suited to explore the lived experiences of educators who have participated in virtual professional development (Creswell, 2013). The study participants were emailed the questionnaire with a ten-day completion time in order to provide meaningful and thoughtful responses. Virtual interviews were conducted as a follow up to each questionnaire as a method of member checking for accuracy and reliability. Background information about each participant was collected and presented in the following paragraphs. For this study, the participants are referred to by pseudonyms.

Ellena is a Kindergarten teacher with twenty-three years of teaching experience. She holds a master's degree in Literacy. Her teaching philosophy is that all children are unique and special. She believes that students should have a safe, caring, and nurturing classroom environment that allows them to grow physically, mentally, emotionally, and socially. It is her desire to create this type of atmosphere where students can meet their full potential. She has received both in person and virtual professional development opportunities related to curriculum, assessments, and technology. In person opportunities included Teachers College Reading and Writing training and an introduction for "Into Math." Virtual professional development opportunities included assessment training, Seesaw platform, and COVID-19 training.

Pauline is a first-grade teacher with a bachelor's degree in Elementary and Special Education and a master's degree in Literacy. Her professional certificate is in Elementary and Special Education K-6 and she holds a professional license in Literacy. This is her ninth-year teaching and her third-year teaching first grade. She believes each student is a valued individual with unique physical, social and emotional needs and that each student will be the center of the learning experience and should be actively engaged. She was able to attend virtual workshops for the Teachers College Reading and Writing program and the Seesaw platform. She also took numerous virtual classes based on her interests which included topics of mindfulness, hands on math activities, interactive math notebooks, and assessment tools for remote learning. She participated in traditional in person training for data assessment.

Georgette is a second-grade teacher with two years of teaching experience and a master's degree in Elementary Education. To shape strong learners, Georgette said she must consider the whole child to ensure that her teaching methods are meaningful and relevant to their lives. In order to teach her students in an effective manner, she strives to make her teaching student centered. Academically, she understands how each child learns best in order to meet their individual needs and foster their growth. She believes that understanding the children personally is essential as well. Her goal is to help shape students into strong individuals who understand their worth and have strong hopes and dreams both inside and outside of school. She has attended in person professional development for the Teachers College Reading and Writing program, GoMath, Habits of Mind, RTI, and the RULER programs. Virtual professional development sessions

included Microsoft Teams and Class Notebook as well as Zoom, Flocabulary, Seesaw, and Nearpod.

Petra is a third-grade teacher with three years of teaching experience. She holds a bachelor's degree in General Education and a master's degree in Special Education. She believes that educating a student in today's world must come from a holistic approach. She believes that teaching must come with motivation, excitement, and student inquiry. This participant has taken nine classes through the local Teachers Center. Some of her courses include a virtual book club based on the book, I Wish My Teacher Knew in addition to online conferences for the Teachers College Reading and Writing program. She also attended in person training for Nearpod.

Anna has been teaching for seven years. She currently teaches fourth grade and is certified in Early Childhood and Childhood Education (Birth-6). She also holds a master's degree in Educational Literacy (Birth-12). She believes that a classroom should be a safe and inclusive community where the teacher's role is to assist and support each student in achieving their goals. Over the last year and half, she has attended multiple virtual professional development trainings including workshops on Zoom, Teams, Flipgrid, Nearpod, PowerPoint, Excel, Flocabulary, and Freckle. In addition, she has attended in person workshops on the NWEA assessment and the Teachers College Reading and Writing program.

Jonna is a fifth-grade general education teacher who has been teaching for three years. She is certified in Childhood Education Teacher (1-6) and Early Childhood Education Teacher (Birth-2). Jonna believes that as a teacher, her role is to be a champion for her students, by creating meaningful connections and encouraging her students to be

the best they can be. She wants her classroom to be a place that students are excited to come to because they feel comfortable, engaged, and excited to learn. In the last 12-18 months, she has attended virtual professional development opportunities in DASA and the NWEA assessment in addition to in person workshops for the Teachers College Reading and Writing program.

Artura has been an educator for thirty-two years. Currently, she works as a second-grade teacher. She holds a master's degree and is permanently certified in Nursery, Kindergarten and Grades 1-6. She believes that educators must be willing to learn and be open to new and innovative methods of instruction. She believes that educators cannot support learning without seeing value in their own personal growth. Creating a warm classroom environment that encourages an "I can" growth mindset is one of her personal goals. She participated in virtual Seesaw training, Teachers College Reading and Writing program, Flocabulary, and Raz-Plus. In person training included Integrated Co-teacher training, NWEA assessment, and Nearpod.

Marilyn is a current 1st grade teacher who has been teaching for eight years. She is certified in both general and special education grades Birth-2 and 1-6 and holds a master's degree. She believes teaching is a vocation that greatly impacts the academic, social, and emotional growth of students in our communities. She believes that students should take an active role in constructing their own learning. In a student-centered learning environment, educators work closely together with students to create opportunities for student growth and their eventual success in all areas of their education. She believes that educators should employ the use of positive and constructive feedback in combination with the use of engaging and authentic materials. Lastly, she feels

collaboration among teachers, students, families, and administration is essential to creating a supportive and flexible learning environment where students feel comfortable and safe. Over the last 12-18 months she has participated in many professional development opportunities, both virtual and in person including topics such as math games, interactive notebooks, creating a positive learning environment for students, and mindfulness. She also attended the virtual Teachers College Reunion Days in both October and March. In addition, she attended the past two Long Island Mathematics Conferences.

Beth is an elementary remote educator who works with students in grades K-5. She holds a master's degree in early childhood education (Birth-2) and childhood education (1-6) and has been teaching for two years. Her passion to teach is founded on the idea that all students should have the opportunity to see their potential, find their purpose in life, and develop a love of learning. Professional development opportunities that she has participated in over the last 12-18 months include in person Teachers College Reading and Writing training and BOCES training in utilizing educational websites such as Nearpod, Padlet, and Flocabulary. She has attended virtual professional development sessions in mindfulness techniques to practice in the pandemic environment as well as RAZ-Kids reading.

Deb is third grade teacher with twenty years of experience. She is permanently certified in Nursery through grade 6 and holds a master's degree. She believes her role as an elementary teacher is to encourage her students to be the best they can be by becoming lifelong learners. She hopes to motivate her students to take challenges, make mistakes and explore their individuality. Her goal is to inspire her students to be inquisitive and

respect others' perspectives. She has received both in person and virtual professional development in education that included Teachers College Reading and Writing training, Go Math Curriculum, Flocabulary, DASA, COVID, NWEA assessment training, TEAMS, and Nearpod.

Michaela is a fifth-grade general education teacher and with seventeen years teaching experience. She is certified in general education (1-6) and has her master's degree in Literacy (B-12). She believes teaching is a way to build a safe and loving learning environment where children take risks and are engaged in high level learning. She has participated in multiple in person and virtual professional development over the last 12-18 including using online platforms and reading assessments in addition to Microsoft Teams, Flocabulary, and Teachers College Reading and Writing training.

