

# K-12 Virtual Educators' Perceptions of Professional Development Initiatives

John H. Gorman

B.A., Pittsburg State University, 2005

M.S., Pittsburg State University, 2014

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*Regena M. Aye*

Regena M. Aye, Ed.D.  
Major Advisor

*Wendy A. Gentry*

Wendy A. Gentry, Ph.D.

*Kimberly Kreicker*

Kimberley Kreicker, Ph.D.

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## **Abstract**

Quality educator professional development (PD) is critical to the success of K-12 organizations. However, there is a lack of information surrounding professional development for virtual educators. This phenomenological study had two purposes: 1) To examine participants perceptions of their 2022-23 PD initiatives, and 2) To explore the types of PD initiatives that would meet their future needs. An impartial, third-party interviewer conducted semi-structured interviews via Zoom with 10 participants from a northeast Kansas public virtual school using an interview protocol. Each interview was transcribed, and a qualitative data analysis was performed. Eight central themes were derived from the data: 1) Past PD initiatives were perceived as ineffective due to a lack of consideration and awareness of virtual educators' PD needs, 2) PD initiatives educators perceived as valuable have involved interaction with other virtual educators, 3) Participants did not perceive their feedback regarding PD initiatives was listened to or considered, 4) Participants believe increased collaboration with other virtual educators will increase the value and relevance of their PD initiatives, 5) Participants believe increased input and autonomy will make their PD initiatives more valuable and relevant, 6) Participants believe PD initiatives developed by those with experience in virtual education will make their PD initiatives more valuable and relevant, 7) Participants believe applicable PD initiatives and adequate time to learn, practice, and apply the PD content will make their PD initiatives more valuable and relevant, and 8) Participants believe future PD initiatives that address student engagement will make their PD initiatives more valuable and relevant. The results of this study provided an opportunity to offer implications for action and recommendations for future research.

## **Dedication**

I dedicate this dissertation to my family. I love you all more than I could ever articulate. Although it is my name on the title page, a dissertation is never completed in isolation. I thank Granddad for teaching me the importance of persistence and resolve. I thank Poppy for teaching me about bravery in the face of real adversity. Lessons gleaned from both men kept things in perspective when I thought the going got ‘tough’. I thank my parents for their unwavering support and guidance in all I have ever done. I will be forever grateful. Most importantly, I thank my wife. Your daily support and patience over the last few years made the completion of this dissertation possible. I know it has been a sacrifice and I would not have finished this task if you weren’t by my side every step of the way. I promise to make all the late nights, brief conversations, and missed walks with Peanuts and Murphy worth it as we continue our journey together.

It’s time to see what’s next.

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## **Chapter 1**

### **Introduction**

As desktop computers and internet access became ubiquitous in K-12 classrooms during the 1990s, the swift and inexorable evolution from traditional brick-and-mortar schools to full-time virtual schools began. The availability of virtual school options for K-12 students has outpaced empirical research examining the professional development (PD) virtual educators require to ensure they have the pedagogical and technological skills to provide effective instruction (Archambault & Kennedy, 2014). According to DiPietro et al. (2008), there is a substantial knowledge gap regarding best instructional practices in K-12 virtual learning environments. Teacher PD has often failed to adequately address the concerns stemming from teacher needs, school curriculum, or challenges encountered during content implementation (Looi et al., 2018). Public school organizations have inundated teachers with assistance, but most of what is offered has lacked relevance and failed to support their PD needs effectively (Macias, 2023). Educators and administrators have disagreed on which PD topics are most relevant (Elliott, 2017). To design effective PD initiatives, PD coordinators must be responsive to the needs of educators and the context in which the learning takes place (Darling-Hammond et al., 2017).

The current phenomenological study examined a population of K-12 virtual educators' perceptions of virtual PD to understand which types of PD are deemed valuable and relevant by this specific group. This chapter includes background information about the current study, the statement of the problem, the purpose and significance of the study, the delimitations and assumptions of the study, the research

questions, definitions of discipline-specific terms, and the general organization of the study.

## **Background**

The first incarnations of what is now commonly known as K-12 virtual schools were launched in 1991 (Barbour, 2013; Clark, 2013; Hu et al., 2019), and K-12 virtual schools have grown in popularity since their inception (DiPietro et al., 2008). Barbour (2012) reported that K-12 students receiving all or part of their education online grew from 45,000 in 2001 to approximately 4,000,000 in 2011. Over 297,700 students were enrolled in full-time K-12 virtual programs during the 2017-2018 school year (Molnar et al., 2019). Students participating in full-time K-12 virtual programs grew to 375,000 during the 2018-2019 school year (The Digital Learning Collaborative, 2022). During the 2019-2020 school year, 5,045,492 students were enrolled in one of the 691 virtual schools or 8,673 supplemental virtual schools in the United States (National Center for Educational Statistics, 2021). In response to several factors, primarily the effects of the COVID-19 Pandemic, the number of students receiving a full-time K-12 virtual education grew by 75% during the 2020-2021 school year to 656,000 (The Digital Learning Collaborative, 2022). Additionally, the Digital Learning Collaborative (2022) claimed that during the 2021-2022 school year, more than 1,000 school districts planned to significantly increase the capacity of their online schools in anticipation of a further increase in K-12 student enrollment. The predicted increase in enrollment indicated that although the U.S. educational system had primarily returned to pre-pandemic operations, many districts still expected a future rise in full-time K-12 online enrollment.

Although virtual school has become an increasingly prevalent option for students throughout the U.S., online educators often do not receive adequate instruction on developing effective online material (Hartshorne et al., 2020; Zweig & Stafford, 2016). The disparity between the training teachers need to provide effective instruction in the virtual environment and the training they receive in preservice teacher training programs has been explored and acknowledged (Archambault & Larson, 2015; Barbour & Harrison, 2016; Duncan & Barnett, 2009; Farmer & West, 2019; Kennedy & Archambault, 2012; Leary et al., 2020).

Archambault and Larson (2015) found most preservice teacher training neglected to address the techniques required to teach in the virtual environment, and most virtual educators learned virtual instructional strategies while in the field.

Kennedy and Archambault (2012) conducted a national survey of preservice teacher education programs and discovered that only 1.3% of these programs provided virtual teaching experiences. Five years later, a subsequent study revealed only 4.1% of preservice teacher education programs offered virtual teaching experience to teacher candidates (Archambault et al., 2016). Even teachers who graduated from the handful of preservice teacher training programs that provided training in virtual instruction still had misconceptions about K-12 online instruction and felt unprepared to provide instruction virtually (Barbour & Harrison, 2016; Hodges et al., 2020). Unfortunately, recent research still suggested a lack of virtual instruction courses and student teaching opportunities in preservice teacher training programs (Eadens et al., 2022; Johnson et al., 2022; McAllister & Graham, 2016; Middleton, 2020; Zweig & Stafford, 2016).

As a result of inadequate preservice teaching training, virtual educators frequently rely on PD provided by hiring institutions or engage in self-directed learning to gain knowledge about virtual instruction (Zweig & Stafford, 2016). For example, Zweig and Stafford (2016) surveyed 324 virtual educators and found that 75% of graduating K-12 virtual educators received no PD related to virtual education before teaching. Virtual educators' reliance on in-house PD opportunities to gain and refine the instructional and technical skills required to teach in the virtual environment illuminates the importance of having access to quality PD within their organization. Adnan (2018) asserted quality PD is "critical for virtual educators to understand online pedagogies and teaching, adopting new roles through skills acquisition for teaching via online media, and is strongly linked to the quality of online education" (p. 91). Desimone (2009) declared that effective PD initiatives were content-specific, involved active learning, coherent, of sufficient duration, and involved collaborative participation. Haug and Mork (2021) supported this observation, submitting that effective PD allows teachers to engage, collaborate, and reflect on their profession. However, 20% of administrators acknowledged either disregarding guidelines or being unaware of existing guidelines for PD when creating PD initiatives for their virtual educators (Rice & Dawley, 2009).

Many studies have shown that effective educator PD plays an essential role in the success of academic organizations (Adnan, 2018; Desimone, 2011) and is critical in supporting the skills students need in the 21<sup>st</sup> century (Darling-Hammond et al., 2017). Furthermore, Hammond and Moore (2018) asserted, "high quality professional learning is a key component in reform-based agendas in education" (p. 111). A considerable body of research discusses the structure, content, or outcomes of effective PD in different

contexts (Darling-Hammond et al., 2017; Desimone, 2011; Osborne et al., 2019). Research studies have examined brick-and-mortar teachers' perceptions of traditional PD (Haug & Mork, 2021; McKeown et al., 2019; Smith & Robinson, 2020), the general characteristics of effective PD (Sims et al., 2021), the effects of PD on student achievement in various content areas (Dick et al., 2022; Didion et al., 2019; Li et al., 2021; Piasta et al., 2015), and effective PD for ESL students (Truong & Murray, 2019). Although less numerous than research articles that discussed brick-and-mortar teachers' perceptions of traditional PD, a handful of researchers have observed brick-and-mortar teachers' experiences and perceptions of online PD (Alzahrani & Althaqafi, 2020; Beach et al., 2022; Beilstein et al., 2021; Herranen et al., 2021; Mullen & Badger, 2023; Northcote et al., 2019; Parsons et al., 2019; Poole et al., 2020; Powell & Bodur, 2019; Walters et al., 2021; Yildirim et al., 2022). However, Parsons et al. (2019) contended that "in spite of the international proliferation of online teaching and learning, limited empirical work has explored teachers' perceptions of participating in online PD or the efficacy of online PD" (p. 39).

There has been limited publication of research about the PD requirements of virtual educators (Dawson & Dana, 2018). A research gap exists in PD and the characteristics of PD virtual K-12 educators perceive to be beneficial, authentic, collaborative, and relevant. Numerous researchers have supported this position (Dawson & Dana, 2018; Farmer & West, 2019; Roy & Boboc, 2016; Sanders & Lokey-Vega, 2018). There is a lack of information regarding whether online educators actively participate in PD focused on online instruction, the efficacy of the PD, and the areas where additional support is needed. Only a handful of research studies have specifically

analyzed the PD needs of virtual educators or virtual teachers' perceptions of virtual PD (DiPietro et al., 2008; Farmer & West, 2019; Gerbermann, 2021; Roy & Boboc, 2016; Sanders & Lokey-Vega, 2018; Zweig & Stafford, 2016).

In response to numerous researcher recommendations to address the research gap related to K-12 virtual educators and PD, Jacqueline Gerbermann (2021) completed a dissertation titled *Perspectives of Online Teacher PD: An Exploratory Case Study*. Gerbermann's study explored the types of PD online educators perceive to help them in their online instruction and the types of PD that assist teachers who are new to virtual teaching in individualizing instruction to meet the needs of their students. The seven participants in Gerbermann's (2021) study were virtual educators teaching grades 3rd-8th and currently employed at a southeast Texas corporate virtual school.

Gerbermann's (2021) research design employed qualitative survey and semi-structured interview techniques to investigate what virtual teachers and administrators from grades 3rd-8th perceived as beneficial PD. As the data were coded and analyzed, seven themes emerged: presenter qualities, target-specific content, relevancy, usefulness in the classroom, instructional change, the role of the virtual teacher, and student reactions. However, the extent to which these same themes would emerge if this study were conducted at a different virtual school or across different grade levels is unclear. Accordingly, Gerbermann (2021) provided several recommendations for future research that would help address these unknowns. The first recommendation was to conduct similar research at a different virtual school to determine if the themes developed in her dissertation were unique to the Southeast Texas corporate virtual school or if the results could be generalized. A second recommendation was to include teachers from grades K-



2nd or 9th-12th in a similar study to observe if the findings from the Southeast Texas corporate virtual school educators in grades 3rd-8th could be generalized across other grade levels.

The current study involved the perceptions of K-12 virtual educators employed at an accredited virtual school in Northeast Kansas (NKV). NKV was founded in 2004 as a charter school but has been fully integrated into the local unified school district. During the 2022-2023 academic year, NKV enrolled 792 students in grades K-12 and employed 40 full-time, certified K-12 educators (Unified School District 497, 2023). All students who attended NKV were required to be residents of the state of Kansas (Unified School District 497, 2023). One administrator, the Director of Virtual Education, oversaw all NKV K-12 operations (Unified School District 497, 2023). PD initiatives provided to NKV educators are primarily developed by the NKV administrator or district-level administrators. NKV educators occasionally lead a PD initiative if they have a specific skill set deemed necessary to share with the rest of the NKV educators. NKV remains a K-12 virtual school option for students who reside in the state of Kansas.

### **Statement of the Problem**

There is a lack of information surrounding virtual educators' PD needs and their perceptions of virtual PD initiatives (Bragg et al., 2021; Dawson & Dana, 2018; Farmer & West, 2019; Gerbermann, 2021; Johnson et al., 2022). As virtual learning has continued to proliferate, research regarding the needs of virtual educators has failed to keep pace (Archambault & Kennedy, 2014). As a result, there has remained limited research investigating educators' perceptions of online PD (Macià & García, 2016; Parsons et al., 2019). According to DiPietro et al. (2008), "much of the existing writing

about virtual school teaching does not come from interactions with virtual school teachers” (p. 12). Few studies have specifically analyzed the PD needs of K-12 virtual educators or virtual educators’ perceptions of virtual PD (DiPietro et al., 2008; Farmer & West, 2019; Gerbermann, 2021; Roy & Boboc, 2016; Sanders & Lokey-Vega, 2018; Zweig & Stafford, 2016).

The deficiency of research in this area has been problematic because PD plays an essential role in the success of virtual educators (Adnan, 2018) and in supporting the skills students need to be successful 21st-century learners in the virtual environment (Darling-Hammond et al., 2017). To construct PD that provides K-12 virtual educators with the tools necessary to deliver a quality learning experience to students, designers must gain a deeper understanding of virtual educators’ experiences (Archambault & Kennedy, 2014; Farmer & West, 2019). As a result, there are numerous recommendations for further research studies devised to better understand the perceptions of virtual educators in a variety of different K-12 content areas, grade levels, and virtual school structures as they relate to PD (Archambault & Kennedy, 2014; Dawson & Dana, 2018; Farmer & West, 2019; Johnson et al., 2022; Leary et al., 2020; Molnar et al., 2021; Roy & Boboc, 2016; Sanders & Lokey-Vega, 2018; Zweig & Stafford, 2016).

A survey completed by 32 NKV educators in the spring of 2023 revealed that most current NKV educators did not perceive PD initiatives delivered during the 2022-2023 academic years as valuable, relevant, or personalized (Panorama, 2023). When NKV educators were asked about the perceived value of the PD they were provided, none of the educators responded favorably (either *quite valuable* or *extremely valuable*). Twenty-four percent indicated that PD was *not valuable at all*, 39% indicated it was *slightly*

*valuable*, and 36% indicated it was *somewhat valuable*. When asked about the perceived relevance of NKV PD, 33% indicated that it was *not relevant at all*, 30% indicated it was *slightly relevant*, and 30% indicated it was *somewhat relevant*. Only 6% of NKV educators responded favorably and indicated that PD was *quite relevant* to their role as virtual educators. No NKV educators indicated that PD was *extremely relevant*. Additionally, only 12% of NKV educators responded favorably when asked about the amount of input they have in individualizing their PD opportunities. Eighteen percent indicated they have *almost no input*, 30% indicated they have *a little bit of input*, and 39% indicated they have *some input*. These results suggested that more information was needed about the general effectiveness of PD initiatives provided to NKV educators. Furthermore, the results illuminated the necessity to determine the specific types of PD opportunities NKV educators perceive as necessary and relevant.

### **Purpose of the Study**

The first purpose of the current phenomenological study was to examine the perceptions of NKV educators to understand which types of recent PD initiatives were deemed most relevant and beneficial to this specific group of educators. The second purpose of the current study was to determine what types of PD are needed by NKV educators. Research conducted in online education has identified considerable pedagogical, operational, and student-related challenges encountered by virtual educators, but it remains unclear whether these concerns adhere to predictable patterns that can be anticipated and adequately addressed (Farmer & West, 2019).

### **Significance of the Study**

The findings of the current study contribute to the research surrounding effective PD for virtual educators in several ways. First, the results from the current study will enable NKV educators to express their perceptions of current district PD initiatives and provide input about which types of PD they need to facilitate better instruction and student learning. The findings of the current study could inform district administrators on the types of PD activities perceived as valuable and relevant to assist with planning future PD that would better meet the needs of NKV educators. Identified trends in these perceptions could enhance the organization's PD coordinators' understanding of the effectiveness of current NKV PD initiatives and the current PD needs of NKV educators.

### **Delimitations**

Delimitations encompass the boundaries set by the researcher to narrow the topic and limit the scope of the study. Research delimitations are shaped by conscious decisions made by the researcher regarding what to include and exclude. Therefore, delimitations are a direct consequence of specific choices made by the researcher (Simon & Goes, 2013). Several delimitations were established in the current study to help define the scope and boundaries of the current research:

1. The current study was conducted at one K-12 public virtual school in Northeast Kansas (NKV). NKV was chosen based on the researcher's access to the school and the school's willingness to participate in the study. As with all individual educational institutions, NKV has its own distinctive culture, policy structure, and PD initiatives.

2. The current study focused only on NKV educators' perceptions of PD sessions that occurred during the academic year of August 2022 to May 2023.
3. The first ten participants who were certified, full-time K-12 NKV educators during the 2022-2023 academic year, participated in NKV PD initiatives during the 2022-2023 academic year, continued to be employed during the 2023-2024 academic year, and responded to the recruitment email were selected to participate in interviews.
4. The current study employed qualitative interviews for data collection. Other data, such as document analysis and observation, were not included.
5. Only the researcher for the current study analyzed and interpreted the interview data collected by an impartial third-party interviewer.

### **Assumptions**

Assumptions in academic research are aspects of the study that are accepted as true (Roberts & Hyatt, 2019). The following assumptions were made for the current study:

1. Participants' institutional employment records for 2022-2023 and 2023-2024 were updated, and district email addresses were accurate.
2. The participants comprehended the interview questions and optional follow-up questions asked of them during the interviews.
3. Participants, to the best of their knowledge, provided honest and open responses about their perceptions of PD.

4. All participants had an educational background and prior teaching experiences that would give them meaningful insight into their current PD experiences as virtual educators.
5. The researcher's role as the data collector and analyst was recognized, and potential biases were managed throughout the research process.

### **Research Questions**

The first purpose of the current study was to explore NKV K-12 virtual educators' perceptions of recent virtual PD initiatives they received and to determine if NKV educators felt these initiatives were valuable and relevant. The second purpose of the current study was to determine what types of PD are needed by NKV virtual educators.

The following research questions guided the current study:

#### ***RQ1***

What are NKV educators' perceptions of professional development initiatives during 2022-2023 regarding their value, relevance, and meeting their needs as virtual educators?

#### ***RQ2***

What types of professional development do NKV educators perceive would be valuable, relevant, and better meet their needs as virtual educators?

### **Definition of Terms**

This section of the dissertation defines terms used in the current study that are uncommon or could be misunderstood by the reader (Roberts & Hyatt, 2019). The following terms are defined operationally within the context of the current study.

### ***Andragogy***

Andragogy is the art and science of teaching adults (Knowles et al., 2015).

### ***K-12 Virtual School***

A K-12 virtual school is an educational organization where students can earn credit toward graduation or promotion to the next grade level by completing specific graduation requirements (Beck & Beasley, 2021).

### ***Online Professional Development***

PD is structured, formal professional learning that is provided entirely online, resulting in changes to teacher knowledge, behavior, and practices (Bragg et al., 2021).

### ***Professional Development Coordinator***

A PD coordinator oversees the design, implementation, and growth of educator PD initiatives (Bernhardt, 2015).

### ***Virtual Student***

A virtual student receives their education entirely online and does not meet with teachers and other students in a physical school building (Black et al., 2021).

### **Organization of the Study**

This dissertation is divided into five chapters. Chapter 1 introduced the study and included background information, the statement of the problem, the purpose and significance of the study, and the delimitations and assumptions of the study.

Additionally, Chapter 1 introduced three research questions and operational definitions for terms used in the study. Chapter 2 examines the literature relevant to the research and introduces the conceptual framework for this study. Chapter 3 outlines the methods used

to investigate the phenomenon, including the research design, the setting and sampling procedures, the instruments and data collection procedures, and the data analysis and synthesis processes. The measures used to guarantee the study's reliability and trustworthiness, the researcher's overall role in the study, and the study's limitations are also included in Chapter 3. Chapter 4 presents the results of the data analysis, including the themes that emerged after analyzing and synthesizing data. Chapter 5 summarizes the study, the findings related to the literature, and the overall conclusions. Additionally, implications for action, recommendations for future research, and concluding remarks are included in this final chapter.



## **Chapter 2**

### **Literature Review**

The present chapter is organized into seven primary sections that present a review of the literature relevant to the current study. The initial section defines educator PD and its crucial role as a fundamental component within effective K-12 public education organizations. The second section examines the federal legislation and funding that has impacted educator PD initiatives throughout the last eight decades. The third section details several prominent PD frameworks commonly cited in PD research and utilized and referenced by PD coordinators as a point of reference. The fourth section provides examples of popular PD delivery models and organizes them into categories. The fifth section focuses on the models and delivery of PD specific to virtual educators. The sixth section discusses K-12 educators' PD needs and perceptions of online PD initiatives. The final section of this literature review introduces the conceptual framework used in the current study to investigate virtual educators' perceptions and needs related to virtual PD.

#### **Professional Development Defined**

PD has been essential in enhancing educators' capacity to address the academic, behavioral, and social needs of their students (Bloomfield et al., 2022). It is widely accepted that effective educator PD initiatives have played a critical role in the success of educational organizations (Adnan, 2018; Darling-Hammond et al., 2017; Desimone, 2011; Frerichs et al., 2018; Kennedy, 2016; Kraft et al., 2018). Accordingly, it has been standard practice for public schools to rely on educator PD initiatives to increase student achievement (Pharis et al., 2019). Over the years, researchers have defined teacher PD in numerous ways. For example, Little (1987) broadly stated PD was "any activity that is

intended partly or primarily to prepare paid staff members for improved performance in present or future roles in the school districts” (p. 491). Guskey (2000) characterized PD as “processes and activities designed to enhance the professional knowledge, skills, and attitudes of educators so that they might, in turn, improve the learning of students” (p. 16). Darling-Hammond et al. (2017) incorporated aspects from the previous definitions when they described PD as “structured professional learning that results in changes in teacher practices and improvements in student learning outcomes” (p. 2). Although these individual definitions were published over several decades, the fundamental connotation of the term remained much the same. PD has been intended to provide educators with knowledge that was utilized to increase student achievement (Kennedy, 2016).

### **Professional Development and Policy**

Throughout the initial 176 years of its existence, the U.S. federal government played a limited role in the nation’s K-12 educational system. The government primarily relied on state and local governments to oversee local educational processes (Casalapi, 2017). However, several events led to educational reforms impacting preservice teacher training and PD over the last 80 years. The primary catalyst for these educational reforms was Russia’s launch of the *Sputnik* satellite, which caused federal policymakers to question the effectiveness of math and science instruction in U.S. public schools (Christie, 2019). According to Herold (1974), Russia’s development of a superior rocket and guidance technology and beating the U.S. into space “truly frightened them [policymakers] and subsequently helped bring about changes in American education which are just beginning to be assessed and placed in perspective” (p. 143). The fear instilled by Russia’s successful launch of the *Sputnik* satellite exacerbated the criticisms

regarding America's public education system and paved the way for Congress to allocate an unprecedented amount of funding to bolster public education (Jolly, 2009).