Findings for Research Question 1

The first research question in this study was how do educators describe their experiences with virtual professional development? Ellena summarized the way most of the educators in this study felt. She stated:

> Prior to the pandemic, I always viewed virtual professional development as only online courses. After the pandemic, I was exposed to a variety of ways to learn online. Some ways included using Zoom, Teams, and webinars. Although I continue to prefer in person learning, I am grateful for the opportunities I was given to grow in my profession. During the onset of the pandemic, Zoom gave my colleagues and I the opportunity to meet daily. We provided each other not only professional support, but also emotional support.

The COVID-19 pandemic played an enormous role in the growth of virtual professional development. The educators in this study were abruptly thrust into a virtual learning environment due to the COVID-19 pandemic. At first, teachers provided asynchronous instruction for students and then they shifted to a synchronous on-line environment. Teachers were receiving virtual professional development simultaneously with the virtual instruction they were providing to their students. The genre of virtual professional development was generally unknown to these educators until the pandemic made it a necessity. Georgette stated:

> Prior to the pandemic, I never even considered virtual professional development to be possible. I have heard of video conferencing platforms, yet only thought they were necessary for careers that dealt with people who were far away or overseas. With this in mind, I could not even fathom educational development sessions to be possible. However, the pandemic proved it to be possible to me. Although it did cause me to miss the in person conferences, I was able to see the positives to virtual professional development.

During this time period, educators in this study also mentioned personal issues they faced. These personal issues included family situations, emotional stress and health concerns. Petra commented:

> Before the pandemic, I would have been terrified to go on a ZOOM call and be suddenly connected with tens, if not hundreds of people. For strangers to see part of my home behind me, to possibly not be muted while my dog is barking, would have been more than nerve raking. But going through a pandemic where our options were limited and participating in a virtual world was necessary to survive,

was eye-opening. Before the pandemic, I would not have realized how transformative an online PD (done well) could be. Speaking will colleagues over the past few weeks, I now see how virtual PDs have allowed accessibility and equity for those who have outside commitments, such as childcare or a second job. Being a type one diabetic, I had to be a bit more cautious than someone without an autoimmune disease. My traveling options were restricted. I truly believe that I would have not allowed myself to attend as many conferences as I did these past few years without an online option.

Michaela added:

I like being able to take the classes from home after work as I am a mother of three small children. It allows for me to come home and then engage in the class after seeing them. It was comforting knowing that my kids were in the next room if they needed anything.

New teachers in this study were able to share another view about their experiences with virtual professional development. Beth related her lived experiences below. She stated:

As a new teacher, starting my teaching career in the pandemic environment, most of the professional development sessions that I attended were virtual. I learned a lot of teaching tips and strategies that I used as a remote teacher. I feel as though the virtual professional development sessions that I attended were beneficial and I learned a lot of valuable information that helps me daily as a new teacher. In addition, these sessions provided guidance for teaching remotely and teaching in a pandemic environment.

Overall, the experiences with virtual professional development for the participants in this study all started due the COVID-19 pandemic environment. Except for a few participants completing a required code of conduct asynchronous training online before the COVID-19 pandemic, virtual professional development was a new experience for all educators in this study.

Positive and Negative Aspects of Virtual Professional Development

All the participants in this study commented on the positive and negative aspects of virtual professional development. The major themes are indicated in the figure below.

Figure 1

Positive and Negative Aspects of Virtual Professional Development
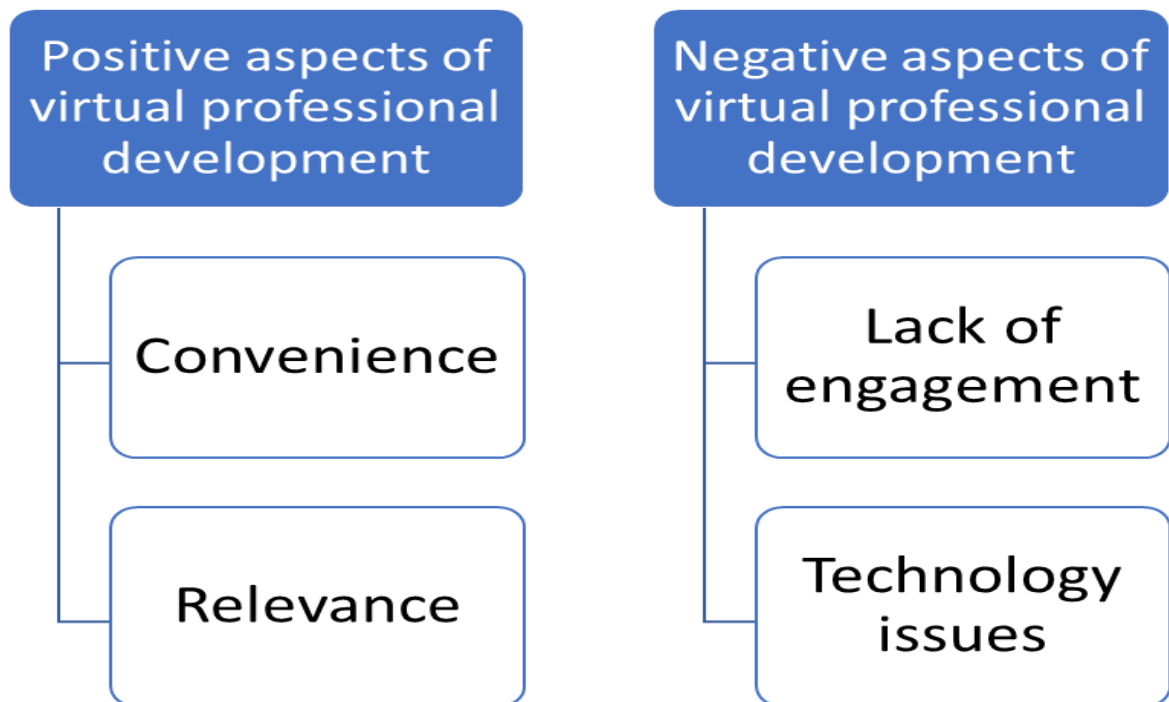
Positive Aspects of Virtual Professional Development

The data revealed two main themes regarding the positive aspects of virtual professional development: convenience and relevance. Each participant cited examples of their lived experience in these areas.

Convenience. When discussing the overarching theme of convenience, the participants shared examples from their own experiences with travel, home life, time management, and lifestyle. Marilyn shared:

The convenience of being able to participate in the professional development from any location is a benefit and has encouraged me to be more involved in many professional development opportunities. For example, I find it is much more convenient to log on to various sessions on the Teachers College Reunion Days from my laptop rather than traveling to the city to attend the sessions in person. I have also taken many Tract classes this past year since I was able to log onto the class from my own device at home. It lessened the stress of traveling to another school to attend the class after teaching for a whole day.

Adding to this, Jonna stated:

Virtual PD is easily accessible and can be catered to the needs of the specific people attending the workshop.

Georgette echoed that notion by adding:

In some cases, those who would have been unable to participate due to illness or other personal situations were able to tune in. Virtual PDs are timelier. Rather than considering transportation time, one can simply log off and join into another

training or have time to practice and apply what was just learned during the

professional development session.

Michaela expanded on the notion of convenience as it related to her family life and role

as a mother. She shared:

> When schools shut down in March of 2020, my third baby was 5 months old. I
>
> was grateful to have the option of virtual professional development because if I
>
> had to step away or turn off my camera for a moment to feed the baby, I was able
>
> to do so with this format. The mute button came in handy too!

The convenience aspect of virtual professional development was a major theme held by

each participant in this study.

> **Relevance**. Under the theme of relevance, most participants highlighted that they

appreciated the variety of topics that could be offered through virtual professional

development. They also valued the ability to choose the topics that interested them or

filled a particular need they had for their teaching. Petra stated:

> Along with turnkey activities, the virtual PD I attended had activities that could be
>
> implemented almost immediately into the classroom structure. One class in
>
> particular, had us try a website out by having us play the games as our students
>
> would. This allowed us to find obstacles students might face and working together
>
> to formulate solutions.

Adding to the aspect of choice and relevance, Pauline commented:

> With more opportunities for virtual professional learning, I feel like I have been
>
> able to take more professional development classes in the past year than I would
>
> have been able to before the pandemic. It has been so easily accessible to receive

professional development on topics of my interest, and ones that directly apply to

my teaching (math games, hands-on math activities, RTI). I have taken more

classes for professional development since they were offered virtually simply

because it is more convenient to do it from my own home and or classroom.

Anna shared:

Because there were so many options of virtual PD to choose from, I was able to

select the ones that I really wanted to learn about. These PDs gave me the

opportunities to learn from experts in certain areas that were relevant to my career

and where I was as a new teacher.

The researcher conducted a virtual observation of a virtual professional development

session which was on the topic of Flocabulary, a popular educational website which

integrates reading and social studies. There were three attendees in the session that the

researcher observed, two of whom were participants in this study. The instructor, the

participants, and the researcher kept their camera feature "on" for the majority (over 40

minutes) of the session, specifically during the timeframe when the instructor was

directly presenting the content. The researcher noted that the teachers stated they were

excited to learn more about this platform because they had heard about it online and from

other teachers in the district. The researcher noticed the hybrid aspect of this training as

the attendees were video conferencing from the same location in the school building

highlighting the convenience of virtual PD, but the instructor of the training was located

off-site. Participants were observed nodding their heads in agreement and taking notes in

a journal as the instructor presented the features of the Flocabulary platform.

Additionally, the teachers were able to explore the website in a hands on manner, while the instructor was available (virtually) to answer any questions a teacher had in real time.

Convenience and relevance were highly regarded as two of the most positive aspects of virtual professional development.

Negative Aspects of Virtual Professional Development

The data revealed two main themes regarding the negative aspects of virtual professional development; lack of engagement and technology issues. Each participant in this study cited details from their recent lived experiences in these categories.

Lack of engagement. The participants shared the sentiment that virtual professional development lacked the interpersonal connection that traditional in person professional development offers its educators. Beth stated:

A negative aspect of the virtual professional development sessions that I attended was the lack of personal, face-to-face connections. I find that it is much easier to communicate and ask questions in person rather than on a computer screen. I personally think that it is more difficult to raise your hand, find time to speak up, ask questions, and communicate when attending virtual sessions.

Pauline shared her insights about the connection she feels when learning in person with other adults. She shared:

Being in a room physically with others adds energy to the learning experience and with virtual professional development is hard to feel that way. I also feel like it is hard to really get to know the professor through a computer to gain that connection with them. Virtual PDs have been less interactive and more of a

lecture format as compared to the in person trainings I have attended where I

generally can take with others in the course about the topic we are learning.

Artura supported this sentiment by stating:

Virtual professional development can have an impersonal atmosphere and there

are distractions surrounding virtual instruction that can impact learning.

Participants are tempted to multitask, therefore, not fully paying attention to the

content being presented.

Petra added her insights about the lack of collaboration from virtual professional

development below:

Unfortunately, we have all had a handful of negative experiences when it comes

to virtual PD. I will say, as the years have gone on and presenters have been more

comfortable using technology and tools, it has gotten a bit better. I know this is

very controversial, however, the lack of camera and/or participation is a big red

flag for me. I want to learn and grow as an educator and I find that this type of

online environment sets the tone for "I'm lecturing… you're listening... now we

are done." I believe it is up to the presenter to facilitate conversation and provoke

questions from the audience.

Deb commented about both the engagement of the presenter and the participants:

Even the presenters need a level of engagement and feedback from the

participants. It must have been difficult to conduct a PD if the participants just sat

there and gave no feedback. The instructor just has to stay on an agenda, and you

lose the conversations and collaboration you would typically find in an in person

class.

Marilyn presented a salient point regarding the lack of materials or resources that are provided to attendees to foster collaboration. She commented:

> I did not receive any actual resources that I could use in my own classroom. The presenters shared slides of information, but they did not provide the attendees with any of the actual resources, games, and activities that they discussed. I believe it would have been more beneficial to have the opportunity to play and interact with these games in person.

Initially, during the virtual observation, the researcher noted the lack of personal connection between the instructor and the participants. The instructor greeted the participants but had them mute their screens limiting their responses. During the first 30 minutes of the session, it was noted that the participants looked engaged with the way the instructor was presenting the content. Participants were observed nodding their heads in agreement and taking notes in a journal, however exchanges with the presenter were minimal. The researcher noticed multiple times where the participants were talking to each other (although muted) while the instructor was explaining a feature of the website. This data adds value to supporting the notion of hybrid virtual professional development because the participants were enabled to have some collaboration with each other, even though the instructor was virtual.

Each educator is this study shared many lived experiences regarding the sterile and at times non-collaborative nature of virtual professional development. They valued the interpersonal connection that traditional in person professional development offers its participants.

Technology issues. Technology issues are the other main drawback to virtual professional development. The educators in this study have all shared multiple instances when an aspect of technology had failed. These glitches included wireless connectivity issues, apps or websites not responding, problems with a site's login, and/or audio and visual problems. Anna stated:

> Technology always has glitches (low bandwidth, connection issues, updates, etc.) and comes with a learning curve. People that are not familiar with technology had difficulties using these professional development opportunities; they were sometimes more work than they were worth.

Regarding technology issues and setbacks, Jonna shared:

> A negative aspect is a lack of preparation or not being flexible when technology fails (which will most likely happen). I have gone to courses that have lasted 20 or so minutes because the google slide was not uploading properly or the WIFI won't connect quickly enough.

Deb stated:

> Technical and WIFI issues occurred frequently and reduced length of many training sessions I've attended.