The first significant 20th-century educational reform came in 1958 when Congress enacted the National Defense and Education Act (NDEA). The NDEA provided funding earmarked to increase K-12 student achievement in mathematics, science, and foreign languages (Rice, 2014). The NDEA funds were used to establish summer PD programs focused on educator training in mathematics and science (Earley et al., 2011). Critics of NDEA suggest several flaws with the educator PD provided by the legislation: (1) Training was only provided to a small number of teachers; (2) Political backing for the NDEA was based on the premise that the education of the U.S. was inferior to Russia's; and (3) Time has proven the NDEA to be ineffective in improving student achievement in mathematics or science (Earley et al., 2011). Despite these criticisms and the data suggesting the NDEA did not accomplish its initial objectives, Title III of the NDEA explicitly earmarked funds for teacher PD (Jolly, 2009).

A second significant piece of federal legislation important to the evolution of educator PD was the 1965 Elementary and Secondary Education Act (ESEA). Rice (2014) claimed that the ESEA is "perhaps the most comprehensive effort to address problems of quality and equity in the nation's schools" (p. 54). The 1965 ESEA was signed into law by U.S. President Lyndon Johnson, who claimed that a "full educational opportunity" must be "our first national goal" (U.S. Department of Education, n.d.). The ESEA was a comprehensive statute that provided financial support to primary and secondary education (Paul, 2016). Once signed into law in 1965, over one billion dollars would be appropriated to school districts and schools over the next five years to support

learning opportunities (Thomas & Brady, 2005). The ESEA has defined the federal government's role in public education since its inception (Black, 2017).

The original 1965 ESEA contained five provisions signed into law (Casalaspri, 2017). ESEA Title I, the provision allocating most of the grant money, focused on distributing funds to schools and school districts with a high percentage of students from low-income families. ESEA Title II grants provided public and private school children with library books and other educational materials. ESEA Title III grants established supplementary education facilities and other services for students unavailable in their local school systems. ESEA Title IV grants would support academic research centers and teacher development, and ESEA Title V grants were used to bolster state education departments (Jeffrey, 1972). Although all five ESEA provisions provided educational funding, Title IV was potentially the most important to teacher PD initiatives as it earmarked 100 million dollars to fund academic research and teacher training (Paul, 2016). According to Martin (2021), the ESEA was a precursor to providing teachers with PD to identify the needs of at-risk students. The original 1965 ESEA would continue to be restructured and reauthorized over the next five decades (Sharp, 2016).

The next iteration of the ESEA was implemented when President Bill Clinton signed the Improving America's Schools Act (IASA), which extended and amended the existing ESEA (Riddle, 1995). The IASA was predicated on the report, *A Nation at Risk*, published in 1983 by the National Commission on Excellence in Education. This report was authored in direct response to the rising concern that the U.S. was experiencing a decline in global competitiveness and provided an indication of the direction of future educational policy (Rice, 2014). The 1994 reauthorization of the ESEA established the

first collaborative framework between the state and federal levels to implement national standards-based education reforms (Cohen, 2002). States have been required to have a framework of standards, assessments, and accountability at the primary and secondary levels since the 1994 ESEA reauthorization (Cohen, 2002).

A point of emphasis in the amended 1994 ESEA was improving educator training and providing quality PD opportunities to educators (Stedman, 1994). The updated language was added to the legislation to reflect these new priorities. School districts had to submit a detailed PD implementation strategy to receive ESEA Title I funding. Furthermore, schools that received Title I funding had to allocate at least 10% of the funding to PD initiatives. Title II designated 250 million dollars in grant money for PD initiatives in mathematics and science. Title III authorized 215 million dollars in grant money that could be used to establish or promote high-quality instruction for bilingual students. Title X funding provided 10 million dollars in grants that schools could use to fund PD initiatives for teachers who worked with students in gifted education programs (Education Week, 1994). As Stedman (1994) concluded, the IASA replaced “the piecemeal structure of the ESEA” and promoted “the alignment of all educational components – curriculum and instruction, PD, school leadership, accountability, and school improvement – so that every aspect of the of the education system works together” (p. 4).

The ESEA was again reauthorized in 2001 by George W. Bush and renamed the *No Child Left Behind Act of 2001* (NCLB) (Sharp, 2016). According to Thomas and Brady (2005), this new legislation “reflected unprecedented and bipartisan commitment to providing a quality education to all American students, regardless of racial, ethnic, or

socioeconomic background” (p. 55). NCLB introduced the demand that students, regardless of any demographic distinctions, must make adequate yearly progress (AYP) toward meeting a state-defined level of proficiency (Cohen, 2002). All students were expected to meet established grade-level academic expectations by the 2013 – 2014 school year (Thomas & Brady, 2005). Schools that failed to meet these established performance targets were subjected to an increasingly punitive set of consequences until they met the standards (McLaughlin et al., 2005). Naturally, most states and school districts expended tremendous resources on PD initiatives to train teachers in techniques to improve student achievement (Benton & Benton, 2008).

The NCLB reauthorization continued to reflect the understood importance of educator PD and provided teacher PD funds to help school districts meet AYP. For example, the NCLB act provided 2.9 billion dollars that schools could use for PD initiatives to support teachers in making AYP in 2005 (Viadero, 2005). Yoon et al. (2007) identified five criteria for high-quality PD initiatives as outlined in the NCLB Act:

- 1) PD must be sustained, intensive, and content-focused.
- 2) PD is aligned with state academic standards, student achievement standards, and assessments.
- 3) PD improves educators’ knowledge of the subjects they teach.
- 4) PD improves educators’ understanding of effective pedagogical techniques.
- 5) PD is evaluated to determine the impact of teacher effectiveness on student achievement.

Although the NCLB attempted to provide educators with the tools and incentives to increase the academic achievement levels of all students, the educational community

recognized weaknesses in the NCLB legislation. According to Close et al. (2018), researchers “investigated and subsequently questioned the practice of tying high-stakes consequences to scores on such large-scale assessments, especially at the student and teacher levels” (p. 3). It became clear that updated legislation was needed.

As a partial result of the criticism regarding the high-stakes nature of NCLB, the most current reauthorization of the ESEA was signed in 2015 by Barack Obama and renamed the *Every Student Succeeds Act* (ESSA) (Close et al., 2018). The ESSA reduced federal oversight and allowed states more autonomy over state assessments and accountability systems than under NCLB (Edgerton, 2019). While the ESSA gave schools the freedom to select assessment and accountability systems, this shift imposed a greater responsibility on local school districts to meet the academic needs of their students (Zinskie & Rea, 2016). To support school districts in meeting the needs of their students, the ESSA provided specific PD funding under Titles I, II, III, and VI of the bill (Skinner, 2022). For the 2023 fiscal year, schools were eligible for 18.39 billion in Title I funds and 2.19 billion in Title II funds. This funding constituted an increase of over 1.2 billion under Titles I and II combined (First Five Years Fund, 2023).

### **Professional Development Frameworks**

Academic standards for students and educators have been raised significantly due to educational research, reforms, policies, and societal expectations that dictate the development of 21<sup>st</sup>-century skills (Roy & Boboc, 2016). Providing effective PD to teachers has been critical to educational organizations (Kraft et al., 2018). Traditional and online PD initiatives rely on similar characteristics to make them effective (Elliott, 2017). Accordingly, effective PD initiatives have been a critical component in countless

proposals to improve the quality of educational organizations (Guskey, 2002; Little & Housand, 2011). The body of empirical research on the structure, content, and outcomes of the characteristics of effective PD has grown in recent years (Osborne et al., 2019). Several experimental evaluations have examined the impact of PD and the individual characteristics of successful PD (Sims et al., 2021). Although there are multiple frameworks used to construct effective PD initiatives, according to Guskey (2000), “One constant finding in the research literature is that notable improvements in education almost never take place in the absence of professional development” (p. 4).

Desimone (2009) contended that “understanding what makes professional development effective is critical to understanding the success or failure of many education reforms” (p. 181). Based upon a synthesis of empirical research, Desimone (2009) identified five central characteristics that were necessary to construct effective PD:

1. Content focus – PD should focus on subject matter content and solidify an understanding of how students best learn that content.
2. Active learning – PD should incorporate activities that allow educators to connect their learning and classroom instruction.
3. Coherence – PD should align with state and district goals and standards for student learning.
4. Duration – The length of a PD session should be sufficient to allow intellectual or pedagogical change to occur.

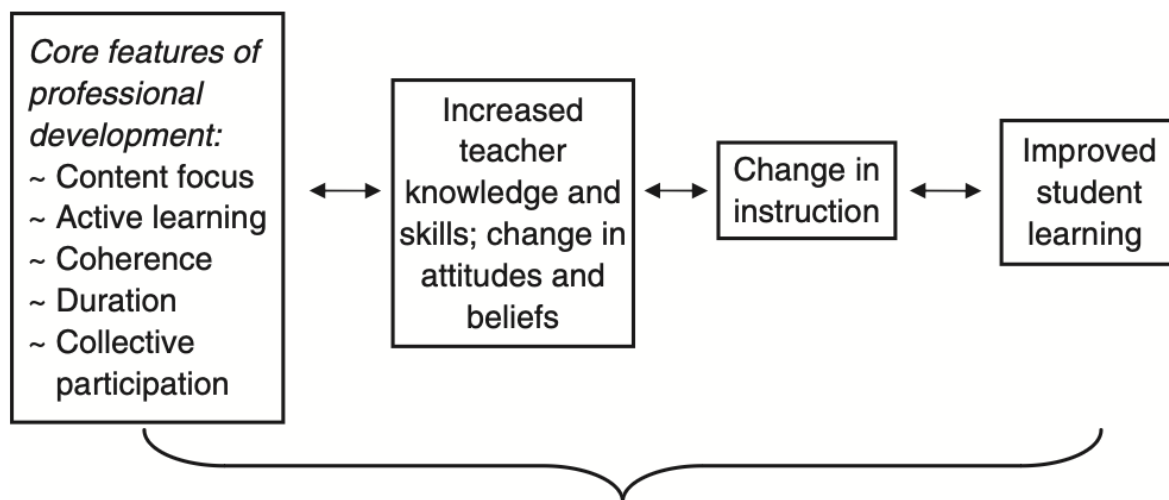


5. Collective participation – Educators from the same school, grade, or level should participate in the same PD sessions to build a collaborative learning community.

Desimone (2009) asserted that PD initiatives that included these five components could increase educator knowledge and skills, leading to a change in instructional practices and, ultimately, an improvement in student learning (see Figure 1). These five key components are widely recognized as essential for effective educator PD (Kennedy, 2016; Main & Pendergast, 2015) and have frequently been referenced by PD coordinators as a guiding PD framework (Osborne et al., 2019).

### Figure 1

*Desimone's Core Conceptual Framework for Professional Development*



Note. From “Improving Impact Studies of Teachers’ Professional Development: Toward Better Conceptualizations and Measures,” by L. M. Desimone, 2009, *Educational Researcher*, 38(3), p.185 (<https://doi.org/10.3102/0013189x08331140>). In the public domain.

Although Desimone (2009) provided a widely respected and utilized PD framework, researchers continued to examine the characteristics of effective PD and created subsequent frameworks that can be used to construct effective PD initiatives. For example, Darling-Hammond et al. (2017) reviewed 35 studies that suggested a positive relationship between PD initiatives, educator instructional practices, and student achievement. The meta-analysis discovered these effective PD initiatives were:

1. Content-focused – PD emphasized content-specific teaching strategies and curriculum development.
2. Incorporated active learning – PD encouraged teachers to engage in the same activities they were to develop for their students. This PD consciously avoided lecture-based activities and utilized authentic artifacts and interactive activities to create a contextualized PD experience for the educators.
3. Supported collaboration – PD should encourage teachers to share ideas in job-specific contexts.
4. Used models of effective practice – PD should provide curricular and instructional models for educators to reference.
5. Provided coaching and expert support – PD should offer educators coaching and expert support based on individual needs.
6. Offered feedback and reflection – PD should provide educators time to reflect on the questions that can provide valuable feedback.
7. Was of sustained duration – PD should afford teachers adequate time to learn, practice, implement, and reflect upon what they have learned.

Bates et al. (2018) supported these findings and contended that while these characteristics of effective PD could be implemented individually, the most effective PD would integrate each of the seven attributes from this framework.

One of the most widely recognized recommendations in the literature surrounding PD has been the necessity of a sustained commitment to a PD initiative to be effective (Little & Housand, 2011). However, there has been debate concerning the necessary duration of PD (Darling-Hammond et al., 2009). Numerous studies produced contradictory results between the causality of the duration of PD initiatives and the desired effects of the initiative (Fletcher-Wood & Zucollo, 2020). In an analysis of nine methodologically rigorous studies, Yoon et al. (2007) discovered that PD initiatives with a duration of over 14 hours produce a positive and significant effect on student achievement. Desimone (2009) recommended that PD initiatives occur over a semester and include at least 20 hours of direct training. Fletcher-Wood and Zucollo (2020) contended that “thirty-five hours seems a reasonable amount of time to have a meaningful impact” (p. 16). Although researchers have not agreed on a specific threshold for successful PD, the literature indicated that one-day PD workshops were ineffective and that a sustained focus was necessary if any PD initiative was to produce the desired results (Bates et al., 2018; Darling-Hammond et al., 2017; Desimone, 2009).

### **Professional Development Models**

The models used to deliver traditional PD to educators have remained relatively consistent since the turn of the century. Because there has been little research focused directly on PD for online teachers (Archambault & Kennedy, 2014), examining PD research conducted in face-to-face instructional environments has proven valuable in the

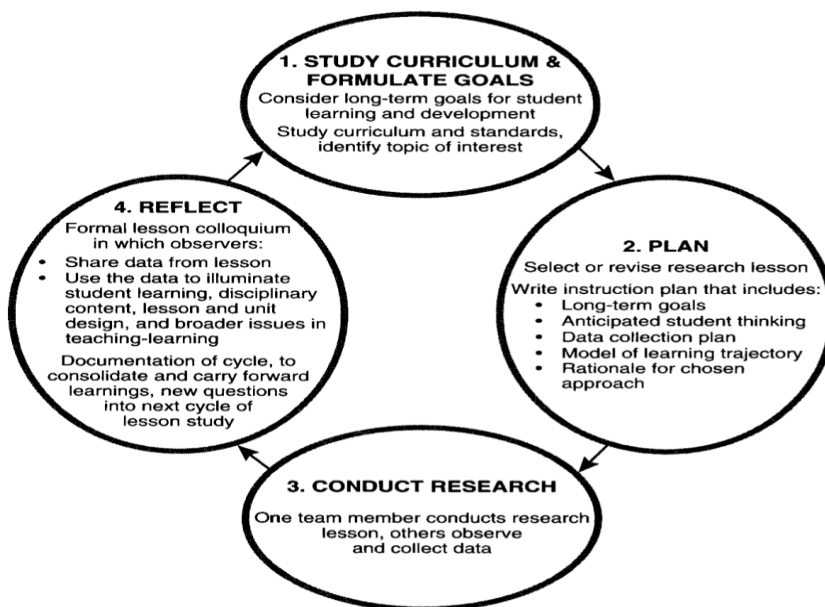
endeavor to gain a deeper understanding of the PD requirements in virtual instructional environments (Zweig & Stafford, 2016). Guskey (2000) outlined seven predominant models of educator PD that have been used for centuries. These standard PD models were classified as (a) training, (b) observation and assessment, (c) improvement process, (d) study groups, (e) action research, (f) individually guided activities, and (g) mentoring. Several years later, Kennedy (2005) identified nine conventional models used by PD coordinators: (a) training; (b) award bearing; (c) deficit; (d) cascade; (e) standards-based; (f) mentoring; (g) community of practice; (h) action research, and (d) transformative PD models. Kennedy (2005) acknowledged the similarity between the community of practice and mentoring model of PD but stipulated that the community of practice model typically included more than one person, and the confidentiality standards between mentor and mentee did not commonly apply. Additionally, Guskey (2000) and Kennedy (2005) were aligned in that both researchers identified the training, action research, and mentoring models as commonly used in delivering educator PD.

As Kennedy (2005) conceded, there has been an overlap between PD delivery models. The inability to delineate PD delivery models hindered researchers' ability to identify the effects of individual characteristics embedded within PD initiatives. While conducting a meta-analysis of 104 articles intended to identify characteristics of effective PD, Sims et al. (2021) acknowledged this obstacle and organized models of effective PD delivery into categories that were "clearly defined" and "sufficiently conceptually distinct from each other" (p. 22). Sims et al. (2021) determined that the multitude of PD models included in their review could be classified into three primary categories: (a) lesson study, (b) instructional coaching, and (c) teacher learning communities.

According to Dick et al. (2022), *lesson study* is “a collaborative process of investigating instruction with the goal of improving student learning through a single lesson” (p. 112). Lesson study can be understood by using Lewis et al.’s (2006) conceptualization, which involved a cycle of a) studying standards-based curriculum and formulating goals; (b) developing a research lesson plan that includes long-term goals, anticipated student response, a data collection plan, and rationale for the selected approach; (c) teaching, observing, and collecting data; and (d) reflecting upon observer data to determine relevant questions for the next cycle of lesson study (see Figure 2). When implemented correctly, lesson study PD has impacted teachers’ knowledge and beliefs about instruction, resulted in a change in instructional practices, and led to a refined focus of curricula (Ko, 2018).

**Figure 2**

*Lewis et al.’s Lesson Study Cycle*



Note. From “How Should Research Contribute to Instructional Improvement? The Case of Lesson Study,” by C. Lewis, R. Perry, and A. Murata, 2006, *Educational Researcher*, 35, p. 3 (<https://doi.org/10.3102/0013189X035003003>). In the public domain.

*Instructional coaching* has been a popular PD model that supports new teacher training, ongoing professional learning, and the establishment of new education initiatives (Desimone & Pak, 2017). Kraft et al. (2018) defined instructional coaching programs as “all in-service professional development programs where coaches or peers observe teachers’ instruction and provide feedback to help them improve” (p. 3).

Instructional coaching programs have been personalized, have a duration of a semester or year, and focus on content-specific skills (Kraft et al., 2018). Although there has been some incongruence between instructional coaching models, Sims et al. (2021) determined that most contained elements of goal setting, feedback, instruction or modeling, and rehearsal or content-specific repetition.

During the last 20 years, there has been a growing emphasis on research related to *teacher learning communities* (Meesuk et al., 2021). The terminology teacher learning community and professional learning community have often been used interchangeably, depending upon the context in which the community was formed (Jita & Mokhele, 2014). Pan (2023) defined teacher learning communities as “collaborative, job-embedded, and sustained in nature, providing opportunities for open discussions among teachers about how student learning takes place” (p. 1). These learning communities have significantly

improved teachers' performance and positively influenced their students' academic achievements (Khalid, 2022).

### **Online Professional Development**

In recent years, the importance of high-quality teaching and PD has significantly increased in the United States. Teachers have faced increased pressure from high-stakes testing, accountability, standards movement, and the constant expectation to improve student achievement levels. These pressures have often been heightened when combined with the budget shortfalls and time constraints that plague K-12 organizations (Powell & Bodur, 2019). Powell and Bodur (2019) claim this has resulted in online educator PD becoming “increasingly utilized to help address such concerns through “flexible, cost-effective, wide-scale options on a myriad of educational topics” (pp. 19-20). According to Bragg et al. (2021), online PD is defined as “structured, formal professional learning that is provided entirely online, resulting in changes to teacher knowledge, behavior, and practices” (p. 2). The online learning environment has delivered educator PD that addressed a broad spectrum of topics, issues, and learning goals (Little & Housand, 2011). Educators have leveraged online PD opportunities that explored programs aligned with their interests and goals, which opened new avenues of learning and development (Elliott, 2017).

### ***Models and Delivery of Online Professional Development***

The effectiveness of traditional and online educator PD initiatives has depended upon the same characteristics (Elliott, 2017). Purposefully developed online training has offered educators the accessibility, relevance, and content-specific PD they have desired while delivering equivalent or superior results compared to face-to-face training

(Sheridan & Wen, 2021). Bates et al. (2016) identified five situations in which PD coordinators could consider providing educators with online PD when:

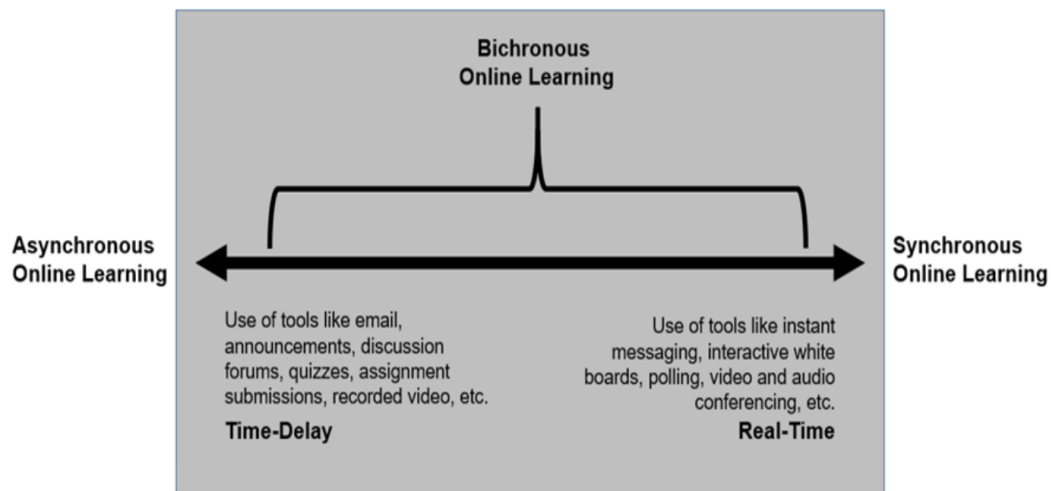
1. A subset of teachers needs specific PD that is not on the schools' PD agenda.
2. A particular expertise is not available in a school or district but is available online.
3. Teachers need access to colleagues with similar interests or specialized skill sets.
4. Teachers' immediate needs prohibit more powerful professional learning experiences.
5. Online PD is significantly cheaper or more feasible than in-person development, but the quality is equivalent.

Although online PD is a popular option for K-12 educator training, there is a lack of standardized terminology used to categorize the online PD opportunities available (Bates et al., 2016). Powell and Bodur (2019) broadly classified online PD initiatives as being delivered asynchronously, synchronously, or in a hybrid format. Hybrid online PD opportunities have typically been integrated within a larger in-person learning context, including workshops that entail completing online tasks (Bates et al., 2016). Although the hybrid PD model has had its merits in specific learning environments, Martin et al. (2020) introduced a new classification of online learning better aligned with the PD requirements of K-12 virtual educators. Martin et al. (2020) classified online learning initiatives that combined elements of asynchronous and synchronous learning as *bichronous* online learning (see Figure 3).



**Figure 3**

*Martin et al.'s Conceptual Model for Bichronous Online Learning*



Note. From *Bichronous Online Learning: Blending Asynchronous and Synchronous*

*Online Learning*, by F. Martin, D. Polly, and A. Ritzhaupt, 2020,

(<https://er.educause.edu/articles/2020/>

[9/bichronous-online-learning-blending-asynchronous-and-synchronous-online-learning](https://er.educause.edu/articles/2020/9/bichronous-online-learning-blending-asynchronous-and-synchronous-online-learning)).

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### ***Asynchronous Online Learning***

Asynchronous online learning enables learners to engage and participate in learning opportunities at their convenience from any location (Martin et al., 2020).

Asynchronous learning is learning that typically occurred online and is presented in the form of self-guided learning modules, video courses, posted articles (Sulha et al., 2021), and massive open online courses (MOOCs) (Bates et al., 2016). Martin et al. (2020) identified instructional tools such as email, announcements, discussion forums, quizzes, assignment submissions, and recorded videos as effective in asynchronous learning

environments. Furthermore, asynchronous learning environments allowed learners to progress at their own pace and afforded them more time to reflect upon the material and their responses to instructional prompts (Sulha et al., 2021).