Ellena expressed her frustration when she experienced technical difficulties with virtual professional development and with virtual learning. She stated:

> The worst is when you get the dreaded "spinning wheel" on your screen and you feel helpless. The level of stress rises, and I know this happens to the adults and the students. In one of my recent PD sessions, the trainer couldn't get us logged into Nearpod. She had to retry it several times and that interfered with her time

management of the session because we weren't able to learn the second topic that was scheduled for that session.

The researcher observed three times where there were delays in the internet connection during the virtual professional development observation session. The instructor's video in real time, did not match her words, which caused some confused expressions amongst the participants.

In conclusion, the participants in this study reported on the negative aspects of virtual professional development which include the lack of engagement and technological issues that often exist in the virtual learning world.

Findings for Research Question 2

Research question 2 asked, "What characteristics of adult learning do educators value most?" The researcher analyzed the data through the lens of adult learning theory for this answer. As previous Stated in Chapter 2, Knowles (1980) identified six characteristics of adult learners. The researcher used these constructs to see how they related to the eleven participants in this study.

Item number 11 on the questionnaire, asked each participant to rank which of the following six constructs were the most valuable to them as an adult learner as related to professional development. They were instructed to choose from the six statements listed below and select their top three choices.

1. I learn best with PD courses that I feel that I have a need to know.

2. I learn best with PD courses that are self-directed.

3. I learn best with PD that add to my specific experiences.

4. I learn best with PD courses that have immediate relevance.

5. I learn best with PD courses that have immediate application.

6. I learn best with PD courses that I am internally motivated about.

The results are displayed in the bar graph below.

Figure 2

Adult Learning Traits Valued by Educators in Professional Development
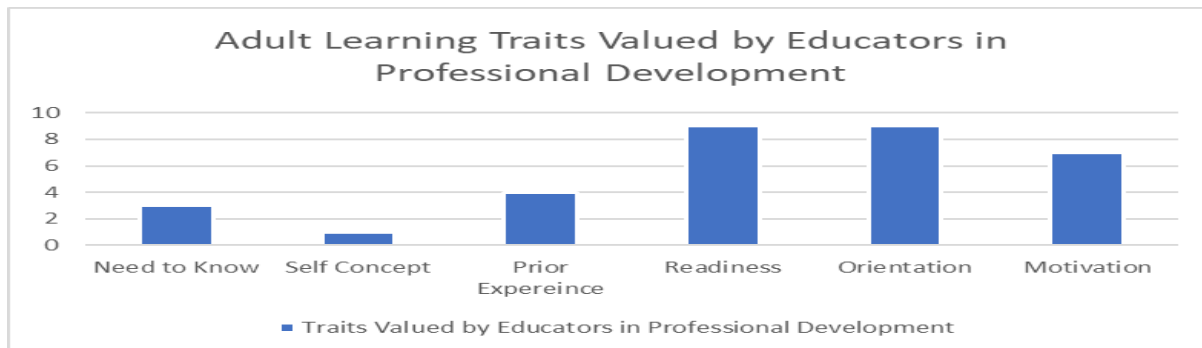
Knowles' constructs 4, 5, and 6 (readiness to learn, orientation to learning, and motivation to learn) received the highest rankings by the educators in this study with approximately 80% of the total votes.

The majority of the participants related to the belief that when learning as an adult, it is valuable for the learning to be directly relevant to an aspect of their job responsibilities or classroom practice. This readiness involves situations where an educator becomes aware of the content they need to know to effectively teach their students.

Professional Development Feedback Forms were also analyzed by the researcher and the data supported this finding. The Professional Development Feedback Form from Anna stated:

> I thought this training was very useful and relevant. It taught us how to find activities, assign them, and create folders. I needed tips on these features and I now am more confident to use them with my class.

Equally as important to the belief that it is valuable for the learning to be directly relevant to an aspect of a teacher's job responsibilities was the construct of learning orientation. This idea supports the notion that the educators in this study valued professional development opportunities that had immediate application of knowledge gained. The educators in this study appreciated learning about topics that had real-life application in their classrooms. The Professional Development Feedback Form from Michaela stated:

> I had a great professional development experience learning to use Nearpod. I was taught how to use the website from both a teacher's perspective and the student's perspective which I found super helpful. I am ready to try this out in my students tomorrow!

Artura commented on the importance of professional development being applicable to her classroom and her own adult learning. She stated:

> As an adult learner, if you don't use it, you lose it. When I learn a new topic, I need to implement it right away, so it almost becomes a habit. Once I do this, I take ownership of the learning and I can use these new skills or methods with my students.

Having an internal motivation to learn was ranked third. The educators in this study valued the desire to achieve their goals and pursue learning opportunities that they are internally motivated about. The educators in this study value having the option to choose topics of interest based on internal motivation for professional development. This is also reflected in their teaching goals where many educators stated that they want to foster students who are lifelong learners because they are lifelong learners themselves. Pauline

shared her feelings about a recent in person professional development session which inspired her. She shared:

> When we had Dr. Brackett speak to us about the RULER program and the Mood Meter, I was so moved by his story I started crying. I found this topic so relevant and I saw how it could help my students with their social emotional growth. I was so motivated to learn and do more with this because there was an immediate connection, and I could use these tools with my class.

The Professional Development Feedback Form from Artura stated:

> I was motivated by this session, because I always wanted to learn more about Nearpod. I've heard about it from other teachers and now I can try it out!

Anna shared her enthusiasm and internal drive after a professional development session about Flocabulary. She shared:

> I was so motivated to learn about this platform. The topic interested me, and I learned so much from the instructor in just one hour. I felt like the PD was useful because I was able to see the student's view and features and saw how I could use it the very next day with my class (which I did) and they absolutely loved it. I was motivated because it was worth my time and this tool made my classroom learning environment a better place.

The participants in this study placed 7 votes (out of 33 votes) total between Knowles constructs 1, 2, and 3 (need to know, self-concept, and prior experience) which was only about 20%. From these results, the researcher was able to conclude that the educators in this study regarded Knowles' constructs of readiness to learn, orientation to learning, and motivation to learn as more valued to their adult learning.

Findings for Research Question 3

The researcher poised the last question, which was "How does virtual professional development compare to traditional in person professional development as it relates to educators' professional growth and/or career?" The researcher sought to tie the data together through this idea and analyze the participants' perceived effects on their career. Additionally, this question has the embedded layer of allowing the teachers to reflect on their individual learning styles and preferences.

Each participant in this study, responded that they preferred traditional in person professional development as to virtual professional development even though they had some positive experiences with the virtual format. Ellena stated:

Both virtual and traditional professional development can be beneficial. While virtual learning offers the convenience and the opportunity to work at your own pace and maybe even from your own home, I do feel as an early childhood educator, it will never be as engaging as in person learning. Adults, as well as our children, need to learn not only content and curriculum, but they also need exposure to social interactions and norms. After living through a pandemic, with wearing masks and long periods of time of having to be isolated, it is even more important now to bring back as many in person opportunities, because even adults still need to practice interpersonal skills.