Multiple examples from the literature suggested asynchronous PD initiatives have been effective. Borup and Evmenova (2019) conducted a qualitative case study that utilized pre and post-treatment surveys and interview techniques to examine participants' knowledge and skill development as a result of participating in an asynchronous course designed to improve their ability to teach online courses. After completing the 7-week course, 21 participants were given a post-treatment survey that measured their abilities based on the Technological, Pedagogical, and Content Knowledge framework. Descriptive statistics suggested participants increased their knowledge and skills upon completing the asynchronous PD. Brown and Woods (2012) conducted a cohort study of 24 infant communication specialists to explore the effects of an asynchronous training program designed to improve participants' content knowledge and ability to coach caregivers. After completing five 6-hour modules, assessment and survey data indicated a significant increase in the participants' content knowledge and high participant satisfaction ratings. Erickson et al. (2012) conducted a mixed-methods study to examine the effects of a 4-week asynchronous PD initiative designed to improve the professional competency of 149 rural special education teachers. Results from pre- and post-treatment surveys suggested a high level of participant satisfaction with the PD initiative and a significant increase in content knowledge and collaboration. The findings from these studies indicated that well-designed and executed asynchronous PD initiatives could result in desired learning outcomes and high levels of educator satisfaction.

### *Synchronous Online Learning*

Synchronous online learning has enabled learners to engage in real-time collaborative activities (Martin et al., 2020). Examples of synchronous PD methods include live lectures, video conferences, and teleconferences (Sulha et al., 2021). Martin et al. (2020) suggested video conferencing, instant messaging, interactive whiteboards, and polling have been effectively utilized as instructional tools in synchronous online learning environments. A significant advantage of synchronous online learning is that it enables participants to collaborate in real-time (Moorhouse & Wong, 2022). Integrating collaborative elements into synchronous online education has been a crucial component of the learning process (González-Lloret, 2020).

Research has indicated that synchronous online PD initiatives have been a popular option for educators and beneficial to virtual educators in various contexts. For example, Ansyari et al. (2022) surveyed 330 educators to determine their online PD preferences. When given a choice between synchronous and asynchronous online PD options, 69.1% of educators identified synchronous online PD as their preference. Furthermore, 67.9% of educators recognized they would prefer to work collaboratively instead of individually. Marrero et al. (2010) received completed questionnaires from 59 K-12 educators who participated in a series of online synchronous courses designed to improve the pedagogical content knowledge in science. Seventy-eight percent of the educators stated that synchronous PD contributed to their personal growth, and 79.6% claimed they immediately utilized pedagogical knowledge from the PD initiative in their classrooms.

### ***Bichronous Online Learning***

The term bichronous online learning was introduced by Florence Martin in 2020 (Utomo & Ahsanah, 2022). Martin et al. (2020) characterized bichronous learning as “the blending of both asynchronous and synchronous online learning, where students can participate in anytime, anywhere learning during asynchronous parts of the course but then participate in real-time activities for the synchronous sessions” (Bichronous section). Research has indicated that integrating synchronous learning with asynchronous learning resulted in improved learning outcomes, positive attitudes, and increased retention (Martin et al., 2020). There have been few empirical studies specifically on bichronous learning due to its novelty as a concept. However, previous studies have examined integrating asynchronous and synchronous online learning components without explicitly referencing it as bichronous learning (Utomo & Ahsanah, 2022).

Madden et al. (2017) studied learner interactions in a graduate-level science distance education course that utilized a bichronous online learning design. The 22 students enrolled in the course were required to participate in asynchronous discussion board threads, synchronous conversations during web conferencing, and synchronous chat communication during web conferencing. The researchers discovered that incorporating synchronous and asynchronous communication options into the course framework can increase learners’ comfort levels. Griffin et al. (2018) designed and implemented a year-long, online bichronous PD program to improve educators’ ability to provide math instruction to students with disabilities. Although the researchers did not observe a significant increase in student mathematics achievement, the 23 educators reported a high level of satisfaction with the bichronous PD initiative.

Researchers also observed significant positive changes in educators' concepts of self-efficacy and beliefs about teaching students with disabilities. Soto et al. (2019) employed a bichronous online learning to establish a virtual lesson study group to develop a multiplication lesson for elementary school students. The five educators asynchronously used Google Docs to store information that each group member could access independently and Google Slides to work on lesson plans at their convenience. The group synchronously utilized Google Hangouts for real-time virtual meetings. After the lesson study, the group felt they successfully analyzed teaching and learning processes and supported other group members in their professional growth. Although Soto et al.'s (2019) lesson study group did not collect quantitative or qualitative data, it did underscore the versatility and adaptability of bichronous online learning.

### **Professional Development Needs and Perceptions of K-12 Educators**

There has been a misconception that virtual and brick-and-mortar educators rely on identical pedagogical skills when delivering instruction (Roy & Boboc, 2016). Research has indicated that virtual educators have faced unique pedagogical challenges inherent to the online teaching environment (Farmer & West, 2019). Dawson and Dana (2018) advocated that all K-12 virtual educators, regardless of their prior teaching experience in brick-and-mortar settings, should undergo PD designed for online instruction before they begin teaching in virtual environments. However, online educators frequently lacked sufficient preservice educator training in creating engaging and impactful educational content designed for online learning environments (Archambault et al., 2016; Eadens et al., 2022; Zweig & Stafford, 2016). The majority of preservice teacher training programs failed to adequately address the essential techniques virtual

educators needed to provide effective instruction in virtual environments, resulting in virtual educators primarily acquiring virtual instructional strategies through practical experience in the field or PD initiatives implemented by their organizations (Archambault & Larson, 2015; Zweig et al., 2015; Zweig & Stafford, 2016). Given the increasing number of K-12 students enrolling in virtual schools and the growing demand for virtual educators, it has been necessary to prioritize the PD of educators who work in K-12 virtual classrooms (Roy & Boboc, 2016; Zweig & Stafford, 2016).

Traditional and online PD initiatives have similar qualities that contribute to their effectiveness (Elliott, 2017). As such, virtual educators have required PD initiatives aligned with the PD frameworks, such as those constructed by Desimone (2009) and Darling-Hammond et al. (2017) to be effective. While virtual and brick-and-mortar educators have traditionally utilized comparable frameworks for effective PD, the PD content has been inherently different due to the settings in which they received training. Research has consistently shown that virtual educators face distinct pedagogical challenges (DiPietro et al., 2008; Farmer & West, 2019). When designing PD for virtual school educators, it is essential to customize the training to fit their unique needs (Roy & Boboc, 2016). According to research by Zweig and Stafford (2016), virtual educators have expressed a growing demand for personalized PD to meet their needs. Roy and Boboc (2016) proposed that PD tailored to virtual educators should ensure: a) educators understand the intricacies of online education, the necessary competencies and skill sets, as well as the advantages and challenges associated with virtual education; b) educators are actively engaged in their learning to acquire the necessary competencies and skill sets to facilitate student learning in the virtual environment effectively, and c) the PD

initiative is designed to provide support and empowerment to educators while increasing the abilities of educator and student.

The PD needs of teachers in the brick-and-mortar setting have been well documented (Dawson & Dana, 2018). Although less numerous than research articles that discussed brick-and-mortar teachers' perceptions of traditional PD, a handful of researchers have observed brick-and-mortar teachers' experiences and perceptions of online PD (Beach et al., 2022; Northcote et al., 2019; Parsons et al., 2019; Poole et al., 2020; Powell & Bodur, 2019; Walters et al., 2021). Powell and Bodur (2019) conducted a multi-case qualitative study to examine brick-and-mortar educators' perceptions of the design and implementation of an online PD initiative. The six high school educators who participated in the study were required to complete ten video-based modules, each 25-30 minutes in duration, and respond to three open-ended questions after each module. After completing a cross-case analysis, Powell and Bodur (2019) discovered six significant themes: relevancy, authenticity, usefulness, interaction and collaboration, reflection, and context. The six themes were aligned with the PD characteristics of content focus, active participation, and collaboration found in the PD frameworks proposed by Desimone (2009) and Darling-Hammond et al. (2017). Furthermore, these themes were consistent with Knowles' (2014) andragogical framework, which provided theoretical support to the current study.

Although the body of research has increased slowly, limited research has been published exploring virtual educators' PD requirements (Dawson & Dana, 2018). Few studies have specifically examined the teaching competencies necessary in the virtual environment, the PD needs of virtual educators, and virtual teachers' perceptions of

virtual PD (DiPietro et al., 2008; Farmer & West, 2019; Gerbermann, 2021; Roy & Boboc, 2016; Zweig & Stafford, 2016). In one of the earlier attempts to identify the necessary teaching competencies of virtual school educators, DiPietro et al. (2008) conducted a series of interviews with 16 highly-qualified K-12 virtual educators. After coding the interview transcripts, the researchers discovered twelve general characteristics, two classroom management strategies, and twenty-three pedagogical strategies unique to the virtual learning environment. DiPietro et al. (2008) identified several principal implications from the study: 1) Each of the identified strategies provided a potential PD concept to be developed and tested; 2) Despite not providing instruction to students in a physical classroom, classroom management was nonetheless a central component to quality online instruction; 3) By having an established set of research-based practices associated with virtual school teaching, it will be easier to explore the optimal approaches for teaching in blended or hybrid environments, and 4) General characteristics of online educators emerged that seemed to be true of all the participants in the study, which led to recommendations for future generalization of the findings.

Zweig and Stafford (2016) conducted survey research to examine virtual educators' challenges and the types of PD they perceived as beneficial in addressing them. A completed survey was returned by 283 virtual educators who taught within four discrete K-12 virtual organizations. The survey results indicated that only 20% of the respondents across the four virtual organizations received preservice training in K-12 virtual education strategies. An average of 57% indicated they received K-12 virtual education strategies after preservice education but before teaching online, and an average of 75% signified they received virtual education training while currently in the field.



Additionally, Zweig and Stafford (2016) found that an average of 94% of educators received PD in technology competencies, while only 34% received training in supporting students with disabilities. These results reinforced Rice (2017), who advocated that PD coordinators should reassess the content of their online PD initiatives and prioritize the needs of students with disabilities. Furthermore, these results suggested that PD initiatives focused more on improving the educators' technical proficiency than their online pedagogical competency. Zweig and Stafford (2016) also discovered virtual educators believed unstructured PD can be more effective than structured PD in addressing the primary challenges of virtual instruction.

Roy and Boboc (2016) used interpretive survey techniques to examine the PD needs of K-12 virtual educators in Ohio. Ninety-eight virtual educators completed the online survey, which included several qualitative research questions. The first research question asked the participants to list the most important recommendations for online teacher preparation, both preservice and in-service. The respondents identified four areas of PD as most beneficial to virtual educators: a) identifying and cultivating qualities of effective virtual educators; b) improving technical competence; c) establishing robust professional learning communities; and d) understanding the learning perspectives of virtual learners.

The second question posed by Roy and Boboc (2016) asked the participants to describe ways in which PD sessions they participated in were reinforced by follow-up and continuous feedback. Approximately 41% of the respondents reported they received no feedback related to PD initiatives, 29% reported receiving online feedback, 25% received in-person feedback, and 4% received feedback initiated by content providers. A

participant in the study responded that the lack of feedback after participating in PD was a “sore point” (Roy & Boboc, 2016, p. 295). This participant’s response was aligned with Darling-Hammond et al.’s (2017) PD framework, which emphasized the importance of providing feedback to educators. When developing PD initiatives, Roy and Boboc (2016) discovered “not only is it important to customize it according to teacher needs, but to also give them opportunities to reinforce what has been taught, as these professionals will be able to evaluate what works and what does not work” (p. 299).

Farmer and West (2019) conducted an interpretive phenomenological analysis to examine the concerns of virtual educators as they pertain to actual or anticipated events associated with online instruction. The seven participants in the study were K-12 virtual educators who engaged in a two-stage interview process and bi-monthly journaling exercise that required the participants to provide details about their current concerns and experiences as virtual educators. The researchers identified three main categories of concern among virtual educators: a) personal, b) instructional, and c) relational. *Personal* concerns included job outlook, expectations, evaluations, priorities, and time management. *Instructional* concerns centered primarily on course quality, technology issues, or the virtual learning environment. *Relational* concerns encompassed the issues related to the students, mentors, and parents as they participated in the learning environment.

Farmer and West (2019) also conceptualized three themes at the intersection of the three main categories. These themes were labeled as responsibility, experience, and interaction (see Figure 4). The researchers envisioned *responsibility* at the intersection of the personal and instructional themes. Concerns in this area were centered around

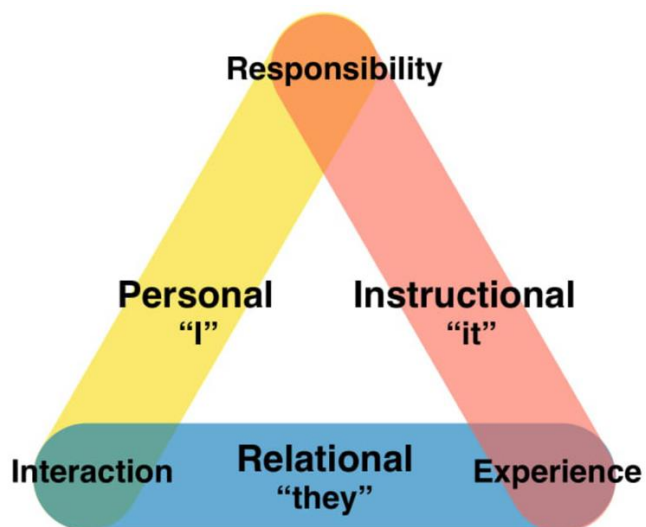
educator roles and educator grading responsibilities. The virtual educators felt a lack of control over their course content and how the courses were sequenced. Several educators mentioned that their lack of control over the course material impeded their ability to adapt the curriculum to target skill deficits and their ability to make appropriate accommodations for their students with disabilities.

*Experience* was conceptualized at the intersection of the instructional and relations themes. These concerns were focused on student enrollment and placement, student movement, and student experience. For example, virtual educators found that students often enrolled at their virtual school weeks after the school year had started and would quickly fall behind their peers. Virtual educators also expressed concern about their inability to address students who would sporadically log in to their learning management system.

The theme of *interaction* was positioned at the intersection of relational and personal concerns and addressed concerns related to virtual educator-student communication and relationships. The virtual educators indicated that teaching in a virtual educational environment made it difficult to establish the standard lines of communication that educators frequently utilize to cultivate relationships in brick-and-mortar learning environments. Farmer and West (2019) concluded that although research in online education has discovered notable pedagogical, operational, and student-related challenges experienced by virtual educators, it was uncertain whether the concerns adhered to predictable patterns that could be anticipated and effectively addressed.

**Figure 4**

*Farmer and West's Teacher Concerns Themes Illustration*



From *Exploring the Concerns of Online K-12 Teachers*, by T. Farmer and R. West, 2019,

*Journal of Online Learning Research*, 5(1), p. 105

(<https://www.learntechlib.org/primary/p/184482/>). In the public domain.

Research by Gerbermann (2021) explored the types of PD online educators perceive to help them in their online instruction and the types of PD that assist teachers new to virtual teaching in individualizing instruction to meet the needs of their students. The seven teacher participants in Gerbermann's (2021) study were virtual educators teaching grades 3<sup>rd</sup> – 8<sup>th</sup> and currently employed at a southeast Texas corporate virtual school. All had at least one year of teaching experience in a traditional brick-and-mortar school. The two administrators who participated were from the same grade levels as the teachers. They were included because of their connection to the virtual school community and ability to provide insight into what they believed would benefit PD.

Gerbermann's (2021) research design employed qualitative survey and interview techniques to investigate what virtual teachers and administrators from grades 3rd through 8th perceived as beneficial PD. The survey consisted of six demographic questions, eight guiding questions, and three questions designed to determine if survey respondents were interested in participating in a subsequent interview. The interview consisted of 10 open-ended questions designed to gain insight into the online teachers' perceptions of their PD. As the data were coded and analyzed, seven themes emerged: presenter qualities, target-specific content, relevancy, usefulness in the classroom, instructional change, the role of the virtual teacher, and student reactions. However, Gerbermann (2021) indicated it was unknown if these same themes would emerge if this study were conducted at a different virtual school or across different grade levels.

### **Theoretical Framework**

The current study was framed by the theoretical perspective of *andragogy*, also known as Adult Learning Theory. The term andragogy has been used to refer to the art and science of teaching adults (Forrest & Peterson, 2006; Knowles et al., 2015). By employing the theoretical framework of andragogy, researchers can examine educators' perceptions of specific phenomena while considering that K-12 educators are adult learners with unique learning needs (Powell & Bodur, 2019). Andragogy was first added to the lexicon by German grammar school teacher Alexander Kapp in 1833 (Rachal, 2002), but the term never gained traction in the educational community at that time (Ozuah, 2005). According to Khudaybergenova et al. (2022), the term did not gain popularity in the 19<sup>th</sup> century because of the nascent state of adult education and the science that studies it.

It would not be until several decades into the 20<sup>th</sup> century that the term andragogy would resurface, and advancements related to the philosophy and assumptions surrounding adult learning would occur (Merriam, 2001). When adult educational opportunities became increasingly prevalent in the 1920s, adult educators relied on pedagogical models of instruction when teaching adult learners (Loeng, 2023). These were the only models available at that time. *Pedagogy* is a term that refers to the philosophy of pre-adult education and the assumptions surrounding the characteristics of pre-adult learners (Forrest & Peterson, 2006). Ozuah (2005) provided a set of assumptions upon which early pedagogical assumptions were based: (a) pre-adult learners were dependent upon the instructor and could not understand their learning needs; (b) pre-adult learners needed subject-centered learning opportunities; (c) pre-adult learners were motivated by external factors; (d) pre-adult learners' prior experiences were irrelevant. It soon became apparent that the pedagogical models of education were not meeting the needs of adult learners. According to Loeng (2023), "discontent arose among adult educators and adult learners with respect to this traditional pedagogical model. Many of the learner characteristics set forth in the pedagogical model did not fit the characteristics of adult learners" (p. 2).

One of the first examples of a model summarizing the assumptions of adult learning was constructed by Eduard Lindeman (1926) in the book *The Meaning of Adult Education*. While claiming that the most effective way for adults to acquire knowledge is to participate in the process of deciding when, what, and how they should learn, Lindeman (1926) advanced several assumptions about adult education: (a) adult learners are intrinsically motivated to learn that which satisfies their needs and serves their

interests; (b) adult learning is centered around life experiences and not solely on vocational or career-related pursuits; (c) adult learners have a desire for autonomy; (d) an adults' past experiences are a primary source of knowledge and the most valuable learning resource; and (e) learning styles evolve as adult learners age. Lindeman (1926) asserted, "The resource of highest value in adult education is the learner's experience. If education is life, then life is also education. Too much of learning consists of vicarious substitution of someone else's experience and knowledge" (pp. 9-10). According to Knowles et al. (2015), Lindeman's book catalyzed a line of scientific inquiry that sought to "discover new knowledge through intuition and the analysis of experience" and "laid the foundation for a systematic theory about adult learning" (p. 29).

In Europe, the term andragogy was reintroduced to the academic community by Eugen Rosenback in 1921 at a conference in Frankfurt, Germany. By the 1960s, the term was frequently used in Holland, France, and Yugoslavia (Forrest & Peterson, 2006). While Lindeman did use the term andragogy in several 1920s articles in the United States (Stewart, 1987), he primarily used the term *adult education* to characterize his approach to adult learning (Rachal, 2002). Although the principles of andragogy were gaining traction elsewhere in the world, andragogy and the proposition that adults learn differently than children was popularized in the United States in the 1960s by Malcolm Knowles, where he has been considered the "father" of andragogy (Knowles et al., 2015; Lee, 1998). Knowles has published a prolific amount of research about andragogy and has been highly regarded in adult education (Galustyan et al., 2019; Lee, 1998; Powell & Bodur, 2019). Furthermore, Knowles' work has been widely referenced in academic literature in various contexts (Beach et al., 2022; Bélanger, 2011; Forrest & Peterson,

2006; Smith, 2002; Vann, 2017). Knowles' work was heavily influenced by the previously mentioned Eduard Lindeman, and he considered Lindeman's book *The Meaning of Adult Education* one of his most significant sources of inspiration (Loeng, 2023).

In the seminal work, *The Adult Learner: A Neglected Species*, Knowles (1973) identified four assumptions upon which andragogical theory has been based. The first assumption involved *changes in self-concept*, which occurred as a person matured from childhood to adulthood, progressing from complete reliance on others during infancy to increased self-reliance. The second, *the role of experience*, contended that as people grew older, they accumulated knowledge from their life experiences. A person's collective knowledge enhanced their understanding of new information by relating it to past experiences. The third, *readiness to learn*, was the assumption that as individuals matured, their eagerness to learn was influenced by their evolving social roles more than biological development or traditional K-12 educational requirements. The fourth, *orientation to learning*, suggested that children were conditioned to focus on the subject matter when learning. In contrast, adults were more inclined to adopt a problem-solving approach to learning.

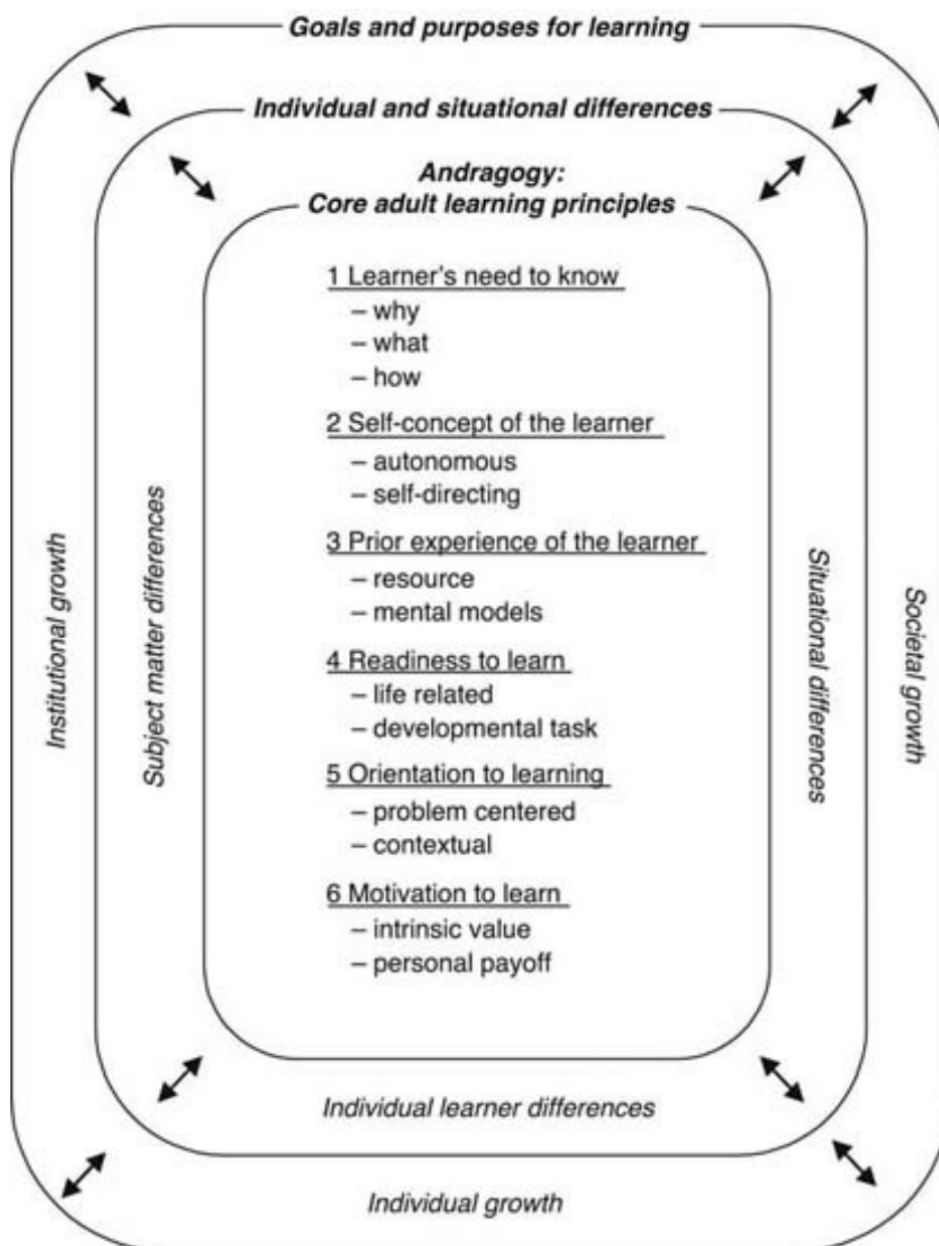
Over the years, Knowles continued to develop and augment the theory of andragogy. In Knowles et al. (2015), two additional assumptions regarding andragogical theory were added to the sequence. The first added assumption introduced in 1984 was *the learners need to know*. This assumption stated that it was important for adult learners to understand the *why*, *what*, and *how* behind the knowledge they have been expected to acquire. The second, introduced in 1989, was *motivation to learn*, which assumed that



while external motivators influenced adults to an extent, internal pressures have been the most impactful motivators (see Figure 5).