Georgette echoed a similar opinion. She stated:

I believe that I will be more likely to grow as an educator with more in person opportunities. It ensures that I am not only learning the content but have the opportunity to learn from my colleagues and their experiences. It also allows me,

especially as a young educator, to practice my collaboration skills and participate

in activities that can push me out of my comfort zone. I feel that if I remain

behind a screen in virtual professional development opportunities, it will limit my

ability to learn from others and gain the skills that are essential as an educator.

There is meaning even when walking out of a workshop to your car together with

a colleague, that can deepen these professional relationships and help me grow as

a professional. It is important to me that I take advantage of those opportunities to

connect with my colleagues so I can grow in my career.

Anna stated:

I learn best when material is relevant to what I am doing in my classroom, when I

connect to the person conducting the workshop, when I leave with something I

can use in my own classroom right away, and when I am given the opportunity to

collaborate with my coworkers about the professional development. While I have

had both positive and negative experiences with virtual and in person professional

development, I prefer in person.

Artura shared her feelings about being a lifelong learner. She commented:

I love having faculty meetings back in person with my colleagues. There is a

sense of community and collaboration that I need to grow in my career. Even

though I am a veteran teacher, I never want to stop learning new things. Being in

person makes me more willing to ask a question. I think it is important to connect

with other professionals and that doesn't happen easily over a screen.

Deb shared how she thought virtual professional development significantly impacted her

career during the start of the COVID-19 pandemic. She stated:

In light of COVID, there was a huge shift for all of us. To continue to grow and even survive effectively in our careers we needed virtual PD. It did have its benefits during that time frame and impacted many of our teaching careers. There is still a place for virtual PD, but I am happy that many trainings have returned to an in person format. I tend to lose attention and focus when staring at a screen, and there is a different energy when working towards a common goal with my colleagues.

The researcher noted through the data analysis process that each participants' background played a role which may have influenced their opinion. Generally, teachers newer to the profession like Georgette, Jonna, and Beth, appreciated both virtual and in person professional development because they wanted to absorb as much as they could to add to their teaching toolbox and grow in their career. Also interesting to note is that fact that the experienced teachers in this study like Artura, Deb, and Ellena who tended to utilize technology less, expressed the importance of having the opportunity to participate in virtual professional development during the COVID-19 pandemic or else they wouldn't have been able to provide a high quality of virtual instruction to their students.

When speaking specifically about their careers, each educator in this study expressed how they valued the importance of collaboration in the field of education. Without exception, the educators in this study felt strongly about the need to have in person opportunities to learn together as adults for their professional growth and career satisfaction and advancement.

Summary

This chapter presented findings from teachers' perceptions of virtual professional development through the lens of adult learning theory. The email questionnaire, follow up interviews, virtual observation, and Professional Development Feedback Forms of the eleven participants answered the research questions: how do educators describe their experiences with virtual professional development, what characteristics of adult learning do educators value most, and how does virtual professional development compare to traditional in person professional development as it relates to educators' professional growth and/or career? The findings from this study were viewed through the lens of Knowles Theory of adult learning which helped the researcher to understand the eleven participants' lived experiences with virtual professional development in the pandemic environment. Chapter 5 will address the implications of findings, relationship to prior research, limitations of the study and future practice and research.

CHAPTER 5: DISCUSSION

Introduction

This study explored teachers' perceptions of virtual professional development through the lens of adult learning theory. It employed Knowles' Theory of Adult Learning through which the data was analyzed. The three research questions addressed were the following:

1. How do educators describe their experiences with virtual professional development?

2. What characteristics of adult learning do educators value most?

3. How does virtual professional development compare to traditional in person professional development as it relates to educators' professional growth and/or career?

The sampling method was a purposeful sample of eleven elementary school teachers who work in a suburban county of New York state. The researcher collected data through email questionnaires and follow up interviews, virtual observation of a virtual professional development session, and document analysis of Professional Development Feedback Forms.

Implications of Findings

For this study, the COVID-19 pandemic caused school districts to utilize multiple types of virtual professional development options which educators have not used before. Once schools closed, teachers were trained in ways to teach students virtually using various virtual platforms, apps, and websites. Through the lens of adult learning theory, findings demonstrated that the elementary education teachers in this study valued

professional learning experiences which were aligned to topics that had immediate

relevance to their job responsibilities, topics that had immediate application to their

students, and topics in which they were internally motivated to learn about. The four key

findings from this phenomenological study are described in the following paragraphs.

The first key finding was that the participants in this study all preferred in person

professional development experiences as compared to virtual professional development

experiences, although they liked to have the option of virtual learning depending on the

topic or circumstances. The advantages and benefits to in person professional

development were highly valued by the educators in this study. This speaks to the adult

learners' want for a collaborative environment and interaction with the course instructor

to meet the needs of multiple backgrounds and personality differences of adult learners.

Participants also commented that in certain scenarios, they would still appreciate having

the choice to participate in a virtual professional development session. These scenarios

include professional development trainings which were not directly related to their

classroom instruction or selecting a virtual option for time management reasons.

The second key finding was about the positive aspects of virtual professional

development. The participants in this study appreciated the convenience and relevance of

topics that virtual professional development offered them. The COVID-19 pandemic

taught the educators in this study the necessity of using technology during a time when

society was in lockdown. The benefits that emerged were an increased knowledge and

comfort of using multiple platforms to learn and appreciating the convenience of the

virtual learning method. Teachers stressed the important convenience, particularly of

time and location, to take virtual professional development classes. They also stressed

the value of being able to choose topics that were relevant to what they needed or wanted to study as an adult learner.

The third key finding was about the negative aspects of virtual professional development. The negative aspects of virtual professional development based on the lived experiences of the participants in this study were that virtual professional development lacked engagement and often presented with technological issues. Each educator in this study told of a scenario from their personal experience with a technological malfunction while trying to engage in a virtual professional development session. There was often a feeling of frustration or annoyance tied to a technological failure, whether it was on the part of the teacher or the instructor of the session. Additionally, each participant in this study described an experience where they felt disconnected during a virtual professional development session. They expressed that often during these virtual sessions the instructor would present through the screen and there were minimal interactions with or between the participants in attendance. This perception went directly against the need for collaboration and active learning in professional development.

The fourth key finding was that participants in this study benefitted from in person professional development experiences as related to their careers through the lens of adult learning theory. The collaboration and connections with colleagues were important factors stressed by the educators in this study. These factors helped grow the knowledge base of these educators as well as assisted them in nurturing their professional relationships. Adult learners valued the "learner-centered" approach which Knowles (1980) states is needed for human survival and forward development.

Relationship to Prior Research

The current investigation provided insight into elementary educators lived experiences with virtual professional development during and after the COVID-19 pandemic. Due to the ongoing nature of the COVID-19 pandemic, this study helped fill the literature gap about how the field of virtual professional development grew and how it can be more beneficial to educators. The findings were consistent with the literature on professional development and andragogy. Well-designed and implemented professional development should link to educators' experiences and bridge into leadership opportunities to focus on the growth and development of teachers (Darling-Hammond, Hyler, & Gardner, 2017). In addition, Darling-Hammond (1994) believes that teachers need to know about collaboration in terms of working with each other, with students, and with families, to foster maximum growth. These principles should hold true for in person or virtual professional development. This study found that collaboration was essential to adult learning in either an in person or virtual setting, however it was more prevalent during in person professional development trainings.

Referring to Knowles constructs of andragogy, a significant finding of this study was that adult learners who are elementary teachers valued readiness to learn, orientation to learning, and internal motivation for learning. Teachers displayed an added willingness to learn about topics or skills that matter to them as teachers. They wanted to learn about topics that had a direct relevance to their instruction with students. Teachers also wanted to learn about topics that had an immediate application. This made them feel like they had an advantage in their field to enhance their instructional practice. Teachers

also valued internal motivation. This feeling came from within each teacher as they pursued their own learning that gave them an added value to their existing skills.

These three constructs can assist in developing well-constructed professional development courses employing Knowles' adult learning design theory based on active learning. Active learning, whether it be in person or virtual, engages the learner and requires critical thinking regarding the course organization, content, and assessment. Knowles described principles for teaching adults, which include setting a climate that encourages learning, involving the learner in the planning process, assisting the learner in identifying and meeting their learning needs, and involving the learner in evaluating their outcomes (Knowles et al., 2015). This is relevant to this phenomenological study because teachers' perceptions of virtual professional development were more favorable when these aspects were included in the course design. Teachers in this study who shared advantageous opinions of virtual professional development documented that the instructor knew what their clear goal for the course was and provided the necessary time and collaboration with their colleagues to meet those goals. Designing activities that develop a "learner-centered" approach causes learners to be actively engaged in the learning process (Palloff & Pratt, 2007). Participants described the use of collaboration features (ex. use of chat, screen sharing, unmuting) in virtual professional development sessions added to their increased feeling of engagement, which was typically lacking in their virtual professional development experiences.

Limitations of Study

There were certain limitations associated with this study. As a qualitative phenomenological study that relied on email questionnaires and interviews, this research

was limited to eleven participants who shared their experiences with virtual professional development during the COVID-19 pandemic. The sample size was representative of a small portion of elementary educators from a middle-class suburban school district in New York state. Rural and urban school districts were not included in this study. A larger sample size may have provided different findings. There was a limitation in the generalizability to all elementary educators with this small sample size (Creswell, 2014).

In addition, the participants were from a traditional public school organization and participants from private and parochial schools were not included. To enhance reliability and validity, follow up interviews were conducted with each participant to ensure that the researcher interpreted their responses with their intended meaning.

Lastly, an increase in the amount of virtual observations of synchronous virtual professional development could have been conducted to study if any additional themes would emerge.

Recommendations for Future Practice

This study was beneficial for two groups of stakeholders: school leaders and instructional coaches. From the findings of this study, school leaders can gain insight into the type of professional development they offer to their faculty. In person professional development should be considered as the "first choice" of format for PD offerings at Superintendent's Conference Days or faculty meetings. In person trainings were especially valued when educators were learning about a topic which either had direct relevance or direct application to their classrooms. In person coaching and modeling should be considered as well as allowing for opportunities for teachers to talk with each other about the content presented. If school leaders cannot provide in person trainings

because of time constraints or financial limitations, choosing or developing virtual professional development sessions which increase teacher collaboration should be considered.

Instructional coaches can also benefit from the findings in this study. It is recommended that the virtual instructor integrate activities which foster communication and engagement. Some techniques can include the use of the chat feature, break out rooms, screen sharing, asking direct questions to participants, and allowing participants to come off "mute" to engage in dialogue. Allowing the use of the chat feature enables the participants to share their thoughts with each other during the session which increases the extent to which they are an active learner. Break out rooms, which can be used during synchronous virtual professional development, allow for the participants to speak to each another in real time and share their thoughts and experiences about the content being presented. Break out rooms also offer the opportunity for the instructor to interact with the participants in smaller groups and check for understanding. Allowing for screen sharing, is another way for the instructor to encourage participants to add on to their learning by showing or illustrating a concept to the group based on their experiences. Instructors may also consider organizing their content in a PowerPoint format to make the information more accessible for the participants and increase their engagement with the topic. Building a "question and answer" period into a virtual professional development session also increases collaboration because it affords the participants an opportunity to share their thoughts. Encouraging and/or requiring participants to keep their cameras "on" during a virtual professional development session allows for increased

interaction between the instructor and the participants. Verbal and non-verbal feedback can be used by the presenter to adjust the content of the session if necessary.

Additionally, developing a hybrid virtual professional development session which the researcher had observed in this study, is another way to increase engagement amongst the participants who are in person learning together while the instructor is presenting the content virtually. Asynchronous virtual professional development can be offered for topics which are generally a requirement for the district and/or state regulation. Teachers could complete these types of training at their own pace and in their own choice of location. Lastly, instructional coaches can benefit from the knowledge of adult learning styles specifically valued by educators. They can gain insight into the way that educators perceive their adult learning based on the lived experiences of the participants in this study.

Recommendations for Future Research

The findings from this phenomenological study added to the literature about elementary educators and their experiences with virtual professional development. The participants in this study included teachers from Kindergarten to Grade 5 from a suburban school district in New York State. Future researchers may consider comparing elementary teachers' viewpoints to secondary teachers' perspectives to determine if the experiences differ. Future researchers may also consider comparing suburban districts with rural and urban districts to determine if the location or socio-economic status of the where the educators work produces different results.

To finish, future researchers may replicate aspects of this study using quantitative methods with a larger sample size to concentrate on the preferred learning styles of

educators based on Knowles constructs. An electronic survey could be conducted for a specific target population and participants can rank their adult learning preferences, so the researcher can draw conclusions about which of these constructs are most valued by educators. This research can be done within all of New York State or across a larger geographic area.

Summary

It was evident that the elementary educators in this study had varied perceptions of virtual professional development during and after the COVID-19 pandemic. Their lived experiences allowed the researcher to learn about the positive and negatives aspects of virtual professional development using Malcolm Knowles' adult learning theory. The researcher was also able to connect the findings to the perceived impact on the educators' professional growth and careers.

EPILOGUE

As a researcher goes through the process of conducting a study and writing a dissertation, an epilogue offers an opportunity to reflect on the overall process, review the findings, and share and insights that were discovered over the course of the journey. It is interesting to note how the topic of virtual professional development emerged with a greater intensity because the research was conducted during the COVID-19 pandemic. This topic was highly relatable not only to the participants in this study, but also to educators worldwide, as everyone was trying to navigate a new educational landscape both as teachers and learners.

The data collection process was also aligned to the landscape of this virtual environment. As a researcher, it was important to be adaptable to working within various

virtual formats to gather the necessary data. One may have had notions about teachers'

perceptions about virtual professional development and adult learning, but until the data

was collected and their stories were told, only then could conclusions be drawn.