Figure 5

*Knowles et al.'s Andragogy in Practice*



Note. From *The Adult Learner: The Definitive Classic in Adult Education and Human Resource Development* (p. 18), by M. Knowles, E. Holton, and R. Swanson, 2015, Routledge (10.4324/9781315816951). In the public domain.

Knowles et al. (2015) have stressed that their andragogical model is a *process* model instead of a *content* model. When adult educators utilized the traditional content model, they decided in advance what skills were to be taught, how the lessons were structured, and the format used to transmit the knowledge (Knowles et al., 2015). Knowles et al. (2015) emphasized that, in contrast, his andragogical process model has encouraged adult educators to proactively develop “a set of procedures for involving the learners or other relevant parties” in the knowledge acquisition process (p. 54). Knowles et al. (2015) recommended that designers should incorporate eight specific elements to engage learners: (1) preparing the learner; (2) establishing a climate conducive to learning; (3) creating a mechanism for mutual planning; (4) identifying why learning is needed; (5) formulating program objectives and content that will satisfy these needs; (6) designing a pattern of learning experiences; (7) conducting these learning experiences with suitable techniques and materials; and (8) evaluating the learning outcomes and rediagnosing learning needs. The distinction between the two models was that the content model concentrated on transmitting information while the process model focused on providing learners with procedures and resources to acquire resources and skills (Knowles et al., 2015).

Elliott (2017) conducted a literature review of 107 peer-reviewed articles and discovered an “overlap between andragogy learning theory and the qualities of effective PD” (p. 116). The previously referenced PD frameworks by Darling-Hammond et al. (2017) and Desimone (2009) emphasized characteristics of effective PD that align with Knowles’ andragogical principles and further assisted in providing a conceptual framework for the current study. Furthermore, the PD frameworks posited by Darling-

Hammond et al. (2017) and Desimone (2009) emphasized the importance of providing content-focused and collaborative PD opportunities for educators. In relation to andragogical theory, providing content-focused PD to virtual educators aligned with Knowles et al.'s (2015) assumption that adult learners possess an innate need to understand the *why*, *what*, and *how* behind the knowledge they are expected to acquire. Darling-Hammond et al. (2017) and Desimone (2009) also discussed the importance of educator collaboration in their respective models of effective PD. A primary construct of the andragogical model of instruction was that PD designers should actively engage educators to determine their training needs and the methods used to satisfy these needs (Knowles et al., 2015). Educators are more inclined to participate in and benefit from PD initiatives that they perceive as relevant to their experiences and meet their learning needs (Beach et al., 2022).

Although Knowles' theory of andragogy has remained popular since its inception in 1973, it did not mature without criticism. For example, andragogy has been referred to as a theory of adult education, a method of adult education, a technique of adult education, and a set of assumptions about adult education. This vacillation in terminology has led to ambiguity about how andragogy should be classified and to what purposes andragogical principles were best utilized (Davenport & Davenport, 1985). Other researchers have questioned whether andragogical principles can be referred to as a theory or if andragogy is merely a set of principles that delineate the characteristics typical of adult learners (Hartree, 1984).

Despite these criticisms, Knowles' andragogical principles have been frequently discussed and utilized in educational research. The andragogical framework has been

used while conducting literature reviews of PD initiatives (Bragg et al., 2021), when developing PD initiatives (Frerichs et al., 2018; Khudaybergenova et al., 2022; Roy & Boboc, 2016), in the context of evaluating e-learning initiatives (Galustyan et al., 2019; Martin et al., 2019), when investigating leadership roles when implementing new technologies (Uzorka & Olaniyan, 2023), and when examining how instructional designers make instructional strategy decisions for adult learners (Vann, 2017). Pursuant to the current study, Knowles' andragogical framework has recently been employed when analyzing educator perceptions of traditional and online PD initiatives (Beach et al., 2022; Powell & Bodur, 2019; Smith & Robinson, 2020). As Powell and Bodur (2019) asserted, the andragogical framework provided "a lens through which the researchers can examine the extent to which those learning needs [of educators] are operationalized, which holds potential to impact online teacher PD design and implementation" (p. 22).

### **Summary**

Online educator PD was defined as "structured, formal professional learning that is provided entirely online, resulting in changes to teacher knowledge, behavior, and practices" (Bragg et al., 2021, p. 2). Providing effective PD to teachers has been critical to educational organizations (Kraft et al., 2018). K-12 brick-and-mortar and virtual school organizations rely on PD initiatives to enhance educators' capacity to address the academic, behavioral, and social needs of their students (Bloomfield et al., 2022). Over the last eight decades, federal legislation (the NDEA, ESEA, IASA, NCLB, and ESSA) has significantly impacted the PD landscape for K-12 educators. Billions of dollars are spent annually on educator PD (First Five Years Fund, 2023).

It has been established that traditional and online PD initiatives rely on similar qualities to make them effective (Elliott, 2017). As there has been insufficient research focused directly on PD for online teachers (Archambault & Kennedy, 2014), examining PD research conducted in face-to-face instructional environments has proven valuable in the endeavor to gain a deeper understanding of the PD requirements in virtual instructional environments (Zweig & Stafford, 2016). PD frameworks, such as those developed by Desimone (2009) and Darling-Hammond et al. (2017), identified characteristics of effective PD initiatives. Guskey (2000) and Kennedy (2005) delineated various PD delivery models. Sims et al. (2021) determined that PD models can be classified into three primary categories: (a) lesson study, (b) instructional coaching, and (c) teacher learning communities. Additionally, Martin et al. (2020) provided a conceptual model of the spectrum of online PD delivery methods: (a) asynchronous, b) synchronous, and (c) bichronous.

There has been a misconception that virtual and brick-and-mortar educators rely on identical pedagogical skills when delivering instruction (Roy & Boboc, 2016). Research has indicated that virtual educators have faced unique pedagogical challenges inherent to the online teaching environment (Farmer & West, 2019). Online educators frequently lacked sufficient preservice educator training in creating engaging and impactful educational content designed for online learning environments (Archambault et al., 2016; Eadens et al., 2022; Zweig & Stafford, 2016). Literature has suggested the majority of preservice teacher training programs failed to adequately address the essential techniques virtual educators needed to provide effective instruction in virtual environments, resulting in virtual educators primarily acquiring virtual instructional

strategies through practical experience in the field or PD initiatives implemented by their organizations (Archambault & Larson, 2015; Zweig et al., 2015; Zweig & Stafford, 2016). Virtual educators have expressed a need for personalized PD to meet their specific needs (Zweig & Stafford, 2016). Although the body of research has been slowly increasing, limited research has been published exploring virtual educators' PD requirements (Dawson & Dana, 2018). There have been numerous suggestions for further research studies devised to better understand the perceptions of virtual educators in a variety of different K-12 content areas, grade levels, and virtual school structures as they relate to PD (Archambault & Kennedy, 2014; Dawson & Dana, 2018; Farmer & West, 2019; Johnson et al., 2022; Leary et al., 2020; Molnar et al., 2021; Roy & Boboc, 2016; Sanders & Lokey-Vega, 2018; Zweig & Stafford, 2016).

The present chapter concluded with a discussion of the conceptual framework of Knowles' (1973) theory of andragogy, which was used in the current study to examine virtual educators' perceptions and requirements of virtual PD. Powell and Bodur (2019) asserted that by employing the theoretical framework of andragogy, researchers could examine educators' perceptions of specific phenomena while considering that K-12 educators are adult learners with unique learning needs. There has been criticism of Knowles' theory of andragogy (Davenport & Davenport, 1985; Hartree, 1984). However, andragogy has frequently been used to provide a conceptual perspective to educational research in a variety of contexts (Beach et al., 2022; Bragg et al., 2021; Frerichs et al., 2018; Galustyan et al., 2019; Khudaybergenova et al., 2022; Martin et al., 2019; Powell & Bodur, 2019; Roy & Boboc, 2016; Smith & Robinson, 2020; Uzorka & Olaniyan,

2023; Vann, 2017) and is done so in the current study. The next chapter describes the research methods used to conduct the present study.



## **Chapter 3**

### **Methods**

The current study explored NKV educators' perceptions of their organization's PD opportunities, assessed which types of PD they felt were most valuable and relevant, and explored other types of PD they perceived would help meet their individualized needs as virtual educators. Chapter 3 provides a comprehensive account of the research methods employed for the current study. The chapter begins with an overview of the research design, followed by a description of the criterion sampling employed for selecting these participants. The rationale behind selecting the data collection instruments and an explanation of how these instruments were developed are discussed. Next, the procedures for conducting and recording the interviews are described, the techniques for analyzing and synthesizing the interview data are narrated in detail, and a description of the measures taken to ensure the reliability and trustworthiness of the data is provided. Finally, the researcher clarifies their role in the current study and outlines its limitations.

### **Research Design**

A review of the available research literature has indicated a lack of information surrounding virtual educators' PD needs and their perceptions of PD initiatives (Bragg et al., 2021; Dawson & Dana, 2018; Farmer & West, 2019; Gerbermann, 2021; Johnson et al., 2022). Creswell and Creswell (2018) explained, "If a concept or phenomenon needs to be explored and understood because little research has been done on it or because it involves an understudied sample, then it merits a qualitative approach" (p. 18). The lack of information regarding the perceptions of virtual educators related to PD indicated a qualitative research approach was appropriate for the current study. Qualitative research

focuses on understanding interpretations and constructions of reality within a specific context and time frame (Merriam, 2002).

More specifically, the current study employed phenomenological research methodology to explore participants' perspectives of their PD initiatives. According to Creswell and Creswell (2018), phenomenology is a "design of inquiry coming from philosophy and psychology in which the researcher describes the lived experiences of individuals about a phenomenon as described by the participants" (p. 13).

Phenomenological studies help researchers interpret the shared importance of a concept or phenomenon through the lived experiences of multiple individuals (Creswell & Poth, 2018). Elements of phenomenology are present in all qualitative research. The distinctive investigative methods used in phenomenological research have differentiated it from other types of qualitative inquiry (Merriam, 2002). In the current study, NKV educators described the phenomena of their PD experiences and needs during recorded interviews. The data collected from these interviews was analyzed and synthesized to address the following research questions:

***RQ1***

What are NKV educators' perceptions of professional development initiatives during 2022-2023 regarding their value, relevance, and meeting their needs as virtual educators?

***RQ2***

What types of professional development do NKV educators perceive would be valuable, relevant, and better meet their needs as virtual educators?

## Setting

NKV is a public virtual school in a Unified School District (USD) in northeast Kansas. According to the Kansas State Department of Education (2023), the USD in which NKV operated had 10,896 students enrolled in grades K-12 during the 2022-2023 academic year. Students who attend NKV must reside in Kansas. Of the K-12 students enrolled in LVS during the 2022-2023 academic year, 51.6% were female and 48.4% were male. A breakdown of NKV student ethnicity for the 2022-2023 school year showed that 65.8% were white, 12.8% were Hispanic, 8.3% were African American, 9.1% were multiracial, 2% were Asian, and 2% were American Indian or Alaskan Native. Only 1.3% of NKV students were English language learners (Kansas State Department of Education, 2023).

Forty certified full-time NKV educators instructed students in grades K-12 during the 2022-2023 academic year. Eleven taught grades K-5, seven taught grades 6-8, and 14 taught grades 9-12. Eight certified full-time virtual special education teachers supported students identified as needing special education services in grades K-12. Two special education teachers supported grades K-5, two supported grades 6-8, three supported grades 9-12, and one gifted facilitator supported exceptional students in grades K-12. PD initiatives provided during 2022-2023 to NKV educators were primarily developed by the NKV administrator and district-level administrators. NKV educators occasionally led a PD initiative if they had a specific skill set deemed appropriate to share with the rest of the NKV educators. PD was delivered to NKV educators in virtual and in-person formats during the 2022-2023 academic year.

## **Sampling Procedures**

The current study utilized a qualitative phenomenological approach to examine NKV educators' perceptions of their PD opportunities and explore which types of PD participants deemed beneficial and necessary. Creswell (2007) explained that in qualitative phenomenological research, it is imperative to select participants who "have all experienced the phenomenon being explored and can articulate their lived experiences" (p. 119). Accordingly, the researcher in the current study used criterion sampling to recruit interview participants from a population of 25 K-12 NKV educators who met these qualifications. According to Creswell and Poth (2018), "criterion sampling works well when all individuals studied represent people who have experienced the phenomenon" (p. 157). Purposefully selecting participants based on a specific criterion allows researchers to gain deep insight into the research problem and questions (Creswell & Creswell, 2018). For participants to qualify for the current study, they were required to meet four specific criteria:

1. Participants must have been certified, full-time K-12 NKV educators during the 2022- 2023 academic year.
2. Participants must have participated in NKV PD initiatives during the August 2022-May 2023 academic year.
3. Participants must have continued employment at NKV during the 2023-2024 academic year and have an active district email address.
4. Participants must have provided informed consent to participate in the current study.

By selecting participants who met these criteria, the researcher ensured that all participants could provide detailed information relevant to the objectives of the current study.

Guest et al. (2020) contended that “data saturation is the conceptual yardstick for estimating and assessing qualitative sample sizes” (p. 1). However, the guidelines for determining when saturation has been achieved and the necessary sample sizes to achieve it have been vague in qualitative research (Hennink & Kaiser, 2022). Limited methodological research has existed regarding the precise conditions that define saturation or the explicit criteria for attaining it (Sebele-Mpofu, 2020). Saturation occurs in phenomenological research when no additional data are discovered, and the researcher observes repetition in the data (Charmaz, 2006; Glaser & Strauss, 1967; Guest et al., 2020; Rijnsouwer, 2017). The number of participants in phenomenological research has typically varied from groups of 3-4 participants to groups of 10-15 participants (Creswell & Poth, 2018). Most phenomenological studies have an average of 3-10 participants (Creswell & Creswell, 2018). Creswell and Creswell’s (2018) recommendation of 3-10 participants was reinforced by Smith and Nizza (2022), who advised that phenomenological research completed to fulfill requirements for a doctoral degree should include at least 10 participants. Marshall (1996) advised that “an appropriate sample size for a qualitative study is one that adequately answers the research question” (p. 523). The researcher’s decision to include 10 participants in the current study aligned with recommendations from multiple sources who indicated that this number of participants is a sufficient number to interview when conducting qualitative phenomenological research (Creswell & Poth, 2018; Creswell & Creswell, 2018; Smith & Nizza, 2022).

## **Instruments**

The utility of interviewing as a data collection technique has extended across multiple qualitative research methodologies (McGrath et al., 2019). The objective of conducting qualitative interviews is to enable the researcher to gain insight into the perspectives of other individuals (Patton, 2002). Furthermore, interviewing has been the primary method researchers use to collect data during phenomenological research (Smith & Nizza, 2022) and has been preferable when the researcher has intended to depict an individual's perceptions of a phenomenon rather than constructing generalizations for broad populations (McGrath et al., 2019).

Each interview conducted during the current study consisted of seven demographic questions and 21 main questions, each with optional follow-up questions to probe for additional information or clarification of interviewees' responses. The researcher developed these interview questions by reflecting upon the information detailed in the current study's literature review, the focus of the current study's research questions, and the results of the quantitative survey administered to NKV educators at the end of the 2022-2023 school year that asked the educators to what extent they perceived their PD opportunities as valuable, relevant, and meeting their personal needs as virtual educators. The development of interview questions is directly impacted by the study's research questions (Engward et al., 2022). Therefore, the objective of each interview question presented to the participants was to address the current study's two research questions.

When considering the instruments utilized in a qualitative study, Mertens (2020) emphasized it is essential to remember that "the researcher is the instrument for

collecting data” (p. 272). Although the researcher was the primary instrument used to collect data in the current study, a semi-structured interview protocol (see Appendix A) was created and utilized to assist in collecting data that provided insight into the current study’s research problem and questions. An interview protocol helps ensure that consistent and uniform lines of inquiry are followed with each participant (Patton, 2002). As Patton (2002) explained, “The interview guide provides topics or subject areas within which the interviewer is free to explore, probe, and ask questions that will elucidate and illuminate that particular subject” (p. 343). Smith and Nizza (2022) emphasized that developing interview protocols has allowed researchers to visualize future interviews in detail, allowing them to prepare the interview sequence and anticipate potential impediments to obtaining meaningful data.

The interview protocol utilized in the current study sequentially listed the interview and follow-up questions the researcher crafted to encourage participants to expand upon their original responses. Additionally, the interview protocol included a pre- and post-interview narrative the third-party interviewer delivered to participants to verify their consent to participate in the recorded interviews and their understanding of the current study’s objectives. This interview protocol was diligently followed during each interview session by an impartial, third-party interviewer trained in applying the protocol.

### **Data Collection Procedures**

It is critical for researchers to collect quality data to produce quality research (Smith & Nizza, 2022). In phenomenological research, this entails obtaining comprehensive and intricate participant accounts of a particular experience (Smith & Nizza, 2022). Before collecting data from the participants, researchers must obtain

approval from the appropriate institutional review board (IRB) (Creswell & Poth, 2018). IRBs are responsible for conducting an impartial assessment to determine the ethical acceptability of proposed research, examining potential biases of clinical investigators, and assessing adherence to regulations and laws established to safeguard human subjects (Grady, 2015). The researcher for the current study obtained permission to conduct the current study from the NKV district administration (see Appendix B) on December 8, 2023. Subsequently, the researcher submitted an IRB request to Baker University on December 14, 2023 (see Appendix C). The IRB request for the current study was approved on December 19, 2023 (see Appendix D).

Following approval from Baker University's IRB and the NKV administrators, the researcher for the current study identified 25 NKV educators who met the eligibility criteria and emailed all potential participants to recruit interviewees. After identifying the 25 qualified NKV educators, the researcher for the current study sent a recruitment email to all individuals (see Appendix E) regarding their willingness to participate in an interview. After considering the sample size guidance provided by Creswell and Creswell (2018), Creswell and Poth (2018), and Smith and Nizza (2022), the researcher from the current study concluded that 10 interviewees were adequate to achieve data saturation and conduct a comprehensive investigation of the research problem and questions. The first 10 respondents who indicated they were willing to participate in an interview were contacted within a week of their response to the recruitment email to schedule an interview and asked to sign an informed consent form (see Appendix F). Additional participants who expressed their readiness received an email expressing appreciation for their willingness and sharing that 10 interviews had already been scheduled, and there



was no need for additional participants. Those who did not respond to the recruitment email received no further communication about the current study.

The researcher for the current study trained the third-party interviewer to apply the interview protocol while utilizing the Zoom video conferencing platform, which allowed the third-party interviewer and the participants to communicate visually and auditorily during the interview process. There were several reasons why Zoom was chosen as the communications platform most conducive for obtaining information from participants that would allow the researcher to address the research problem and questions. First, all participants regularly used Zoom as an instructional tool and were proficient at operating Zoom. The participants' familiarity with Zoom enabled the interviews to be conducted in a natural setting, which increased the probability that the participants would freely express their perceptions (Elhami & Khoshnevisan, 2022). Secondly, participants were located across the state of Kansas. This geographical barrier made Zoom a practical setting for the interviews, as the researcher was able to minimize the expenditure of resources. Although the interviewer and participants did not share a physical location during the interview process, Engward et al. (2022) asserted that "a sense of closeness can be experienced remotely through a conversational transaction to share one's thoughts and feelings with an empathic listener without physical proximity" (p. 3). The third-party interviewer conducted and recorded the interviews via the Zoom communications platform between January 23, 2024, and February 15, 2024. Interviews lasted between 14-69 minutes.

Following the training session provided by the researcher for the current study, the third-party interviewer rigorously adhered to the interview protocol before, during, and after each interview:

1. The third-party interviewer exchanged pleasantries and introductions.
2. The current study's objectives were reiterated.
3. Participants were allowed to seek the opportunity to seek clarification about the objectives of the current study or to convey any discomfort with their participation. If participants indicated additional clarification was required or were uncomfortable proceeding, they were instructed to contact the researcher for the current study with specific questions or concerns. The participants were then thanked for their time, and the interview was terminated. If no additional clarification was required, the interview protocol was continued.
4. Participants were reminded that the interview would be recorded and stored in the password-protected Zoom cloud.
5. Participants were asked to provide verbal consent to record the Zoom interview.
6. Upon confirmation of participant consent to record the interviews, the objective third-party interviewer initiated the Zoom recording.
7. Participants were again asked for verbal consent to record.
8. Participants were asked to verbally confirm that they signed the consent form to participate in the interview.
9. Assurance regarding the maintenance of confidentiality for both the participant's identity and the responses to the interview questions was given.

10. Participants were informed of their right to decline to answer any questions or terminate the interview at any time.
11. The third-party interviewer asked the main interview questions with the optional follow-up probes as needed.
12. Participants were asked if they had any questions or concerns about the interview or how the interview data would be used. Any participant questions or concerns were immediately brought to the researcher's attention.
13. The third-party interviewer stopped the Zoom recording.

Upon the completion of each interview, the recording was securely stored within a password-protected cloud environment and was subsequently deleted two years after the study's conclusion.

### **Data Analysis and Synthesis**

Data analysis in phenomenological studies involves researchers engaging with interview transcripts to uncover and illuminate the phenomenon under investigation and its importance to the participants (Smith & Nizza, 2022). Creswell and Creswell (2018) succinctly stated that "in general, the intent [of qualitative data analysis] is to make sense out of text and image data" (p. 190). The researcher followed a process for coding and theming the data as outlined by Creswell and Creswell (2018) to analyze the interview responses for the current study. The researcher ensured that each Zoom transcription of the interview audio recordings was accurate. Each participant was emailed a reviewed transcript of their interview so they could verify that the transcript accurately reflected the information they provided. As participants reviewed the transcript of their interview, they were instructed to identify any necessary corrections and return the transcript to the

researcher. All participant indicated that their transcripts were accurate, and no revisions or edits to the transcripts were made.

Once verification was received from each participant that the transcript of their interview was accurate, the researcher imported each transcript to MaxQDA. MaxQDA is a software program that assisted the researcher of the current study in organizing, analyzing, and interpreting the interview data. This procedure is referred to as a qualitative data analysis (QLDA), which is a common methodology employed to interpret qualitative data (Lichtman, 2023). Using the transcript coding features built in to the MaxQDA software, the researcher used a method of inductive coding discussed by Lichtman (2023) and Saldaña (2021). This sequential process involved the researcher reading through each transcript line-by-line and assigning initial codes to the text. Saldaña (2021) explained that a code in QLDA is “most often a word or short phrase that symbolically assigns a summative, salient, essence-capturing, and/or evocative attribute for a portion of language-based or visual data” (p. 5). The initial coding phase was *iterative* (Lichtman, 2023), and the researcher read through each transcript several times, adding and renaming codes as a deeper understanding of the data developed. After several iterations of initial coding, the researcher refined 30 initial codes (Saldaña, 2021) and arranged them into categories aligned with the research questions of the current study (Lichtman, 2023). Finally, the researcher extracted several central concepts from the list of categories (Lichtman, 2023; Saldaña, 2021). These concepts were further distilled and became the eight central themes discussed in the next chapter of the current study.

## **Reliability and Trustworthiness**

There has been much debate regarding what procedures should be utilized in qualitative research to establish methodological integrity (Smith & Nizza, 2022). As Creswell and Poth (2018) recognized, “many perspectives exist regarding the importance of validation in qualitative research, the definition of it, terms to describe it, and procedures for establishing it” (p. 254). There has been no single agreed-upon technique to establish trustworthiness in qualitative research (Stahl & King, 2020). In 1985, Lincoln and Guba advised that to establish trustworthiness in qualitative studies, researchers should verify credibility, transferability, dependability, and confirmability. These four components of trustworthy qualitative studies outlined by Lincoln and Guba (1985) have been widely accepted by researchers (Connelly, 2016; Creswell & Poth, 2018; Shenton, 2004), and their framework has frequently been referenced in literature discussing the characteristics of valid qualitative research (Connelly, 2016; Creswell & Poth, 2018; Rose & Johnson, 2020; Shenton, 2004; Sinkovics et al., 2009; Stahl & King, 2020). In 2018, Creswell and Poth developed strategies for establishing trustworthiness in qualitative research. These strategies included (a) corroborating evidence through triangulation; (b) discovering a negative case analysis or disconfirming evidence; (c) clarifying researcher bias or engaging in reflexivity; (d) member checking or seeking participant feedback; (e) having prolonged engagement in the field; (f) collaborating with participants; (g) enabling external audits; (h) generating rich and thick descriptions; and (i) having a peer review or debriefing of the data. Creswell and Poth (2018) recommended qualitative researchers utilize at least two of these nine validation strategies in their framework.

Creswell and Poth (2018) viewed qualitative research validation as an evolving, dynamic concept and acknowledged that “there are many types of validation in qualitative research and that authors need to choose the types and terms with which they are comfortable” (p. 259). Researchers’ procedures to establish validity must be aligned with their research designs and objectives (Connelly, 2016). Stahl and King (2020) proclaimed that “the degree of trust one has in the person telling the tale has much to do with the degree of trust attributed to the telling” (p. 26). The researcher for the current study relied upon the validation frameworks proposed by Lincoln and Guba (1985) and Creswell and Poth (2018) to establish reliability and trustworthiness. Following the guidance of these researchers, four specific techniques were incorporated into the current study to establish methodological validity:

1. The researcher used *member checking*. Member checking is a technique used to obtain participant feedback regarding the accuracy of collected data and verify the researcher’s interpretations of the data (Stahl & King, 2020). Lincoln and Guba (1985) stressed that member checking is the primary method for establishing qualitative validity. Following the advice of Stahl and King (2020), the researcher of the current study provided participants with an opportunity to verify the accuracy of their transcripts and clarify any part of these transcripts after their interview. Participants were subsequently emailed the researcher’s preliminary codes so they could confirm their fidelity. Rose and Johnson (2020) explained this opportunity to review the researcher’s preliminary analysis results allowed the participants to “decide to what degree

preliminary codes, themes, texts, participant quotes, cultural description, or a grounded theory represent their sense of the question or phenomenon” (p. 9).

2. The researcher used *rich, thick descriptions* to communicate the findings. This technique provides readers with information that allows them to assess the potential transferability of the study (Lincoln & Guba, 1985). According to Creswell and Creswell (2018), rich, thick descriptions “transport readers to the [research] setting and give the discussion an element of shared experiences” (p. 200). A researcher’s focus on an intricate and comprehensive data presentation offers readers a heightened sense of authenticity and an increased understanding of the phenomenon (Rose & Johnson, 2020). Rich, thick descriptions of the participants’ experiences with PD are found in Chapters 4 and 5 of this dissertation.
3. The researcher used an objective, third-party individual to conduct the interviews due to the researcher’s proximity to the participants and personal stake in PD opportunities at NKV. This individual also served as an *external auditor*. Using an external auditor unfamiliar with the researcher or the study to evaluate the current research objectively has increased methodological validity in qualitative research (Creswell & Creswell, 2018). According to Creswell and Poth (2018), “the auditor examines whether or not the findings, interpretations, and conclusion are supported by the data” (p. 262).
4. The researcher *clarified the potential bias* related to the current study. When researchers fully acknowledge any preconceptions or biases related to the study, they introduce a measure of trustworthiness (Creswell & Creswell,

2018). According to Rose and Johnson (2020), the “validity of the overall study can be strengthened with thoughtful, insightful articulation of the ways in which researchers’ subjective positionalities influence all aspects of the research process, from subject matter to methods to analysis to representation of the findings” (p. 11). Clearly defining and articulating the role of the researcher is imperative to producing a reliable and trustworthy dissertation or research manuscript (Stahl & King, 2020). The role of the researcher is defined in the next section of this chapter. Furthermore, the researcher disclosed their proximity to the participants and personal stake in the phenomenon under investigation as limitations of the research design at the end of the present chapter.

### **Researcher’s Role**

Creswell and Creswell (2018) explained that a researcher’s “personal background, culture, and experiences hold potential for shaping their interpretations, such as the themes they advance and meaning that they ascribe to the data” (p. 182). These researcher attributes can influence the trajectory of qualitative research (Creswell & Creswell, 2018). As such, qualitative researchers are understandably encouraged to identify personal values, assumptions, beliefs, and biases that could potentially influence data collection and interpretation (Mertens, 2020). The researcher for the current study obtained a B.S.Ed. in Psychology (2005), a B.S.Ed. in Physical Education (2005), and an M.Ed. in Special Education (2014) from Pittsburg State University. Furthermore, the researcher has been a K-12 public educator for 16 years. The last five years have been spent in the capacity of a virtual educator at NKV, the organization from which the



researcher recruited participants for the current study. The researcher's interest in the phenomenon originated from his involvement in numerous NKV PD initiatives and his reflection upon their value and relevance to NKV educators. The researcher for the current study acknowledged that this proximity to the participants and phenomena increased the possibility that bias was introduced. Due to this proximity, the researcher trained an objective third-party individual to apply the interview protocol consistently while conducting each interview. Utilizing a third-party interviewer mitigated potential biases that might have been introduced into the current study due to the researcher's connection to the participants.

Although the researcher's proximity to the participants and experience with the phenomena did increase the potential for bias, it also afforded him the ability to ensure that all interview questions asked by the third-party interviewer supported the objectives of the current study and that the collected data directly addressed the current study's research problem and questions. McGrath et al. (2019) explained that a researcher's "previous knowledge may play an important part in understanding the context or the experiences of the interviewee" (p. 1004). For this reason, it is recommended that researchers take steps to familiarize themselves with the participants before data collection and interpretation to increase the validity of qualitative research (Creswell & Poth, 2018).

### **Limitations**

According to Roberts and Hyatt (2019), limitations are specific characteristics of a study that could potentially impact the results or the researcher's ability to generalize the findings. The researcher acknowledges the current study has several limitations:

1. The primary limitation is the researcher's proximity to the participants and the phenomenon being explored. The researcher is an NKV educator familiar with the participants and has experience with the phenomena examined in the current study. Although the researcher does not work directly with most participants in the current study, he does work for the same organization. Although the researcher used an objective third-party individual to conduct the interviews, it is possible that the participants responded to interview questions in ways they felt were desirable to the researcher as they were aware of the purpose of the interviews.
2. Phenomenological research involves interpreting participants' descriptions and experiences, which can introduce researcher bias. The researcher's preconceptions and biases could have influenced data collection, analysis, and interpretation. A different researcher might interpret the collected data differently, leading to potential variations in findings.
3. The current study employed criterion sampling and relied solely on the perspectives of only 10 participants. Relying only on the perspectives of a limited sample of a small population can introduce bias and subjectivity into the findings as data collected from the sampled participants may not be representative of the entire population of interest. Furthermore, participation in the current study was voluntary. It is possible that participants with perceptions other than those included in the interviews were not represented or chose not to participate.

4. Although the researcher's objective was to interview participants encompassing maximum variation within the population, it is possible that participants were not fully representative of all NKV educators.
5. Qualitative findings are specific to the sample in the setting at the specific research setting and are not easily generalizable. The transferability of qualitative research to different settings is problematic due to the unique nature of individual participants, research sites, temporal context, and phenomena. The current study's findings may not generalize to other virtual schools, districts, or geographical areas outside of NKV.

### **Summary**

Two research questions guided the current phenomenological study that examined NKV educators' perceptions of their organization's PD opportunities and examined which types of PD they felt were relevant, beneficial, and needed. To address these research questions, a trained third-party interviewer applied an interview protocol that consisted of a pre and post-interview narrative, seven demographic questions, 21 primary questions, and optional follow-up probes. The 10 participants interviewed were sampled from a pool of 25 NKV educators who met specific criteria. Each interview lasted 15-69 minutes. Transcripts of each interview were uploaded to MaxQDA to assist the researcher in analyzing and synthesizing the data. Chapter 4 presents the results of this analysis.

## Chapter 4

### Results

The current study explored NKV educators' perceptions of their organization's PD opportunities, assessed which types of PD they felt were most valuable and relevant, and explored other types of PD they perceived would help meet their individualized needs as virtual educators. To collect data for the current study, a third-party individual employed an interview protocol to conduct semi-structured interviews with 10 NKV educators selected by criterion sampling from a population of 25 potential participants. The demographic information regarding the 10 NKV educators who participated in the current study is displayed in Table 1.

**Table 1**

*Participant Demographics*

Participant	Age	Gender	Overall Teaching Experience	Virtual Teaching Experience	Grade Level Taught	Content Area Taught	Training in Virtual Pedagogy Before NKV Employment
#1	45	F	18	18	9-12	Music/FACS	Yes
#2	46	F	24	4	6-8	ELA	No
#3	62	F	35	15	K-12	Gifted Education	No
#4	55	F	32	9	9-12	ELA	Yes
#5	54	F	23	2	8-12	Math	No
#6	55	F	30	10	9-12	Social Studies	No
#7	53	F	25	20	9-12	ELA	No
#8	60	F	20	2	K-12	SPED	No
#9	56	F	23	14	6-8	SPED	No
#10	37	F	13	6	9-12	SPED	No

The age of the 10 participants in the current study ranged from 37 to 62, with a mean age of 52.3. The participants' overall K-12 teaching experience ranged from 13 to

35 years, with a mean experience of 24.3 years. The participants' level of K-12 virtual teaching experience ranged from 2 to 20 years, with a mean of 10 years. Three special education teachers, two English language arts (ELA) teachers, one music and family and consumer science (FACS) teacher, one math teacher, and one teacher of academically gifted students were interviewed. The participants in the current study represented educators from grades K-12. Two of the 10 participants (20%) received training in virtual pedagogy before being employed as NKV educators.

The researcher for the current study used an inductive coding method to conduct a QLDA using the interview transcriptions. While conducting the QLDA, the researcher developed 30 individual codes, which assisted in identifying eight major themes related to RQ1 and RQ2. Three of these themes are associated with RQ1 and five of these themes are associated with RQ2. Each of these eight themes are discussed in subsequent sections of the current chapter.

The following research questions guided the current study:

***RQ1***

What are NKV educators' perceptions of professional development initiatives during 2022-2023 in terms of their value, relevance, and meeting their needs as virtual educators?

***RQ2***

What types of professional development do NKV educators perceive would be valuable, relevant, and better meet their needs as virtual educators?

## **Themes Associated With RQ1**

RQ1 explored NKV educators' perceptions of PD initiatives during 2022-2023 in terms of their value, relevance, and meeting their needs. The interview data from most of the 10 participants in the current study suggested that PD provided by NKV district administration was ineffective in meeting their needs as virtual educators. Although this outcome was expected based on the results of the 2022-23 quantitative survey of NKV educators' perceptions of PD (Panorama, 2023), which indicated that NKV PD was not valuable or relevant, the current qualitative study presented an opportunity for multiple NKV educators to expand upon their survey responses and articulate specific details regarding 2022-23 NKV PD initiatives. A review of the transcript data revealed three central themes related to RQ1. These three central themes related to RQ1 are presented in the following sections of this chapter.

### ***Theme 1 (RQ1): 2022-23 NKV PD Initiatives Were Perceived as Ineffective Due to a Lack of Consideration and Awareness of NKV Educators' PD Needs***

The most frequently referenced perception during the interviews of current NKV educators was that the 2022-23 PD initiatives developed and presented by the NKV district administration were nonvaluable, irrelevant, and did not meet their specific needs as virtual educators. There were various reasons why NKV educators felt their PD initiatives were ineffective. The most frequent comments involved a perception that district-provided PD was irrelevant to NKV educators' professional learning needs because the PD initiative was developed for brick-and-mortar educators. Each of the 10 participants, at some point during the interview, mentioned the lack of relevance in district PD initiatives to their roles as virtual educators. Some NKV educators perceived

their district administration did not consider their specific PD needs in developing PD or were not prepared to deliver effective PD. Additionally, several NKV educators articulated a perception that the NKV District administration was not aware of their specific PD needs and has not provided NKV educators adequate opportunities to communicate these needs.

**District-Provided 2022-23 PD Irrelevant to NKV Educators.** When asked about their perceptions of the relevance of 2022-23 NKV PD initiatives, Participant #2 stated, “I don't think any [2022-23 PD initiatives] were [relevant] last year because all of them felt very mandated by our district administrators, and the PD felt just kind of universal to everyone in the district regardless of being an in-person or virtual educator.” According to Participant #1, “We need to reinvigorate PD because right now when people say ‘PD’, they groan and try to find a way out of attending.” The same participant referred to these PD initiatives as “checking the box” type of PD because educators feel that “they are something you have to do” although they lacked in relevance to NKV educators. Participant #4 concurred:

I think sometimes the district wants to put all of us into the same category, and they don't look at virtual educators as a completely different entity, and so the classroom management stuff that they're doing with brick-and-mortar teachers, that does not apply for us. We have completely different issues, so I would love to see them recognize that and try to figure out how to cater that to us as well so that we're included.

The position that NKV district administrators provided PD that was irrelevant to NKV educators during the 2022-23 school year was further reiterated. For example,

Participant #5 recounted:

I went to the beginning of year PD in person in 2022-23. You know, for instance, we went to this presentation by the textbook provider for the rest of the district, but it was useless to me because we [NKV] don't use that textbook. I had to sit there for an hour, hearing about a tool I don't use.

Participant #6 emphasized, “Any PD that we were given by our district was not relevant to online teaching.” Participant #7 added, “Last year, we were made to attend all of the district PD and it just doesn't pertain to the virtual world. All of the PD that the district offered was just not relevant to the virtual school.” Participant #9 provided further reinforcement of this concept and claimed:

Most of the time, the PD did not meet my needs just because it was based more on being a brick-and-mortar teacher. And in our district, a lot of times when you're going to a PD, it's district-wide, so it's not really relevant to us as virtual school teachers. There isn't really any PD I can think of district-wide that I've been to that's really benefited me as a virtual teacher.

Participant #10 relayed the general sentiments of all participants and succinctly asserted, “Honestly, all of the district trainings that we were required to do had no relevance to us whatsoever.”

**NKV Educators' 2022-23 PD Needs Not Considered.** In addition to 2022-23 NKV PD initiatives lacking relevance, multiple participants mentioned instances where they perceived the PD needs of NKV educators were not considered, which precluded



them from actively participating in the district PD initiatives. As Participant #7 explained, “The PD wasn't timely. It just had nothing to do with what we did. They [NKV district administration] just really didn't take us into consideration at all.” Other NKV educators recalled specific PD initiatives that characterized this lack of consideration. Participant #2 stated:

I went to a district-mandated professional development, and we were going to look at student scores for data and trends, and it was an assessment that in-person students were able to do, but it was an assessment that our virtual school couldn't do because at the state level, they said it needed to be in-person proctored. So my other colleague and I just kind of sat at this round table while all of our in-person colleagues were reviewing scores and talking about data trends and patterns and next steps for teaching, and we couldn't participate.

Participant #8 recalled:

I would start with the Benchmark PDs, which is a program we use at the elementary level for teaching ELA and reading. What was not beneficial for me with Benchmark is they were presenting to the entire district. They were presenting just the brick-and-mortar part of Benchmark. Both times, it was just what you would use in a brick-and-mortar building, so it was not catered to how we teach virtually at all.

Participant #5 shared an instance where the district PD presenters' lack of preparedness diminished the relevance of the PD:

Some of the PD wasn't ready for prime time, honestly, when we went to it, like the PD about Xello, which we do use. When I got to the training, I remember

nothing was set up, so you couldn't actually look at the tool and explore it. They just really weren't ready to give us professional development on that tool.

**NKV District Administration Unaware of NKV Educator 2022-23 PD Needs.**

Additional data illuminating why some NKV educators perceive district PD as ineffective involved their concerns that NKV district-level administration lacks an awareness of the specific PD they require due to a general misunderstanding of the unique requirements of their jobs as virtual educators. For example, Participant #10 stated:

It would be nice to be provided PD from someone who knows our school [NKV] and what we [virtual educators] actually do and not what they [NKV district administration] think we do. The district people come in and try to give us guidance, but they don't know who we are. Having someone who knows what we're doing, who wants to learn what we're doing is so vital to our success.

Participant #2 expressed a similar viewpoint and claimed, "As a virtual teacher, I would like my district to understand what we do, what our challenges are, what our successes are, and how to meet our needs as virtual teachers."

The interview findings highlighted a perception that administrators within the NKV district have not made proactive efforts to understand the NKV educators' daily job requirements or the PD needs of NKV educators despite the educators' willingness to participate in such discussions. Participant #6 asserted:

The district needs to ask us what we need. We just really haven't had that opportunity, and even just having a day where we could all sit down with the district and share what we do would be very helpful for all of us.

Participant #7 concurred and verbalized that NKV district administration needs “to listen to us about what we need and want for the virtual school PD. If they would listen, just listen to our needs about PD, I think that would be helpful”. NKV educators’ hopes for their district administration to better understand their PD needs was articulated well by Participant #1, who vocalized, “My hope is that in the future that they are literally listening to our needs and the needs of my colleagues about what would they need to make PD relevant to make them better educators.”

***Theme 2 (RQ1): The 2022-23 PD Initiatives NKV Educators Perceived as Valuable Involved Interaction and Collaboration With Other NKV Educators***

Theme 2 discusses the one aspect of 2022-23 PD that NKV educators perceived as most valuable and relevant to their profession. Although 2022-23 PD was overwhelmingly perceived by NKV educators as lacking overall value and relevance, several participants made it clear that the aspect of 2022-23 PD initiatives that were of value involved having time to interact and collaborate with their NKV colleagues during these PD initiatives. The benefits resulting from the interaction between NKV educators were not intentionally incorporated into the PD initiatives but emerged as a byproduct of NKV educators sharing the same virtual or physical space. Participant #7 described a typical scenario where NKV educators took the initiative to benefit from district PD that was not relevant:

I really don't remember the district creating an opportunity for us to get together. If we got together, it was because we took the day off or we went [to the district PD] and then we would just hang out together in the commons area and work and talk together there.

Providing further insight into how NKV educators leveraged their time during PD to their benefit despite the PD not being valuable, Participant #2 shared, “I would say it wasn't necessarily valuable for my curriculum or my academic goals. But for kind of that connection, social-emotional connection, it was very valuable because when you're a virtual teacher... it can be very isolating.”

Other NKV educators perceived collaboration time during 2022-23 PD initiatives as the most valuable aspect of having PD. Participant #9 explained the importance of collaboration with NKV colleagues:

I felt like if NKV was meeting together as a school or as a team, that was helpful. The NKV middle school teachers met together and were doing some things that we had learned or discussed programs or some things that we'd learned on our own. We would present that or share that with the rest of the team. That's very helpful, but there wasn't really anything I can think of district-wide that I've been to that's really benefited me as a virtual teacher.

Two NKV educators expressed similar perceptions about the importance of interacting with their NKV colleagues. Participant #1 commented:

What was important for me was getting together with my colleagues. It is important to be in the same room with virtual colleagues. So that's what I felt was valuable, that time to actually be with other virtual colleagues. The fact that I got to be with colleagues and to collaborate with them was memorable for me.

Participant #7 added, “During the 2022-23 school year, the only PD that was valuable was PD when NKV teachers could really work together. That is really, really, really the only thing that was valuable. And we really didn't get much time for that at all.”

While there were very few references to any tangible benefit NKV educators gained from district PD initiatives, participants repeatedly professed their desire to interact and collaborate with each other. When asked what they found valuable about attendance at PD initiatives, Participant #5 replied, “Mostly when we were given time with colleagues, our NKV colleagues. I would say this time would be the most valuable for our specific setting.” When asked the same question, Participant #10 expressed a similar opinion and reiterated the importance of NKV educators having time to collaborate and explained, “It’s really helpful when we do meet... and we get to actually collaborate as a team”.

The comments made by the NKV educators during the interviews for the current study indicated that the primary benefit from participating in district PD did not stem from any presentation or workshop on the PD agenda but rather from the opportunity for NKV educators to spend time together, interact, and collaborate.

***Theme 3 (RQ1): NKV Educators Did Not Perceive Their Feedback Regarding 2022-23 PD Initiatives Was Listened to or Considered in PD Development***

NKV educators indicated they perceived their feedback about PD initiatives during the 2022-23 academic year to be undervalued or not considered by NKV district administration. Although most NKV educators mentioned that they could provide feedback via brief post-PD electronic survey or questionnaire (all but Participant #4), most felt the lack of attention and response to their feedback contributed to participation in 2022-23 PD that did not meet their needs. When asked how they have seen their PD feedback shape future PD design, Participant #1 felt that any 2022-23 feedback “hasn’t been considered” by the district administration and that NKV’s district administration has

“to get to a place where teachers can actually give some real feedback so we can actually make it better and it's useful. I would fill out the survey and give feedback and it fell upon deaf ears”. When asked the same question, Participant #3 simply declared, “I wouldn't say that I have [seen any changes to PD as a result of feedback],” and Participant #7 added, “PD itself has not changed as a result of any feedback.”

In addition to a perception that 2022-23 PD feedback was not valued or considered by the NKV district administration, other NKV educators expressed confusion about who was reviewing their PD feedback at the district level. As Participant #6 explained, “I'm not really sure what happens to feedback after they're submitted.” Participant #4 expressed a similar uncertainty:

You know, we rate it and fill all that stuff out all the time and I'm not sure if they read it. We sure don't know that they read it and there's never any feedback that we've received about the feedback we've left. That's convoluted, but I think you understand what I'm talking about. So that would be one thing. Who's looking at that feedback, and who's making recommendations based on what we say?

Participant #7 explained, “We have opportunities to provide feedback. I don't know if anyone ever reads it”. Participant #8 contemplated:

Who actually reads it? Is it at the presenter's level, or is it at a department level? I would like to see how it is on the back end, because by it being electronic, that's good, but who has access to it? Who actually reads it and uses it?”.