Additionally, it was personally valuable and meaningful to conduct research in "real

time" as information around this topic was rapidly unfolding. The notion of hybrid virtual

professional development was an insight that presented itself during the duration of this

process and it happened organically. In conversations with colleagues and other

professionals in the field, immediate benefits to the hybrid model were noted. When

teachers were able to be in person in the same location, and only the instructor was

virtual, the interaction, engagement, and connection of the in person learning component

was more visible as compared to when all participants were virtual. As a researcher, I

drew inspiration from this notion and I will continue to look for ways to observe, grow,

and evaluate this insight through my continued work in the field.

APPENDIX A: IRB APPROVAL MEMO

Federal Wide Assurance: FWA00009066

Mar 25, 2022 12:08:57 PM EDT

PI: Mary-Ellen Kakalos

CO-PI: Mary Ellen Freeley

Dept: The School of Education, Ed Admin & Instructional Leadership

Re: Initial - IRB-FY2022-200 A PHENOMENOLOGICAL STUDY EXPLORING TEACHERS' PERCEPTIONS OF VIRTUAL PROFESSIONAL DEVELOPMENT THROUGH THE LENS OF ADULT LEARNING THEORY

Dear Mary-Ellen Kakalos:

The St John's University Institutional Review Board Institutional Review Board has approved your initial submission for A PHENOMENOLOGICAL STUDY EXPLORING TEACHERS' PERCEPTIONS OF VIRTUAL PROFESSIONAL DEVELOPMENT THROUGH THE LENS OF ADULT LEARNING THEORY . The approval is effective from March 25, 2022 through March 23, 2023.

PLEASE NOTE: If you have collected any data prior to this approval date, the data must

be discarded.

Findings (if applicable):

Research Notes:

Sincerely,

Raymond DiGiuseppe, PhD, ABPP

Chair, Institutional Review Board

Professor of Psychology

Marie Nitopi, Ed.D.

IRB Coordinator

APPENDIX B: LETTER OF INFORMED CONSENT

Investigator:

Name: Mary-Ellen Kakalos

Institution: St. John's University

Phone Number: 516 835-0472

Email: mary.kakalos19@my.stjohns.edu

Purpose:

You are invited to participate in a study about teachers' perceptions of virtual professional development. The objective of this study is to understand the effectiveness of virtual professional development compared to traditional professional development. You are eligible to participate in this study if you are an educator over the age of 18 years old.

Description of Procedures:

If you agree to participate in this study, the expectations are listed below:

1. Complete an email questionnaire about virtual and traditional professional development (approximately 30 minutes)

2. Participate in a follow up virtual interview (approximately 15-30 minutes)

3. The researcher will conduct a virtual observation of a professional development session.

Participation & Confidentiality:

Your participation in this research is completely voluntary. Refusal to participate will involve no penalty or loss to you. You may terminate your participation at any time. Responses will be confidential. Only the principal investigator will have access to the information you provide. Any information obtained from this study will be used for educational purposes but will not identify project participants in any way and no identifiable information will be used.

Risks:

There are no foreseeable risks associated with this project. If you are uncomfortable answering any questions, you can skip those questions. You can also withdraw from the study at any point.

Benefits:

Although you will receive no direct benefits from participating in this project, this research may help the principal investigator to understand teachers' perceptions of virtual professional development better.

Contact Information:

If there is anything about the study or your participation that is unclear or that you do not understand, if you have questions, or wish to report a research-related problem, you may contact Mary-Ellen Kakalos at (516) 835-0472 mary.kakalos19@my.stjohns.edu or the faculty sponsor, Dr. Freeley at (718) 669-0815 freeleym@stjohns.edu. For questions about your rights as a research participant, you may contact the University's Institutional Review Board, St. John's University, Dr. Raymond DiGiuseppe, Chair

digiuser@stjohns.edu (718)990-1955 or Marie Nitopi, IRN Coordinator,

nitopim@stjohns.edu (718) 990-1440.

***Statement of Consent*:**

By signing below, I agree to participate in this project. You have received a copy of this consent to keep.

_____   _____

Sign Name   Date

_____

Print Name

In addition to consent to participate to this project, I agree to be (audio/video) recorded if necessary.

_____   _____

Sign Name   Date

_____

Print Name

APPENDIX C: QUESTIONNAIRE

1. Please share some background information. Please include the following:

    Current role/current grade level

    How long you have been teaching

    Your certification area(s)

    Your highest level of education

    A Statement about your teaching philosophy

2. Please provide a brief description of the professional development opportunities have you participated in over the last 12-18 months?

3. Please comment on any positive aspects of virtual professional development sessions you've attended.

4. Please comment on any negative aspects of virtual professional development sessions you've attended.

5. How did the pandemic influence your views of virtual professional development?

6. Please share some of your positive traditional (in person) professional development experiences.

7. Please share some of your negative traditional (in person) professional development experiences.

8. Do you prefer traditional or virtual professional development? Why?

9. What instructional methods make for an effective professional development session (either virtual or traditional)?

10. How do you learn best as an adult learner?

11. From the choices below, what characteristics of professional development do you value most and why? Please rank your top 3 choices.

> I learn best with PD courses that I feel that I have a need to know.
>
> I learn best with PD courses that are self-directed.
>
> I learn best with PD that add to my specific experiences.
>
> I learn best with PD courses that have immediate relevance.
>
> I learn best with PD courses that have immediate application.
>
> I learn best with PD courses that I am internally motivated about.

12. How would you compare virtual professional development and traditional professional development as it relates to your professional growth/career?

APPENDIX D: INTERVIEW PROTOCOL

ST. JOHN'S
UNIVERSITY
THE SCHOOL OF EDUCATION

1. Please expand on your experiences with virtual professional development.

2. Please expand on your experiences with in person professional development.

3. Tell me more about the way you learn as an adult referencing these Statements below.

   - I learn best with PD courses that I feel that I have a need to know.

   - I learn best with PD courses that are self-directed.

   - I learn best with PD that add to my specific experiences.

   - I learn best with PD courses that have immediate relevance.

   - I learn best with PD courses that have immediate application.

   - I learn best with PD courses that I am internally motivated about.

4. Can you explain which professional development you have participated in (virtual or in person) which influenced your professional growth or career the least?

5. Can you explain which professional development you have participated in (virtual or in person) which influenced your professional growth or career the most?

APPENDIX E: PROFESSIONAL DEVELOPMENT FEEDBACK FORM

ST. JOHN'S
UNIVERSITY
THE SCHOOL OF EDUCATION

Topic: _____

Name a concept/skill/strategy that you learned from this session.

_____

_____

_____

What is your opinion about the format of this session?

_____

_____

_____

Were there any technical difficulties you experienced during this session? If so, did it

effect your session? Please describe below.

_____

_____

_____

Do you have any suggestions which would improve this professional development

experience?

Please share your thoughts below.