Participant #10 added:

I have not seen or noticed any of the feedback that I have provided used to change any of the PD that we have participated in. I have no idea who looks at the

feedback or decides what to do with it. I would just like to know that we are being listened to and that someone in the district office is actually reading our feedback. Once we provide feedback to the district about our PD, we have no idea what happens with that information.

### **Themes Associated With RQ2**

RQ2 explored the types of PD NKV educators perceived as valuable, relevant, and better meeting their needs. Interview questions related to RQ2 sought to reveal the specific types of PD that NKV educators perceive are necessary to their profession as they navigate the complex and fluid environment of public K-12 virtual education. The interview data from the 10 participants revealed five central themes associated with RQ2. These five themes are presented in the following sections of the current chapter.

#### ***Theme 1 (RQ2): NKV Educators Believe Collaboration With Their Colleagues and Virtual Educators From Other K-12 Organizations Will Increase the Value and Relevance of Their PD Initiatives***

Interview data from the 10 NKV participants indicated that collaboration with their NKV colleagues during PD initiatives was highly valued among this group of educators. All participants commented on their desire to have more collaboration time with their NKV or district colleagues integrated into future PD initiatives. As Theme 2 (NKV Educators Require a Need for More Input and Autonomy in the Development of NKV PD) discussed, past collaboration time was overwhelmingly perceived as the primary beneficial aspect of PD during the 2022-23 academic year. As such, these sentiments are not surprising but are noteworthy as they speak to the NKV educators'

desired attributes of future PD initiatives. Furthermore, multiple participants emphasized the potential benefits of collaboration with virtual educators from other school districts.

**Collaboration Between NKV Educators.** When asked how important it is for NKV educators to collaborate during PD, the 10 NKV educators who participated in the current study were unanimous in their perception that collaboration time with their NKV colleagues is critical. Participant #1 was perhaps the most vocal proponent of ensuring NKV educators have time to collaborate:

It's crucial. It's the lifeblood and foundation, not in the sense of a staff meeting or a checklist to go through all the stuff we got to get done. But it is imperative to have that time where we sit down, whether we're by departments or whether we're by grade levels. Being together is the lifeblood because one teacher shared another tip with me in January. I was like, oh, that's what you did. And it's actually making a big difference in my homeroom class and my advisory. I know the district wants us to have a very detailed, busy schedule, and I appreciate and understand there needs to be structure, but there's got to be that time where, A, we can talk and, B, actually collaborate and do. I think that you have to have that time to sort of touch base and to talk and to share. I think that's important to be able to do that.

Participant #2 provided reinforcement and stated:

I think it's hugely important. I think especially I think more so for virtual than in-person because we're often our own little island at our desk in our home office. So to have that collaboration, whether that's in person or in a web conference, is huge.



Participant #3 concisely asserted, “Very. That's where the benefits come from.”

Participant #4 added, “I think it's extremely important to get to collaborate together.”

While NKV educators desired more collaboration time integrated into their PD initiatives in general, seven NKV educators mentioned specific reasons why they felt this time was beneficial. When asked about the importance of NKV educators collaborating during PD, Participant #5 emphasized that collaboration time allows NKV educators to support each other:

Oh, it's critical. I never would have survived last school year without my colleagues. You know, either in a building PD, officially, or collaboration time, PLC time, my math colleagues, and even my social studies colleague. I mean, I don't teach social studies, but I have a colleague who teaches social studies. She was invaluable in helping with the tools for the Schoology and advisory courses.

Participant #9 conveyed a similar perspective:

Collaboration during PD is huge. The best thing to do is collaborate with your other virtual school teachers just because everyone has their little niche or something they're good at. And then we can teach each other different things or give our own little PD of things that we've learned, just through our daily job of working with our students every day.

Participant #8 also discussed the benefits of collaboration time for NKV educators during PD:

Well, I think it's important, and one of the main things is going back to the strategies. If a teacher has used a certain strategy and they feel successful with it, being able to sit and share that with other teachers is important. So that's one of

the main reasons for making sure that we have time to collaborate together.

Another one is just the stress of teaching and stress comes at all levels, but being able to sit with your coworkers and discuss the ins and outs of the daily classroom and how we handle those, the strategies we're using for handling difficult students. It's not just all about curriculum. A lot of time, it's about behavior.

Participant #4, an English Language Arts (ELA) teacher, observed that ensuring adequate collaboration time during NKV PD could lead to cross-curricular planning, which would potentially lead to enhanced learning opportunities for NKV's students:

I would like to see more collaboration with my other ELA teacher and social studies teachers so that we could combine and do some cross-curricular activities because US history and American Lit go hand in hand. We could do a lot if we were just given a bit of time to figure out how to do it. I think learning from each other has been huge. I feel like given the opportunity to share out what we're doing and how we're handling certain situations would be great.

Participant #7 contended that integrating collaboration time into NKV educators during PD is perhaps more essential than providing collaboration time for their brick-and-mortar school colleagues "because we [NKV educators] don't have a lot of time to spend collaborating because we aren't together daily. We just never get enough time together to do the things we need to do." Participant #6 had similar feelings and emphasized that collaboration time during PD is "incredibly, incredibly important, and we, unfortunately, don't really get the opportunity [to collaborate] most of the time." Participant #4 provided an analogy for the uniqueness of NKV educators' roles in their district and mused, "We are all in the same boat, and it's a unique boat, so we need to rely on each other."

### **Collaboration Between NKV Educators and Other K-12 Virtual Educators.**

While all 10 NKV participants indicated they desired more collaboration opportunities with their colleagues during PD initiatives, multiple NKV educators discussed the potential benefits of networking with K-12 educators from other virtual school organizations as part of future NKV PD. Although the NKV educators mentioned several positive outcomes that could result from collaboration with other virtual school organizations, the most frequently referenced was a desire to collaborate with other virtual educators who taught in the same content area. Participant #4 was interested in collaborating with other virtual ELA educators to compare their course pacing and curriculum to their own:

I think we go to people who are doing it well and that have some skin in the game that aren't brand new. They can share with us, and we can share with them. I think looking at their curriculum, talking to other people who do it well, attending virtual PDs if there are any, just to hear what other teachers do. I would like to pick the brains of other virtual ELA teachers to see their [curriculum] pacing... how quickly they go. I mean, am I too easy? Am I too hard?

Participant #6 conveyed that they would like to observe virtual educators from other organizations while they were teaching one of their virtual classes:

It would be nice to meet other virtual educators, especially ones that teach what we teach. To go into another virtual classroom where they're teaching US history or US government or something and just see what they do would be incredibly beneficial for content support and pedagogy. I don't have a problem participating in PD with other teachers who aren't virtual, but our PD is severely lacking the

opportunities to collaborate with each other as virtual educators. I would love the opportunity to collaborate with teachers who are not part of our district but teach virtually. It would be really nice to get some insight from other people who do this [teach virtually] as well. We can kind of compare stories and strategies and things like that. I just hope that down the road, we have opportunities [to collaborate with other virtual educators], and we can start to find out about offerings that maybe we aren't aware of.

Participant #2 was interested in collaborating with other virtual teachers to learn about specific strategies:

I'm interested in how we increase attendance in live classes. I think that right now, I have about a 50 percent attendance rate, so I'd like to see what are some practices that other virtual teachers use to have an increased rate. I'd like to hear about different practices on how to increase student collaboration and engagement in the virtual world in general. Just maybe other resources and programs and platforms. What do other virtual schools use? What are the pros and cons?

The desire to collaborate with virtual educators outside of NKV's district was not limited to content teachers. Two special education teachers expressed a desire to collaborate with their colleagues in other virtual school organizations. According to Participant #10:

It would be really helpful to see what other virtual special educators are doing who teach at different locations. I think especially in special education, just seeing how they deliver their services would be really helpful. Because we kind of just do it, but we also don't know if it's the best practice or if it's just okay.

Participant #9 added:

First of all, collaborating would be great just with other virtual school teachers around the state or around the United States. It would be great if I could work with virtual special educators from other school districts. I think that would be wonderful if I could do that. Just to learn new things from each other, new ways of teaching, and new programs that may help teach the students new skills that you've never heard of. That could definitely impact the student's education.

Both general content and special education NKV educators articulated that they desire collaborative PD with educators in other virtual school organizations. As Participant #1 noted, collaboration with different virtual school organizations would allow NKV educators to “tap into other virtual schools and have an opportunity for a bigger conversation with colleagues who were doing similar things.”

***Theme 2 (RQ2): NKV Educators Believe Increased Input and Autonomy Will Make Their PD Initiatives More Valuable and Relevant***

The majority of the NKV educators participating in the current study indicated that they desired more input into the development and focus of district PD initiatives and more autonomy to develop their building PD initiatives. When questioned as to how future PD initiatives could evolve to meet the needs of NKV educators, Participant #2 replied:

I think the district could reach out to learning coaches and to certified staff and ask or maybe even give options and say, ‘Here are some resources we're looking at or here are some current practices trending in education. What are you interested in hearing more about or trying to implement or meeting with other

people trying to implement?' I would say the content would stem from the need that is voiced by the certified staff or the virtual staff. I'd say that's the place to start.

Participant #1 also perceived that NKV educator input would enhance the quality of district PD initiatives, as they would be more aligned with the needs of NKV educators:

I just feel like there's got to be a better way to schedule and create PD. If we're not talking to our people, then it's not relevant, and it doesn't make sense. Why are we not asking the virtual educators what support do you need? I think that's where the executive leadership team could come in to be like, let's actually ask our educators, what support are you needing?

Participant #6 suggested not only an increase in NKV educator input being integrated into district PD initiatives but also exploring avenues for them to identify and participate in PD initiatives of their choosing based on their current professional learning needs:

I think that it would involve topics that we request, you know, I think it would be nice for them to ask us what specifically we're looking for. Maybe then they [the district] can try to find some of these opportunities or even give us a chance to do some investigation of available opportunities that we might be able to utilize. And [the district needs to] be willing to somehow allow us to join in those PDs and not just have to do what the rest of the district is doing because oftentimes it just does not relate to what we're doing.

Participant #3, Participant #4, and Participant #7 also expressed a desire for NKV educators to be given the autonomy to create and implement their own PD initiatives.

Participant #3 reflected on how NKV was developed and implemented in years past when

they perceived NKV PD initiatives as effective and explained, “It used to be that we did our own PD, and it was always relevant and always beneficial. So I really think we need to go back to the virtual school doing its own professional development.” Participant #4 expressed a similar opinion about how to improve the effectiveness of NKV PD:

I think that's an administrative situation and a district situation that they've got to loosen the reins enough and trust us that we're not just going to be having a party every time we're supposed to be doing something. So I think it would start with trust for us to plan it, and then we can look at our schedules and figure it out on our own with our administration.

Participant #7 also emphasized providing NKV more autonomy to identify and develop their own PD initiatives and suggested the following as to what NKV district administration could do to improve the effectiveness of NKV PD:

To listen to us about what we need and want for the virtual school PD.

Historically, before our current principal, and we had two years prior to this year where we had another principal. But before that, they deferred to us [NKV educators] and allowed us to do our own PD. I don't know if they will allow us to do that anymore, but if they would listen, I think just listen, to our needs about PD that would be helpful.

NKV educators perceived that if they were given the opportunity to provide their district administrators with input regarding the types of PD they require, the initiatives would more effectively meet the needs of NKV educators. Additionally, several NKV educators believed that granting them greater autonomy to pursue PD tailored to their professional learning needs would result in more effective PD opportunities. The NKV

educators repeatedly mentioned the necessity of opening a line of communication between themselves and the district administrators responsible for developing PD initiatives. As Participant #1 speculated, “I feel like that PD could actually be probably one of the most awesome things we have by simply changing the structure of who's planning and getting feedback.” According to Participant #2, “I think that a good first step [in the process of improving NKV PD] is just to have a voice at the table. I think having that voice would really increase teacher buy-in and make PD more personalized.”

***Theme 3 (RQ2): NKV Educators Believe PD Initiatives Developed by Those With Experience in Virtual Education Will Make Their PD Initiatives More Valuable and Relevant***

Most of the participants in the current study indicated they perceived that PD initiatives would be more beneficial if they were presented by experienced virtual educators or representatives from the educational organizations who have created the content that is the focus of the PD. The NKV educators maintained that PD presented by experienced virtual educators or representatives from educational organizations with product expertise would enhance the effectiveness of NKV PD initiatives at the district and building levels. There is a natural overlap between the current theme and RQ2-Theme 1 (NKV Educators Believe Collaboration With Their Colleagues and Virtual Educators From Other K-12 Organizations Will Increase the Value and Relevance of Their PD Initiatives) as an aspect of most PD initiatives includes some form of interaction with the presenter.

Participant #4 specifically discussed the potential benefits of PD initiatives delivered by NKV colleagues or in collaboration with virtual educational professionals.



When asked about how they would describe the ideal PD initiative for virtual educators, Participant #4 stated:

I think we go to people who are doing it well and that have some skin in the game that aren't brand new, and they can share with us, and we can share with them. I think learning from each other has, I mean, if we're just talking our school [NKV], I think learning from each other has been huge. I feel like being given the opportunity to share out what we're doing and how we're handling certain situations is great.

Participant #7 contended, "I really think having other virtual educators present PD is what is going to make PD relevant." Participant #7 was not alone in this perception.

Participant #9 offered their thoughts on who should present PD to NKV educators:

It would be a PD that's specifically supposed to be for virtual teachers. I would say make sure that the presenter is knowledgeable in that area and has a lot of, you know, background in that area to be able to present something that would be useful to us, which is hard to find because most people have, you know, backgrounds in just brick and mortar teaching. Just have it very organized and to the point where you could walk away from that PD saying, okay, I learned something from this. I'm going to start this week, and I'm going to get it started because it was very well presented, and I'm ready to go. I bought into it, and I think it's a good idea.

Other participants provided additional perspectives on the benefits of receiving PD presented by experienced virtual educators or representatives from educational organizations. When discussing who should lead PD initiatives presented to virtual

educators, Participant #10 asserted, “I think someone that has actually taught in a virtual school, the presenter, because everything is so theoretical if you have not done it.”

Participant #5 reflected upon a common occurrence for NKV educators and illustrated how a presenter unfamiliar with the nuances of virtual education can diminish the quality of PD initiatives:

When the PD isn't ready for you to actually explore the tool, then you're going to do the thing that most teachers do anyway, which is teach themselves in their own time. So, if you're not actually ready to teach the tool, or the person that you're flying in, usually at great expense, to teach you about the tool, doesn't understand the nuances of the tool as it's used in the setting, then that makes it less beneficial. Because the person usually doesn't understand how we're using whatever it is they're teaching us about in our setting. And so the most relevant then usually comes from more experienced colleagues in the same setting.

Participant #5 continued moments later:

I commented in the past, that, like, hearing from people who are actually ‘boots on the ground’, who are using these tools or these strategies with students either in person or in a virtual setting, is the most useful to me. I have said that we needed more colleague-to-colleague co-teaching. PD should be conducted by virtual teachers or just recently retired virtual teachers, not somebody who's been out of a classroom since before COVID telling you just general boilerplate stuff.

Participant #8 affirmed, “I think the biggest benefit [of PD to NKV educators] is going to be the teaching and instructional skills or strategies that we learn from each other.”

Two NKV educators indicated that receiving PD from experienced virtual school professionals would be especially beneficial when learning about educational technology.

Participant #6 expressed:

It would be nice to have some training about some of the available software or apps that are available to us that we can use with our students by people who know what they are doing. It would be really nice to get some insight from other people who do this [teach virtually] as well.

Participant #2 stated that PD facilitated by representatives from educational organizations possessing expertise in their products would enhance the effectiveness of NKV PD initiatives, particularly when the PD centers around a specific resource. Additionally, Participant #2 conveyed that they felt PD delivered by organization representatives might offer greater benefits than PD being presented by NKV colleagues:

I think that asking for input [from NKV educators about PD development] and then I think hiring people who are very well trained in both that practice and concept and in rolling it out. I feel like relevant and valuable professional development needs to come directly from the people who are running the programs and the practices. Delving into one idea or one concept or one resource and having that company or those people directly have the PD and then give time and space for teachers to try for implementation and practice and then come together for revisit what worked, what didn't work. What do we want more training on? I think that would be relevant. I would say instead of coming from each other and colleagues, I think it would be beneficial if it came directly from companies.

***Theme 4 (RQ2): NKV Educators Believe Applicable PD Initiatives and Adequate Time to Learn, Practice, and Apply the PD Content Will Make Their PD Initiatives More Valuable and Relevant***

This theme discusses NKV educators' perceptions that they require PD initiatives that provide instructional information, tools, and strategies applicable in their virtual classrooms. Furthermore, NKV educators expressed that they require an adequate amount of training, practice, and time to gain the capability to apply the PD content effectively. Participant #1 vocalized the frustration of participating in PD initiatives with ambiguous objectives and little content relevant to NKV educators:

We don't have our PD aligned to actually have a clear goal and an end goal and actually go, okay, this is what we're going to do, and now that I gave you the info, now let's actually apply it. We always seem to miss that in PD. We get tons of info... and then it falls short. We don't even move into the application stage of doing it. I think that is one of the biggest struggles and that is frustrating to not have support so I can improve and take this PD and actually directly apply it so I can be a better teacher.

Participant #1 added, "It is [participation in PD initiatives] sort of a get-and-grab, and you run to the next thing. There are no steps to move it forward to actually apply it. We [NKV educators] don't have a direct pathway to application into their classroom." Participant #7 expressed similar concerns:

It [an NKV PD initiative] has to be something that impacts students immediately that we can literally start working with immediately with students, that we have time to implement, time to learn right there on that day and implement

immediately. Because if we're introduced to it and we're not given time to implement or to practice it or to learn it, I'll speak for myself, I just won't because the days will go by. I get busy because we're so understaffed. And then summer comes, and it's like, oh yeah, I forgot how to use it.

When Participant #5 was asked how a PD initiative should be constructed to meet the needs of NKV educators, they asserted, “Make it as real-world and applicable [to NKV educators] as you can.”

Participant #2 and Participant #9 also articulated the need for PD initiatives that focused on concepts applicable to NKV educators and the time to learn and apply these concepts. When asked what attributes a beneficial NKV PD initiative would include, Participant #2 replied:

I would say giving time and space and to roll out whatever has been learned instead of just kind of a sit-and-get and a one-and-done and move on. So, I would say ongoing professional development. So focus on just one thing versus kind of being a speedboat through many. And then just, again, not a one-and-done. I mean focusing on one thing and going into more depth and giving time and space to develop, to try to implement, and then to revisit to get that feedback. How did it go? Where do we go from here?

Participant #9 identified similar attributes in PD beneficial to NKV educators:

Just have it very organized and to the point where you could walk away from that PD saying, okay, I learned something from this. I'm going to start this week, and I'm going to get it started because it was very well presented, and I'm ready to go. I bought into it, and I think it's a good idea.

***Theme 5 (RQ2): NKV Educators Believe Future PD Initiatives That Address Student Engagement Will Make Their PD Initiatives More Valuable and Relevant***

Seven participants in the current study voiced a need to enhance NKV student engagement levels or were concerned that NKV educator PD initiatives did not adequately emphasize student engagement in virtual settings. The perception that improving student engagement levels is necessary was not isolated to teachers from a particular grade level. NKV educators who teach grades K-12 shared this observation. Theme 8 addresses NKV educators' perceived need for future PD initiatives that equip them with strategies to increase student engagement and class attendance in virtual school settings. NKV educators found it challenging to engage students due to the inherent lack of physical proximity to their students in virtual learning environments. They are also interested in what tools and strategies their colleagues use to cultivate student engagement. As Participant #1 explained:

I think student engagement is a big thing... I'm not driving to western Kansas to go knock on their door and tap on their shoulder... Strategies they gave me [during district PD] did not help me as a virtual educator because if the kid doesn't come to class, how am I engaging them because they're not there? I needed to hear from my virtual colleagues. What are you doing? What is working for you? How are you getting your kid engaged? What are you doing here? How is this working? I can't reach them. I can't engage them. I can't tell if they're learning or not.

Participant #4 also expressed a need for more PD content related to virtual student engagement and stated, "I would like to know, as far as virtual teaching, are there some

different engagement strategies that people are using that are working well for them?”

Participant #2 offered similar thoughts regarding a need for PD that enhances student engagement:

I'd like to see what are some practices that other virtual teachers use to have an increased attendance rate. I'd like to hear about different practices on how to increase student collaboration and engagement in the virtual world and to learn more about other resources, programs, and platforms.

Multiple NKV educators articulated they desired future PD initiatives focused on educational technology that improves virtual student engagement. Participant # 5 noted:

Engagement in the virtual setting is a whole different thing, right? Our students usually don't turn on their cameras for one reason or another. Either due to bandwidth or maybe they're just not comfortable with it. So, some engagement strategies and [learning about] tools like Nearpod or Pear Deck would be helpful.

Participant #6 expressed a similar need when asked about future PD needs:

I think that for virtual teachers, a big part of it is just knowing what is available in terms of tools that we can use as far as ways to engage our students online and ways to get more students to actually come to our classes. Just ways to make it a little more interactive and engaging for students would be really helpful.

Participant #9 verbalized comparable needs when asked what future PD should include and stated, “It would definitely just be about being able to be up to date on all the new technology that we could use to improve our students' engagement. That would be something that would be beneficial.”

Participant #8, who is a K-12 special education teacher, stated that some of the best PD from prior years incorporated strategies to engage virtual learners:

I went to several trainings through Greenbush. And with those, just the way they were presented and the fact that they gave us strategies on how to engage our virtual students. And not only engage, but to re-engage for those who had lost interest... was really helpful.

Participant #8 also perceived increasing their ability to model 'hands-on' types of activities virtually would enhance their students' levels of engagement. When asked about specific instructional strategies that should be integrated into future PD initiatives, Participant #8 stated, "I would like some PD on, I mentioned earlier, working with students, especially with math, and hands-on solving of equations or solving math problems. So, instructional strategies around how to teach and be able to model hands-on strategies virtually." Participant #8 continued and extended the need for increased engagement to the presenters delivering the PD initiatives to NKV educators:

I think we need to really focus on how to provide instruction, not only to students but to adults also, in a virtual component that is engaging. I believe if the trainers or learning coaches understand how to provide that training virtually, they'll be more able to show us good ways of engaging students and those strategies we need for engaging students.

### **Summary**

The current chapter presented the research findings of the study. These findings were derived from data collected by a third-party individual who conducted semi-structured interviews with 10 NKV educators. Subsequently, the interview data was



transcribed, and the researcher of the current study conducted a QLDA. The purpose of the QLDA was to address the two research questions of the current study. The collected and coded data encompassed three emergent themes related to RQ1 and five emergent themes related to RQ2. These eight themes were presented relative to the research question with which they are associated. The eight central themes developed during the completion of the QLDA are displayed in Table 2.

**Table 2**

*Eight Themes Developed During the QLDA*

	Theme
<b>RQ1</b>	<p><b>What are NKV educators' perceptions of professional development initiatives during 2022-2023 in terms of their value, relevance, and meeting their needs as virtual educators?</b></p> <p>Theme 1: 2022-23 NKV PD Initiatives Were Perceived as Ineffective Due to a Lack of Consideration and Awareness of NKV Educators' PD Needs</p> <p>Theme 2: The 2022-23 PD Initiatives NKV Educators Perceived as Valuable Involved Interaction and Collaboration With Other NKV Educators</p> <p>Theme 3: NKV Educators Did Not Perceive Their Feedback Regarding 2022-23 PD Initiatives Was Listened to or Considered in PD Development</p>
<b>RQ2</b>	<p><b>What types of professional development to NKV educators perceive would be valuable, relevant, and better meet their needs as virtual educators?</b></p> <p>Theme 1: NKV Educators Believe Collaboration With Their Colleagues and Virtual Educators From Other K-12 Organizations Will Increase the Value and Relevance of Their PD Initiatives</p> <p>Theme 2: NKV Educators Believe Increased Input and Autonomy Will Make Their PD Initiatives More Valuable and Relevant</p> <p>Theme 3: NKV Educators Believe PD Initiatives Developed by Those With Experience in Virtual Education Will Make Their PD Initiatives More Valuable and Relevant</p>

Theme 4: NKV Educators Believe Applicable PD Initiatives and Adequate Time to Learn, Practice, and Apply the PD Content Will Make Their PD Initiatives More Valuable and Relevant

Theme 5: NKV Educators Believe Future PD Initiatives That Address Student Engagement Will Make Their PD Initiatives More Valuable and Relevant

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The results of the current study indicated that NKV educators found their 2022-23 PD initiatives to be largely ineffective as they perceived these initiatives lacked relevance to their roles as virtual educators. NKV educators also perceived their feedback regarding past PD initiatives was not considered during the development of 2022-23 PD initiatives. The primary aspect of 2022-23 PD that NKV educators perceived as having some relevance and value was collaboration and interaction with their NKV colleagues during PD. However, most of this collaboration time was not a planned component of the PD but emerged as a byproduct of NKV educators sharing the same virtual or physical space.

The NKV educators also articulated their perceptions regarding how their future PD initiatives could be developed to make them more valuable and relevant. The primary suggestion the NKV educators gave was that building and district-level PD designers integrate more collaboration time into their future PD initiatives. NKV educators also expressed a desire for more input and autonomy in developing NKV PD, that NKV PD is led by experienced virtual educators or product experts from educational companies, and that NKV educators are offered relevant PD they can apply in virtual learning environments. Additionally, NKV educators discussed a need for future PD initiatives that address strategies to enhance student engagement in virtual environments. Chapter 5 provides an interpretation of the research findings for the current study and recommendations for future research.

## Chapter 5

### Interpretation and Recommendations

Chapter 5 provides a detailed interpretation of the research findings outlined in Chapter 4. The chapter begins with a summary of the current study. Next, a review of the literature related to the research findings is provided. Lastly, a conclusion section includes implications for action, recommendations for future research, and concluding remarks.

#### Study Summary

This section provides a summary of the current study. It begins with an overview of the pertinent literature that aided the researcher in identifying the current study's research problem. The section reiterates the study's purpose statement and two research questions. Subsequently, the researcher briefly reviews the qualitative research methodology employed in the current study and the major findings derived from the study's interview data.

#### *Overview of the Problem*

Researchers have acknowledged the research gap surrounding PD for virtual teachers (Dawson & Dana, 2018; Farmer & West, 2019; Roy & Boboc, 2016; Sanders & Lokey-Vega, 2018). Numerous studies have recommended further research to increase the understanding of K-12 virtual educators' PD needs to improve the quality of PD opportunities for these educators (Archambault & Kennedy, 2014; Dawson & Dana, 2018; Farmer & West, 2019; Johnson et al., 2022; Leary et al., 2020; Molnar et al., 2021; Roy & Boboc, 2016; Sanders & Lokey-Vega, 2018; Zweig & Stafford, 2016). However, few studies have specifically explored the PD requirements of K-12 virtual educators or

virtual educators' perceptions of virtual PD (DiPietro et al., 2008; Farmer & West, 2019; Gerbermann, 2021; Roy & Boboc, 2016; Sanders & Lokey-Vega, 2018; Zweig & Stafford, 2016). As Parsons et al. (2019) explained, "In spite of the international proliferation of online teaching and learning, limited empirical work has explored teachers' perceptions of participating in online PD or the efficacy of online PD" (p. 39).

A survey completed by 32 NKV educators in the spring of 2023 revealed that most current NKV educators did not perceive PD initiatives delivered during the 2022-2023 academic years as valuable, relevant, or personalized (Panorama, 2023). When NKV educators were asked about the perceived value of the PD they were provided, none of the educators responded favorably (either *quite valuable* or *extremely valuable*). Twenty-four percent indicated that PD was *not valuable at all*, 39% indicated it was *slightly valuable*, and 36% indicated it was *somewhat valuable*. When asked about the perceived relevance of NKV PD, 33% indicated that it was *not relevant at all*, 30% indicated it was *slightly relevant*, and 30% indicated it was *somewhat relevant*. Only 6% of NKV educators responded favorably and indicated that PD was *quite relevant* to their role as virtual educators. No NKV educators indicated that PD was *extremely relevant*. Additionally, only 12% of NKV educators responded favorably when asked about the amount of input they have in individualizing their PD opportunities. Eighteen percent indicated they have *almost no input*, 30% indicated they have *a little bit of input*, and 39% indicated they have *some input*. This insight suggested a gap in understanding and addressing the PD needs of NKV educators, warranting targeted research to better understand the specific types of PD opportunities NKV educators perceive as necessary and relevant.

### ***Purpose Statement and Research Questions***

The current qualitative phenomenological study explored virtual educators' perceptions of their PD experiences and what types of PD these educators found valuable, relevant, and needed at NKV. The first purpose of the current phenomenological study was to examine NKV educators' perceptions of their 2022-23 PD initiatives and identify which components of those initiatives were deemed as relevant and beneficial and which were not. The second purpose of the current study was to determine what types of PD initiatives NKV educators perceived as being valuable and relevant in the future.

#### ***RQ1***

What are NKV educators' perceptions of professional development initiatives during 2022-2023 in terms of their value, relevance, and meeting their needs as virtual educators?

#### ***RQ2***

What types of professional development do NKV educators perceive would be valuable, relevant, and better meet their needs as virtual educators?

### ***Review of the Methodology***

Two research questions guided the current phenomenological study that explored NKV educators' perceptions of their organization's PD opportunities and which types of PD they felt were relevant, beneficial, and needed. To address these research questions, a trained third-party interviewer applied an interview protocol that consisted of a pre- and post-interview narrative, seven demographic questions, 21 primary questions, and optional follow-up probes. The 10 participants interviewed were sampled from a pool of 25 NKV educators who met specific criteria. Each interview lasted 15-69 minutes and

was recorded on Zoom. Following verification from the participants that the transcripts were accurate, each transcript was uploaded to MaxQDA to assist the researcher in conducting a QLDA that analyzed and synthesized the data. The researcher used member checking to verify transcript accuracy, detailed descriptions to communicate all research findings, an external auditor to objectively evaluate the current study, a third-party interviewer to conduct all interviews, and clarified any potential bias related to the current study to ensure the reliability and trustworthiness of the study.

### ***Major Findings***

RQ1 explored NKV educators' perceptions of PD initiatives during 2022-23 in terms of their value, relevance, and meeting their needs. Three themes emerged that were related to RQ1. First, NKV educators found their 2022-23 PD initiatives largely irrelevant and nonbeneficial. NKV educators articulated that most of the PD initiatives they were required to attend were designed to meet the professional learning needs of their brick-and-mortar counterparts, and the PD content did not pertain to virtual educators. Second, the aspects of 2022-23 PD initiatives that NKV educators did find relevant and beneficial involved collaboration and interaction with their NKV colleagues. However, these opportunities were often not a planned component of the PD initiative. NKV educators made it a priority to find opportunities in between PD sessions or opted out of PD initiatives they recognized as irrelevant to engage with other NKV educators. Third, NKV educators did not perceive their feedback regarding 2022-23 PD initiatives was listened to or considered in PD development. Furthermore, NKV educators expressed uncertainty regarding who at their district level received the PD feedback or was tasked with implementing changes in PD initiatives based on this feedback.

RQ2 explored the types of PD NKV educators perceived as valuable, relevant, and better meeting their future professional learning needs. Five themes emerged that were directly related to RQ2. First, NKV educators desired their PD initiatives to incorporate collaboration with their NKV colleagues and with virtual educators from other K-12 virtual school organizations. The NKV educators were very interested in discussing the pedagogical strategies other K-12 virtual school educators implemented successfully. Second, NKV educators wanted more input and autonomy in PD development. NKV educators believe the more they are included in developing their PD initiatives, the more relevant and beneficial they will be. Third, NKV educators perceived PD initiatives to be more effective when presented by experienced virtual educators or representatives from educational organizations who have created the content that is the focus of the PD. The NKV educators believed that for a presenter to deliver effective PD about virtual education, the presenter must have virtual teaching experience. Fourth, NKV educators require PD initiatives that provide instructional information, tools, and strategies applicable in their virtual classrooms. NKV educators expressed that they require an adequate amount of training, practice, and time to gain the capability to apply the PD content effectively. Fifth, NKV educators voiced a need to enhance NKV student engagement levels or were concerned that NKV educator PD initiatives did not adequately emphasize student engagement in the virtual learning environment.

### **Findings Related to the Literature**

A review of the literature was conducted to explore research surrounding effective PD models and implementation strategies, PD for virtual educators, and virtual educators' perceptions of their PD initiatives. Although numerous research articles

discussed PD for brick-and-mortar educators, the literature review revealed a lack of research regarding PD for virtual educators and their perceptions of their PD. This research gap prompted the researcher to initiate the current phenomenological study focusing on NKV educators' perceptions of their PD initiatives. First, the current study's data and its relationship to Knowles' (1973) theory of *andragogy* is examined. Second, the following section discusses the correlation between the interview data from the current study and typical levels of preservice training in virtual pedagogy received by virtual educators before teaching virtually, which is addressed in relation to previous research findings. Third, each of the eight central themes' relationship to the literature is presented.

### ***Andragogy***

Knowles' (1973) adult learning theory, known as *andragogy*, served as the current study's conceptual framework. This conceptual framework provided a lens through which the researcher of the current study viewed the experiences of adult learners in a unique professional learning environment designed by and for adults. Knowles et al. (2015) outlined six assumptions about adult learning: (1) the need to know, (2) the learners' self-concept, (3) the role of the learners' experience, (4) readiness to learn, (5) orientation to learning, and (6) motivation to learn. These assumptions regarding adult learners are relevant to developing effective online PD initiatives (Beach et al., 2022). Elements of these six assumptions were apparent after the researcher completed the QLDA and are subsequently discussed.

**The Need to Know.** Knowles et al.'s. (2015) first assumption stated, "Adults need to know why they need to learn something before undertaking to learn it" (p. 47).



This statement suggests adult educators participating in learning activities must understand why they are tasked with specific learning objectives and recognize the value they will gain from the knowledge being taught before they can fully engage in the learning process (Knowles et al., 2015). The NKV educators in the current study articulated that they found the 2022-23 PD initiatives to be nonvaluable and irrelevant to virtual educators. As Knowles et al. (2015) assumptions of andragogy anticipated, the perceived lack of value and relevance precluded the NKV educators from understanding the *why* behind the 2022-23 PD initiatives, which diminished their enthusiasm to participate. As Beach et al. (2022) contended, “When teachers can visualize the practical application of a theory and deem PD as meaningful to their classroom environment and professional goals, they may be more likely to invest their energy and resources in the learning process” (p. 4).

**The Learners’ Self-Concept.** Knowles et al.’s. (2015) second assumption maintained, “Adults have a self-concept of being responsible for their own decisions,” and they “resent and resist situations in which they feel others are imposing their wills on them” (p. 47). Furthermore, adult learners require the autonomy to be self-directed in their pursuit of knowledge. When adult learners feel obligated to engage in a PD initiative, they feel dependent upon the facilitator of the PD, which conflicts with their need to be self-directed. Teachers, much like other adult learners, are often reluctant to participate in learning situations that feel obligatory (Beach et al., 2022). When forced into learning situations, they are treated as adolescent learners incapable of making decisions regarding their learning needs (Knowles et al., 2015). As was evident in the interview data collected from the NKV educators, they conveyed a desire to develop their

own PD initiatives and have the autonomy to seek out PD initiatives they felt beneficial instead of being required to attend PD initiatives they felt irrelevant. The NKV educators believed that if given the autonomy to pursue PD opportunities, they could seek, find, and participate in PD initiatives that would be valuable and relevant to their roles as virtual educators.

**The Role of the Learners' Experience.** Knowles et al.'s. (2015) third assumption posited that "Adults come into an educational activity with both a greater volume and different quality of experience from that of youths" (p. 48). Adult learners' best resource for information is the adult learners themselves and learning that involves adult participants should leverage their experience. If an adult learner perceives their knowledge and experience is undervalued in a learning situation, they will often shy away from the learning objectives (Knowles et al., 2015). NKV educators reported they perceived their knowledge regarding virtual education was devalued and ignored. They conveyed a desire for more input into the development of PD initiatives and for their feedback about PD initiatives to be considered by their district administration when new PD initiatives are being developed. Furthermore, NKV educators articulated a desire for more collaboration time to take advantage of their collective knowledge and experience regarding virtual education.

**Readiness to Learn.** Knowles et al.'s. (2015) fourth assumption claimed, "Adults become ready to learn those things they need to know and be able to do in order to cope effectively with their real-life situations" (p.48). Teachers have demonstrated a readiness to engage with PD content when they perceived an opportunity to expand upon their existing knowledge or have identified a gap in their understanding (Beach et al., 2022).

Adult learners have little interest in learning material irrelevant to their present needs (Knowles et al., 2015). Multiple NKV educators asserted they were unenthusiastic about attending 2022-23 PD initiatives. They perceived these initiatives as nonvaluable and irrelevant. Thus, they were not ready to engage with the learning objectives as they did not apply to their current needs as virtual educators. NKV educators expressed a strong desire for relevant PD that provided them with strategies they could utilize in their virtual classrooms.

**Orientation to Learning.** Knowles et al.'s. (2015) fifth assumption stipulated, "Adults are motivated to learn to the extent that they perceive that learning will help them perform tasks or deal with problems they confront in their life situations" (p. 49). Adults are driven to engage in learning activities when they perceive the content is relevant and applicable (Knowles et al., 2015). NKV educators frequently attested that 2022-23 PD initiatives were inapplicable to the virtual learning environment because they were designed for brick-and-mortar educators. As the NKV educators deemed the content of the 2022-23 PD initiatives as mostly irrelevant, there was little enthusiasm among these educators to attend or participate in the initiatives. NVK educators repeatedly expressed the need for relevant PD initiatives that provided applicable content.

**Motivation to Learn.** Knowles et al.'s. (2015) sixth assumption contended, "Adults are responsive to some external motivators, but the most potent motivators are internal pressures" (p. 50). Adult learners are intrinsically motivated to seek opportunities for self-development. However, inadequate resources, limited time, and programs unaligned with andragogical principles can hinder this pursuit (Knowles et al., 2015). Multiple NKV educators attested that the 2022-23 PD initiatives did not provide adequate

resources or an avenue to effectively implement PD content in the virtual setting, as the PD was designed for brick-and-mortar educators. Due to the irrelevant nature of the 2022-23 PD initiatives, it is not surprising that multiple NKV educators found them to be nonvaluable. NKV educators lacked the motivation to attend these PD initiatives due to their irrelevance to virtual education.

Although the NKV educators did not explicitly proclaim a desire for PD initiatives aligned with Knowles et al.'s (2015) andragogical assumptions, they expressed a need for value, relevance, and autonomy in PD content and development. Each of these desired attributes is consistent with Knowles' six andragogical assumptions.

### ***Preservice Training in Virtual Pedagogy***

Dawson and Dana (2018) advocated that all K-12 virtual educators, regardless of their prior teaching experience in brick-and-mortar settings, should undergo PD designed for online instruction before they begin teaching in virtual environments. However, most preservice teacher training neglected to address the techniques required to teach in the virtual environment, and most virtual educators learned virtual instructional strategies while in the field (Archambault & Larson, 2015). The demographic data from the current study were consistent with Archambault and Larson's (2015) findings. Only 20% of the participants in the current study received training in virtual pedagogical strategies before being employed at NKV.

The NKV educators' lack of training that specifically addressed the nuances of virtual instruction before becoming a virtual educator is not uncommon. The lack of training NKV educators received in virtual pedagogy aligned with several other pieces of literature. Kennedy and Archambault (2012) conducted a national survey of preservice

teacher education programs and discovered that only 1.3% of these programs provided virtual teaching experiences. Five years later, a subsequent study revealed only 4.1% of preservice teacher education programs offered virtual teaching experience to teacher candidates (Archambault et al., 2016). Zweig and Stafford (2016) surveyed 324 virtual educators and found that 75% of graduating K-12 virtual educators received no PD related to virtual education before teaching. Recent research still suggested a lack of virtual instruction courses and student teaching opportunities in preservice teacher training programs (Eadens et al., 2022; Johnson et al., 2022; Middleton, 2020). Virtual educators' reliance on in-house PD opportunities to gain and refine the instructional and technical skills required to teach in the virtual environment illuminates the importance of having access to quality PD within their organization. It is necessary to prioritize the PD of educators who work in K-12 virtual classrooms (Roy & Boboc, 2016; Zweig & Stafford, 2016).

***Theme 1 (RQ1): 2022-23 NKV PD Initiatives Were Perceived as Ineffective Due to a Lack of Consideration and Awareness of NKV Educators' PD Needs***

A common perception among NKV educators was that 2022-23 PD initiatives were generally ineffective in meeting their professional learning needs related to virtual education. From the perspective of NKV educators, the 2022-23 PD initiatives were designed considering only the professional learning needs of brick-and-mortar teachers, rendering the PD content inapplicable and irrelevant. The importance of providing educators with relevant PD initiatives was a central tenet of several PD frameworks discussed in the literature. For example, Yoon et al. (2007) identified five criteria for high-quality PD initiatives, which were included in the 2001 NCLB Act. One of these

criteria was that PD improves educators' understanding of effective pedagogical techniques. Understandably, NKV educators did not consider the 2022-23 PD initiatives 'high-quality' as they considered them irrelevant.

Additional PD frameworks identified in the literature emphasized the importance of ensuring PD initiatives are relevant to educators. Both Desimone (2009) and Darling-Hammond et al. (2017) included a component in their respective PD frameworks referred to as *active learning*. While these researchers envisioned active learning being implemented in PD initiatives in slightly different ways, both stress the significance of ensuring that PD is relevant. Desimone (2009) claimed that PD incorporating active learning allows educators to connect their PD to classroom instruction. Darling-Hammond et al. (2017) emphasized the importance of providing educators with PD opportunities that created a contextualized PD experience for the educators. Furthermore, Roy and Boboc (2016) asserted that PD initiatives should enhance the instructional abilities of the participating educators. For NKV educators to connect PD content to their classroom instruction, participate in contextualized PD, or increase their instructional skills, it's imperative they are offered relevant PD opportunities.

***Theme 2 (RQ1): The 2022-23 PD Initiatives NKV Educators Perceived as Valuable Involved Interaction and Collaboration With Other NKV Educators***

The 2022-23 PD initiatives NKV educators perceived as valuable and relevant involved collaboration with NKV colleagues. It is not surprising that NKV educators valued the collaboration time integrated into their PD initiatives, given the literature's emphasis on the importance of collaboration during PD. The PD frameworks developed by Desimone (2009) and Darling-Hammond et al. (2017) stressed that incorporating

educator collaboration as a component of PD initiatives is critical to their success.

Desimone (2009) referred to this collaborative aspect of PD as *collective participation*, which involves educators from the same school, grade, or level participating in the same PD initiatives. Darling-Hammond et al.'s (2017) PD framework referred to the collaborative PD component as *supported collaboration*, which encourages teachers to collaborate about pedagogical techniques and strategies relevant to job-specific contexts. Haug and Mork (2021) supported these observations and submitted that effective PD should allow educators to engage and collaborate with colleagues.

***Theme 3 (RQ1): NKV Educators Did Not Perceive Their Feedback Regarding 2022-23 PD Initiatives Was Listened to or Considered in PD Development***

According to research by Zweig and Stafford (2016), virtual educators have expressed a growing demand for personalized PD that meets their unique needs as virtual educators. To construct PD that provides K-12 virtual educators with the tools necessary to deliver a quality learning experience to students, designers must gain a deeper understanding of virtual educators' experiences (Archambault & Kennedy, 2014; Farmer & West, 2019). PD coordinators must be responsive to the specific learning needs of educators (Darling-Hammond et al., 2017). The NKV educators' 2022-23 PD initiatives did provide them with opportunities to provide feedback to the district facilitators. However, the QLDA conducted by the researcher of the current study indicated that NKV educators did not perceive their feedback regarding 2022-23 PD initiatives was considered during the development of the PD initiatives in which they were required to participate. The NKV educators felt this lack of consideration contributed to the design of

2022-23 PD initiatives that were invaluable and irrelevant to their roles as virtual educators.

Effective PD initiatives must contain PD content aligned with the professional learning needs of the educators participating in the initiative (Darling-Hammond et al., 2017; Desimone, 2009). PD initiatives that are congruent with the professional learning requirements of educators have been shown to open new avenues of learning and development (Elliott, 2017). The NKV educators believed that if their feedback were incorporated into the development of PD initiatives, the initiatives would better align with their professional learning needs. When developing PD initiatives for educators, Roy and Boboc (2016) asserted, “not only is it important to customize it [PD initiatives] according to teacher needs but to also give them opportunities to reinforce what has been taught, as these professionals will be able to evaluate what works and what does not work” (p. 299). According to the NKV educators, they evaluated the PD initiatives and provided feedback, but the feedback was not listened to or considered by the PD developers.

***Theme 1 (RQ2): NKV Educators Believe Collaboration With Their Colleagues and Virtual Educators From Other K-12 Organizations Will Increase the Value and Relevance of Their PD Initiatives***

Research has underscored the significance of collaborative PD initiatives. For example, Garet et al. (2001) reported effective PD initiatives included collaborative participation by teachers. Powell and Bodur (2019) conducted a multi-case qualitative study examining educators’ perceptions of an online PD initiative. One of the six central themes discovered by these researchers was a need for interaction and collaboration



among the participants. As previously elaborated upon in the discussion regarding Theme 2's relationship to the literature, the PD frameworks developed by Desimone (2009) and Darling-Hammond et al. (2017) emphasized the importance of educator collaboration in effective PD initiatives. Researchers such as Haug and Mork (2021) supported these observations. Furthermore, collaborative PD initiatives do not necessarily have to be structured or micro-managed by the PD facilitators. Zweig and Stafford (2016) discovered a perception among virtual educators that unstructured PD can be regarded as more effective than structured PD.

NKV educators expressed a desire for more collaboration time to be incorporated into their PD initiatives to discuss the pedagogical strategies and nuances specific to the virtual learning environment with educators experienced in the virtual environment. They perceived a substantial opportunity for professional learning via collaboration with NKV colleagues and with educators from other K-12 virtual school organizations. Bates et al. (2016) asserted that virtual PD can be utilized effectively when a group of educators need access to colleagues with similar interests or specialized skill sets. However, NKV educators did not find the 2022-23 PD opportunities offered by their district relevant, as the content was primarily tailored to their colleagues in brick-and-mortar settings, and the PD initiatives offered limited opportunities for collaboration with other virtual educators.

The literature illuminated a possible explanation for why NKV educators were expected to participate in the same PD initiatives as their brick-and-mortar colleagues during the 2022-23 academic year. There has been a misconception that virtual and brick-and-mortar educators rely on identical pedagogical skills when delivering instruction (Roy & Boboc, 2016). However, research has indicated that virtual educators encounter

distinctive pedagogical challenges specific to virtual teaching environments (Farmer & West, 2019). It is possible the NKV educators' district PD facilitators were operating under the misconception that virtual and brick-and-mortar educators would have benefited equally from participating in the same PD initiatives when NKV educators required PD initiatives that addressed the distinct pedagogical challenges encountered in virtual education.