REFERENCES

Baran, B., & Cagiltay, K. (2006). Teachers' experiences in online professional development environment. *Turkish Online Journal of Distance Education, 3*(2), 145-173.

Bates, M.S., Phalen, L., & Moran, C. (2016) Online professional development: A primer. *Phi Delta Kappan, 97*(5), 70-73.

Bill and Melinda Gates Foundation. (2014). *Teachers know best: Teachers' views on professional development.* Retrieved from http://k12education.gatesfoundation.org/ resource/teachers-know-best-teachers-views-on-professional-development/

Bloomberg, L. D., & Volpe, M. (2019). *Completing your qualitative dissertation: A road map from beginning to end*.

Centers for Disease Control and Prevention. (2021). *CDC Works 24/7*. [online] Available at: <https://www.cdc.gov/> [Accessed 20 November 2021].

Charalambos, Vrasidas & Zembylas, Michalinos. (2004). Online professional development: Lessons from the field. *Education + Training.* 46(6/7), 326-334 10.1108/00400910410555231.

Charmaz, K (2015). *Constructing grounded theory* (2nd ed.). Sage.

Cochran, C., & Brown, S. (2016). Andragogy and the adult learner. In K. A. Flores, K. D. Kirstein, C. E. Schieber, & S. G. Olswang, *Supporting the success of adult and online students: Proven practices in higher education* (Vol.5, pp.73-84). CreateSpace Independent Publishing Platform.

Creswell, J.W. (2018). *Qualitative inquiry and research design: Choosing among five*

traditions. (4th Edition). Sage Publications, Inc.

Creswell, J.W., & Creswell, J.D. (2018). *Research design: Qualitative, quantitative, and mixed methods approaches* (5th ed.). Sage Publications, Inc.

Darling-Hammond, L., Hyler, M., & Gardner, M. (2017). *Effective teacher professional development*. Learning Policy Institute.

Darling-Hammond, L., ed. (1994). *Professional development schools: Schools for developing a profession*. Teachers College Press.

Darling-Hammond, L., & McLaughlin, M.W. (1995). Policies that support professional development in an era of reform. *Phi Delta Kappan*, 76: 597-604.

Dziuban, C., Graham, C., Moskal, P., Norberg, A., & Sicilia, N. (2018). Blended learning: The new normal and emerging technologies. *International Journal of Educational Technology in Higher Education, 15*(3), 1-16. doi: 10.1186/s41239-017-0087-5

Every student succeeds act. (2017). Retrieved from U.S. Department of Education: https://www.ed.gov/essa?src=ft

Fogart, R., & Pete, B. (2004). *The adult learner: Some things we know.* Hawker Brownlow Education.

Flynn, M. (2021). The End of Boring Online PD: For virtual professional development to stick, make it engaging, challenging, and EPIC. *Educational Leadership*, 78(5), 2 7–32.

Garrison, D. R., & Vaughan, N. (2008). *Blended learning in higher education: Frameworks, principles, and guidelines.* San Francisco, CA: Jossey-Bass.

Hrastinski, S. (2008). Asynchronous & synchronous e-learning. *Educause Quarterly,*

31(4), 51-55.

James, Nalita. (2005). The use of email interviewing as a qualitative method of inquiry in educational research. *British Educational Research Journal* 33(6), 963-976

Knowles, M. S. (1975) *Self-Directed Learning. A guide for learners and teachers*, Prentice Hall/Cambridge.

Knowles, M. S. (1980). *The modern practice of adult education: From pedagogy to andragogy.* Association Press.

Knowles, M. S. (1990). Adult learning: Theory and practice. In L. Nadler & Z. Nadler (Eds.), *Staff Development: A handbook of effective practices* (pp.44-57). National Staff Development Council.

Knowles, M. S., Holton, E. F., & Swanson, R. A. (2015). *The adult learner: The definitive classic adult education and human resource development* (8th ed.). Abingdon Routledge.

Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry.* Sage.

Lincoln, Y. S., & Guba, E. G. (2000). Paradigmatic controversies, contradictions, and emerging confluences. In N.K. Denzin & Y.S. Lincoln (Eds.), *Handbook of qualitative research* (2nd ed., pp. 163-188). Sage.

Mann, C. & Stewart, F. (2000*) Internet communication and qualitative research. A handbook for researching online.* Sage.

Maxwell, J. A. (2013). *Qualitative research design: An interactive approach* (3rd ed.). Sage.

Mills, M. E., & Gay, R. L. (2018). *Educational research: Competencies for analysis and applications* (12th ed.). Pearson.

Mizell, H. (2010). *Why professional development matters.* Learning

Forward. Retrieved from https://learningforward.org/publications/recent-research-

and-reports

Moore, M., Robinson, H., Sheffield, A. & Phillips, A. (2017). Mastering the blend: A

professional development program for K-12 teachers. *Journal of Online*

Learning Research, 3(2), 145-173. Association for

the Advancement of Computing in Education (AACE).

National Center for Educational Statistics. (n.d.) https://data.nysed.gov/enrollment

New York State Professional Development Standards. (n.d.)

http://www.highered.nysed.gov/tcert/pdf/pdstds.pdf

Palloff, R.M., & Pratt, K. (2007). *Building online learning communities: Effective*

strategies for

the virtual classroom. John Wiley & Sons.

Patton, M. Q. (2015). *Qualitative research and evaluation methods* (4th ed.). Sage.

Saldaña, J. (2016). *The coding manual for qualitative researchers* (3rd ed.). Sage.

Sharma, G. (2017). Pros and cons of different sampling techniques. *International Journal*

of Applied Research, 3(7), 749-752. Retrieved from

http://www.allresearchjournal.com/archives/?year=2017&vol3&issue=7&part=K

Seidman, I. (2012). *Interviewing as qualitative research: A guide for researchers in*

education and the social sciences (4th ed.). Teachers College Press.

Watkins, J., Jaber, L., & Dini., V. (2020) Facilitating scientific engagement

online: Responsive teaching in a science professional development

program, *Journal of Science Teacher Education, 31*(5), 515-536.

10.1080/1046560X.2020.1727622

Weber, S. (1993) The narrative anecdote in teacher education, *Journal of Education for*

Teaching, 19(1), 71-81.

Will, M. (2016, November 23). *Study: Most professional training for teachers doesn't*

qualify as "high quality". Retrieved from Education Week:

http://blogs.edweek.org/teachers/teaching_now/2016/11/essa_pd_report.htm

VITA

Name	*Mary-Ellen Montauredes-Kakalos*
Baccalaureate Degree	*Bachelor of Arts, Hofstra University, Hempstead, New York*
	Major(s): Elementary Education and Speech Communications
Date Graduated	*May, 1998*

Other Degrees and Certificates*

Master of Science, Hofstra University, Hempstead, New York

Major: Education with a specialization in Reading

August, 1999

Professional Diploma in Educational Administration, SUNY Stonybrook

Date Graduated	*August, 2003*