***Theme 2 (RQ2): NKV Educators Believe Increased Input and Autonomy Will Make Their PD Initiatives More Valuable and Relevant***

The participants in the current study expressed a desire for more input and autonomy in developing the PD initiatives in which they are required to participate. NKV educators explained that if allowed to find and participate in PD initiatives personalized to their specific needs, they felt PD initiatives would be more valuable and relevant than those in which they were required to participate during the 2022-23 academic year. Furthermore, the NKV educators expressed confusion as to why their PD facilitators have not sought more input regarding their PD needs. Adolescent learners typically depend on their instructors and are unable to comprehend their learning needs (Ozuah, 2005). In contrast, adult learners desire autonomy and are intrinsically motivated to learn that satisfies their needs and serves their interests (Lindeman, 1926). The desire for self-directed learning opportunities is a prevalent trait among adult learners (Knowles et al., 2015). The literature indicated a rising demand among adult educators for personalized PD that caters to their individual learning needs (Zweig & Stafford, 2016). Furthermore, PD opportunities aligned with educators' specific needs can provide new pathways to learning and development (Elliott, 2017).

Powell and Bodur (2019) suggested conducting a needs assessment with teachers and customizing PD content to meet educators' specific professional learning requirements. When designing PD for virtual school educators, it is essential to customize the training to fit their unique needs (Roy & Boboc, 2016). Relevant and content-specific virtual PD initiatives have delivered equivalent or superior results compared to in-person PD initiatives (Sheridan & Wen, 2021). According to Roy and Boboc (2016), PD tailored to virtual educators should ensure: a) educators understand the intricacies of online education, the necessary competencies and skill sets, as well as the advantages and challenges associated with virtual education, b) educators are actively engaged in their learning to acquire the necessary competencies and skill sets to facilitate student learning in the virtual environment effectively, and c) the PD initiative is designed to provide support and empowerment to educators while increasing the abilities of educator and student. Based on these findings from the literature, providing NKV educators with more input and autonomy in PD development could result in more valuable and relevant future PD experiences.

***Theme 3 (RQ2): NKV Educators Believe PD Initiatives Developed by Those With Experience in Virtual Education Will Make Their PD Initiatives More Valuable and Relevant***

The majority of the participants in the current study expressed a belief that PD initiatives would be more valuable and relevant if they were led by facilitators with experience in virtual education. The NKV educators implied that a comprehensive understanding of the intricacies of the virtual teaching profession was attained only by individuals with direct experience as virtual educators. As such, NKV educators claimed

those with firsthand virtual education experience should design and facilitate their PD initiatives, and the literature has supported their perceptions.

PD content for virtual educators should focus on the nuances of virtual education, the essential competencies and skill sets needed by virtual educators, and the specific advantages and challenges inherent in virtual education (Roy & Boboc, 2016). To ensure that virtual educators are being provided PD that addresses the unique pedagogical skills required of those in their profession, the National Education Association recommended that PD for virtual educators should be delivered by experienced online educators (Zweig & Stafford, 2016). Furthermore, Darling-Hammond et al. (2017) asserted that PD initiatives should provide educators with expert support that addresses their individual learning needs. PD initiatives that have addressed the specific learning needs of educators have been demonstrably effective (Bates et al., 2018; Darling-Hammond et al., 2017; Desimone, 2009; Yoon et al., 2007; Zweig & Stafford, 2016).

***Theme 4 (RQ2): NKV Educators Believe Applicable PD Initiatives and Adequate Time to Learn, Practice, and Apply the PD Content Will Make Their PD Initiatives More Valuable and Relevant***

The participants in the current study conveyed that they require PD initiatives that provide instructional information, tools, and strategies applicable in their virtual classrooms. Furthermore, NKV educators expressed that they require an adequate amount of training, practice, and time to gain the capability to implement the PD content effectively. NKV educators expressing that they need more time to apply the content of their PD initiatives effectively is not uncommon. Online educators often receive insufficient instruction on developing effective online material (Hartshorne et al., 2020;

Zweig & Stafford, 2016). Several PD frameworks highlight the need to give educators adequate time to learn and apply PD content. Yoon et al. (2007) submitted that PD must be sustained, intensive, and content-focused. Desimone (2009) explained that the duration of a PD session should be sufficient to allow intellectual or pedagogical change to occur. Darling-Hammond et al. (2017) also contended that PD initiatives must be of a sustained duration and should include adequate time for learning, practice, implementation, and reflection regarding the content of the PD initiative.

There is a consensus in the literature that the duration of a PD initiative impacts its effectiveness. However, there is conflicting evidence regarding the required duration (Fletcher-Wood & Zuccollo, 2020). Yoon et al. (2007) discovered that PD initiatives with a duration of over 14 hours produce a positive and significant effect on student achievement. Desimone (2009) recommended that PD initiatives occur over a semester and include at least 20 hours of direct training. Fletcher-Wood and Zuccollo (2020) articulated that “thirty-five hours seems a reasonable amount of time to have a meaningful impact” (p. 16). Although researchers have not agreed on a specific threshold for successful PD, the literature suggested that the benefits of one-day PD initiatives are limited, emphasizing the importance of sustained efforts to achieve desired outcomes in PD initiatives (Bates et al., 2018; Darling-Hammond et al., 2017; Desimone, 2009).

***Theme 5 (RQ2): NKV Educators Believe Future PD Initiatives That Address Student Engagement Will Make Their PD Initiatives More Valuable and Relevant***

Multiple participants in the current study voiced a need to enhance NKV student engagement levels or were concerned that NKV educator PD initiatives did not adequately emphasize student engagement in virtual settings. NKV educators found it

challenging to engage students due to the inherent lack of physical proximity to their students in virtual learning environments and expressed a desire for PD content that teaches them techniques to enhance virtual student engagement. Engaging students in virtual learning environments can be challenging. According to Rehn et al. (2018):

Successful teaching by videoconference requires teachers to master a complex and distinctive mix of technical, pedagogical, and interpersonal skills, including: communicating across a two-dimensional screen, forging relationships with students through technology-mediated interaction, developing teacher presence, championing the technology within the community and designing courses that leverage the affordances of the medium to foster deep inquiry and student engagement (p. 4).

According to Anderson et al. (2001), a virtual educators' pedagogical approach can be "critical to maintaining the interest, motivation, and engagement of students in active learning" (p. 7).

Additional studies have directly explored the importance of student engagement in virtual education environments. For example, Rice et al. (2010) surveyed 719 virtual educators. They found that 25% felt they were inadequately trained in student engagement techniques and expressed a desire for more PD that addressed engagement strategies they could utilize to engage their virtual students. Archambault and Larson (2015) surveyed 252 virtual educators and identified *engagement strategies* as one of the 11 critical skills virtual educators should possess to be effective. Zweig and Stafford (2016) conducted a study that aligned with these observations when they conducted research that surveyed 324 virtual educators and found the primary challenges

encountered by online teachers were associated with student perseverance and engagement. Berry (2019) interviewed 13 virtual educators to identify strategies to enhance student engagement. Berry found frequently contacting students, limiting lecture time during class sessions, leveraging video and audio communication platforms, and providing students with unstructured time to communicate during class are critical in this pursuit.

### **Conclusions**

The current phenomenological study explored NKV educators' perceptions of their PD experiences during the 2022-23 academic year and the types of PD this group of educators perceive as being valuable and relevant in the future. The findings of the current study prompted several implications for action and recommendations for future research surrounding PD for virtual educators. The following sections discuss these implications and recommendations and offer concluding remarks.

### ***Implications for Action***

The current study explored 10 NKV educators' perceptions about what aspects of PD initiatives they find valuable and relevant. The results of this study offer several practical implications for action focused on improving the value and relevance of PD initiatives for virtual educators. NKV district and building administrators could conduct a thorough assessment of PD initiatives to ensure alignment with the expressed needs of NKV educators. The data from the current study suggests that to align future PD initiatives with the requirements of NKV educators, those facilitating the PD initiatives should ensure:

1. NKV educators are provided PD initiatives that incorporate opportunities for collaboration when they can share experiences, insights, and best practices regarding virtual learning environments.
2. NKV educators are provided avenues to provide feedback about PD that is systematically collected, analyzed, and acted upon to improve the relevance, effectiveness, and inclusivity of PD initiatives.
3. NKV educators are directly involved in decision-making processes related to PD planning, design, and evaluation to ensure alignment with their specific needs, interests, and goals.
4. NKV educators are allowed to provide input about the focus of their PD initiatives and are given the autonomy to select PD topics, formats, and delivery methods that best meet their professional learning needs.
5. NKV educators are provided PD opportunities that directly apply to their roles as virtual educators, and sufficient time and resources are allocated for NKV educators to learn, practice, and implement the content of PD initiatives effectively.
6. NKV educators are provided PD content that includes evidence-based practices for promoting student motivation, participation, and interaction in virtual classroom environments.

Additionally, virtual school administrators and PD facilitators from other virtual school organizations could use the findings from this study as a starting point to develop customized PD initiatives specifically designed to address their virtual educators' unique needs and challenges.



### ***Recommendations for Future Research***

The results of the current study present several opportunities for subsequent research. First, as the current only included 10 participants, future research could examine the perceptions of more participants to gain more insight into the PD needs of virtual educators. Second, as the current study only involved the perceptions of educators from NKV, future research could explore the perceptions of virtual educators from other K-12 virtual organizations. In doing so, researchers could gain further insight into the PD needs of virtual educators from other geographic locations who provide instruction to populations of students with different demographic characteristics. Third, researchers could conduct quantitative research that analyzes virtual educators' perceptions of PD and the types of PD required by this group of educators. Fourth, researchers could conduct qualitative and quantitative research investigating the impact of PD initiatives on the efficacy of K-12 virtual educators' instructional practices. Fifth, researchers could compare the PD needs of virtual educators from different virtual organizations. Finally, researchers could examine the pedagogical strategies utilized by virtual educators to determine their impact on student engagement, perseverance, and performance. By identifying the strategies most beneficial to virtual students, PD facilitators could design PD initiatives that are more valuable and relevant to virtual educators. These potential research areas could all lead to the development of effective PD initiatives for virtual educators, which could increase their ability to provide effective instruction in the virtual setting.

### ***Concluding Remarks***

While K-12 virtual education is no longer in its infancy and is becoming an increasingly popular and accessible option for students, there is still a lack of research surrounding the types of PD that are deemed valuable and relevant to virtual educators. The current phenomenological study aimed to help fill the research gap in this area by examining virtual educators' perceptions of their virtual PD opportunities. The researcher acknowledges that this study examined the perceptions of only 10 participants from a K-12 virtual school in northeast Kansas, and the findings of this study are not necessarily applicable to other K-12 virtual school organizations due to the phenomenological nature of the research. However, this study provided NKV educators a platform to express their perceptions of past PD and the types of PD they perceive to be valuable in the future. The results of this study equip NKV PD facilitators with a blueprint they can use to design effective PD initiatives that are valuable and relevant to NKV educators.

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## Appendices

## Appendix A. Interview Protocol

### Pre-Interview Script

[Begin by exchanging pleasantries and introductions.]

(1) Thank you very much for participating in this interview.

(2) As a reminder, the purpose of this study is to explore your perceptions of professional development opportunities you participated in during the 2022-2023 academic year and to examine which types of professional development you feel will be beneficial and relevant in the future. Your responses could provide information that leads to more relevant professional development opportunities for virtual educators.

(3) Before we start the interview, I would like to take a moment to review a few items. First, I want to make sure you don't have any reservations about the objectives of this study or feel uncomfortable about participating in this study. If you have any reservations about our objectives or participating in this study, please let me know now. [Pause] [If the participants do have questions or reservations, let them know that you will contact the researcher, thank them for their time, and let them know that you will terminate the interview protocol.] [If they do not have questions or reservations, proceed.] Okay. As you don't have any questions or concerns at this time, we will proceed.

(4) I would like to remind you that this interview will be recorded in the password-protected Zoom cloud. (5) Are you okay with me starting the recording here in a few moments? [Obtain verbal or visual confirmation before proceeding to Step 6] (6) [Initiate Zoom recording. Be sure to **Record to Zoom Cloud.**] (7) Now that we are recording, do you mind confirming once again that you consent to this interview being recorded? [Wait for verbal confirmation, then proceed.]

(8) Now that we are recording, do you mind confirming that you provided a signed informed consent form to participate in this interview? [Wait for verbal confirmation, then proceed.]

(9 & 10) Although this was discussed on the informed consent form, John would like to reassure you that this interview and your identity will always remain confidential. This interview will be deleted after the required amount of time John is required to keep the recording in a secure environment. Do you have any questions about this? [Wait for verbal confirmation, then proceed.]

(9) I would also like to remind you that you have the right not to answer any of these questions. If I ask something that you don't want to answer, no problem. Just let me know, and we'll move to the next question. You also have the right to end this interview

at any time. Do you have any questions about this? [Wait for verbal confirmation, then proceed.]

**(11)** As you don't have any questions at this time, let's get started. I am first going to ask you seven demographic questions. These questions will be followed by 21 questions about your PD experiences. [Proceed to interview questions.]

### **Interview Questions**

#### **Demographic Questions:**

1. What is your age? \_\_\_\_\_
2. How do you describe your gender? \_\_\_\_\_
3. How many years of overall teaching experience do you have (traditional and virtual)?  
\_\_\_\_\_
4. How many years of virtual teaching experience do you have? \_\_\_\_\_
5. What grade level(s) do you currently teach? \_\_\_\_\_
6. Which content area(s) do you currently teach? \_\_\_\_\_
7. What types of training specifically designed for virtual educators did you participate in prior to teaching at NKV?

#### **Valuable & Relevant:**

1. What specific aspects of the 2022-23 PD did you find valuable for you and your teaching at NKV?
2. What specific aspects of 2022-23 PD did you find lacking value for you and your teaching at NKV?
3. What specific types of 2022-23 PD did you find relevant for you and your teaching at NKV?
4. What specific types of 2022-23 PD did you not find relevant for you and your teaching at NKV?

5. In your opinion, what factors contribute to making PD relevant and beneficial to virtual educators?
6. In your experiences, what 2022-23 PD activities were memorably relevant or valuable for you as a virtual educator at NKV?

**Meeting Needs:**

7. In what ways did the 2022-23 PD meet your needs as a virtual educator at NKV?
8. In what ways did the 2022-23 PD not meet your needs as a virtual educator at NKV?
9. How do you feel your district PD could evolve to better meet the needs of the virtual educators in your organization?

Probe: How about within your content area?

Probe: How about within your grade level?

10. Please share any insights about the unique challenges or circumstances you face as a virtual K-12 educator that you believe require specialized professional development.

**Collaboration/Networking:**

11. How important do you feel it is for NKV educators to collaborate with each other during NKV PD?
12. In what ways did the 2022-23 PD opportunities encouraged collaboration and networking among virtual K-12 educators?

Probe: Please share some specific instances of collaborative PD activities.

13. In what ways do you perceive collaborative PD activities have benefited you or impacted your virtual pedagogy? In what ways do you perceive collaborative PD activities

14. Would you prefer to participate in PD with only virtual education colleagues or with teachers throughout the district?

Probe: What do you perceive would be the benefits of this approach?

**Feedback:**

15. In what ways were you encouraged to provide feedback about the 2022-23 PD in which you participated?

16. In what ways have you seen your previous feedback regarding your PD activities considered in the development of subsequent PD initiatives?

17. How would you improve the mechanisms or processes used to provide feedback related to district PD?

18. How would you describe the ideal PD initiative designed for virtual educators, how would this PD be structured.

19. How would that ideal PD initiative be structured to best support your needs as a virtual educator at NKV?

Probe: Synchronous or Asynchronous? Live presenter or pre-recorded? In-person or virtual?

20. Please suggest some instructional strategies, instructional technology, or pedagogical approaches you are interested in exploring further through PD.

21. Is there anything else you'd like to add regarding PD initiatives for virtual educators in your district?

**Post-Interview Script**

**(12)** That concludes our interview. Do you have any questions or concerns about the interview or how the interview data will be used? [If so, inform the participant that I will contact them as soon as possible.] [If not, proceed to Step 13.]

**(13)** I am now going to stop the recording. [Stop recording] Thank you for participating. I know John appreciates it very much. He will be in touch soon with a transcript of this interview to review and check for accuracy. He will provide an update on the study at that time.

Please reach out to John with any questions you might have. Have a great day!  
[Terminate the Zoom conference.]

[Save recording to password-protected Zoom cloud.]



## Appendix B. NKV District Research Approval Letter

December 8, 2023

John Gorman  
[REDACTED]

Re: RS242224, IRB ID: TBD Dear John:

Your application to conduct research in the [REDACTED] has been reviewed and approved by our district Data Governance Team. [REDACTED] Supports professional inquiry and has assumed a cautiously supportive stature regarding permission to conduct research with human subjects. Suggestions/comments from the team include the following:

- Approval is contingent upon IRB approval from Baker University. Please forward a copy of the IRB approval before starting your research project in [REDACTED].
- Please work with the [REDACTED], on participant selection and recruitment.

While we recognize the importance of your research, it may not interfere with the district's educational program. At all times during your project, researchers and subjects must be in view of school district staff. All costs associated with the research are the researcher's responsibility. Any changes in your project must have approval from this office before implementation.

Please note that your research project has been assigned [REDACTED] research number RS231113. Your permission to conduct research in the District expires one year from the date of this notice. If your project is to extend beyond this date, you must reapply for authorized permission before the expiration date and obtain the requisite principal signature(s). Failure to reapply will result in the inability of the principal investigator to conduct further research in the [REDACTED]. Until such time as a new application to conduct research is approved by the district's Data Governance Team, no research may be conducted. Thank you for your cooperation with our district policies and procedures.

We request that you submit an abstract of your findings as soon as they are available for possible dissemination among interested educators. We appreciate your interest in [REDACTED] and hope that meaningful data is gained from your efforts.

Sincerely,

[Redacted]

Director of Data and Assessments

[Redacted]

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[Redacted]

[Redacted]

## Appendix C. Baker University IRB Request



### IRB Request

Date 12/13/23

IRB Protocol Number \_\_\_\_\_  
(IRB use only)

#### I. Research Investigator(s) (students must list faculty sponsor)

Department(s) IDPT

	Name	Signature	
1.	<u>John Gorman</u>		Principal Investigator
2.	<u>Regena Aye, Ed.D.</u>		<input checked="" type="checkbox"/> Check if faculty sponsor
3.	<u>Kayla Supon Carter, Ph.D.</u>	 <small>Digitally signed by Kayla Supon Carter, Ph.D. Date: 2023.12.07 14:31:10 -0500'</small>	<input checked="" type="checkbox"/> Check if faculty sponsor
4.	_____	_____	<input type="checkbox"/> Check if faculty sponsor

Principal investigator contact information	Phone	<u>785-218-2945</u>
<b>Note: When submitting your finalized, signed form to the IRB, please ensure that you cc all investigators and faculty sponsors using their official Baker University (or respective organization's) email addresses.</b>	Email	<u>johnhgorman@stu.bakeru.edu</u>
	Address	<u>2145 Kentucky St. Lawrence, KS 66046</u>
	Faculty sponsor contact information	Phone
	Email	<u>raye@bakerU.edu</u>

Expected Category of Review:  Exempt  Expedited  Full  Renewal

#### II. Protocol Title

K-12 Virtual Educators' Perceptions of Professional Development Experiences

### III. Summary:

The following questions must be answered. Be specific about exactly what participants will experience and about the protections that have been included to safeguard participants from harm.

A. In a sentence or two, please describe the background and purpose of the research.

There has been limited publication of research about the professional development requirements of virtual educators (Dawson & Dana, 2018). Researchers have acknowledged the research gap surrounding professional development for virtual teachers (Dawson & Dana, 2018; Farmer & West, 2019; Roy & Boboc, 2016; Sanders & Lokey-Vega, 2018). Numerous studies have recommended further research to increase the understanding of K-12 virtual educators' professional development needs to improve the quality of professional development opportunities for these educators (Archambault & Kennedy, 2014; Dawson & Dana, 2018; Farmer & West, 2019; Johnson et al., 2022; Leary et al., 2020; Molnar et al., 2021; Roy & Boboc, 2016; Sanders & Lokey-Vega, 2018; Zweig & Stafford,

B. Briefly describe each condition, manipulation, or archival data set to be included within the study.

This is a phenomenological study in which participating K-12 virtual educators will be interviewed by a third-party individual to examine their perspectives and experiences related to their previous professional development opportunities and identify perceived future professional development needs. This study is exploratory and does not include any conditions, manipulation, or archival data sets.

### IV. Protocol Details

A. What measures or observations will be taken in the study? If any questionnaire or other instruments are used, provide a brief description and attach a copy.

A semi-structured interview protocol (attached) was developed to guide the interviews. The seven demographic questions and 21 interview questions were developed by reflecting upon the results of the quantitative survey administered to educators at the end of the 2022-23 school year and the available research literature surrounding professional development for virtual educators. Interview questions posed to participating educators will ask in what ways they perceived their 2022-23 professional development opportunities could have been more valuable and relevant to better meet their needs as virtual educators in the future.

B. Will the subjects encounter the risk of psychological, social, physical, or legal risk? If so, please describe the nature of the risk and any measures designed to mitigate that risk.

The subjects will not encounter any psychological, physical, or legal risks.

C. Will any stress to subjects be involved? If so, please describe.

The subjects will not encounter any stress.

D. Will the subjects be deceived or misled in any way? If so, include an outline or script of the debriefing.

The subjects will not be deceived or misled in any way.

E. Will there be a request for information which subjects might consider to be personal or sensitive? If so, please include a description.

Interviewees will be asked to provide demographic information, including age and gender. Participants will be informed prior to the interview that they can refuse to answer any questions, that confidentiality will be maintained at all times, and that they can withdraw from the study at any time if they become uncomfortable.

F. Will the subjects be presented with materials which might be considered to be offensive, threatening, or degrading? If so, please describe.

The subjects will not be presented with materials that might be considered offensive, threatening, or degrading.

G. Approximately how much time will be demanded of each subject?

The interview process will require approximately 45-60 minutes for each subject.

H. Who will be the subjects in this study? How will they be solicited or contacted? Provide an outline or script of the information which will be provided to subjects prior to their volunteering to participate. Include a copy of any written solicitation as well as an outline of any oral solicitation.

The participants will be virtual educators who currently work at a K-12 public virtual school in northeast Kansas and meet the criteria for participation (participated in the northeast Kansas virtual school's professional development initiatives during the 2022-23 academic year). All potential participants who meet the criteria will be solicited via a recruitment email (attached) sent to their organizational email addresses. The first ten who respond to the recruitment email and indicate they consent to participate in a semi-structured interview will be scheduled to do so.

I. What steps will be taken to insure that each subject's participation is voluntary? What if any inducements will be offered to the subjects for their participation?

The initial recruitment email and informed consent form explain that participating in the study is voluntary. Additionally, a verbal reminder that participation is voluntary will be read to each participant at the beginning of the interviews as part of the interview protocol. No compensation or inducements will be provided to participants.

J. How will you insure that the subjects give their consent prior to participating? Will a written consent form be used? If so, include the form. If not, explain why not.

An informed consent form (attached) will be emailed to each potential participant when scheduling the semi-structured interview. Participants must sign and return the completed consent form prior to their scheduled interview. Verbal consent to record the interview will be obtained by the third-party interviewer from each participant before the recording is started.

K. Will any aspect of the data be made a part of any permanent record that can be identified with the subject? If so, please explain the necessity.

No data will be made a part of any permanent record that can be identified with the participants.

L. Will the fact that a subject did or did not participate in a specific experiment or study be made part of any permanent record available to a supervisor, teacher, or employer? If so, explain.

No permanent records will be kept for any participant regarding their choice to participate or not participate in the study.

M. What steps will be taken to insure the confidentiality of the data? Where will it be stored? How long will it be stored? What will be done with the data after the study is completed?

The results of the study will not include information that will personally identify participants. Transcripts will be deidentified after member checking of transcript accuracy and saved as Participant Numbers 1-10. The interview recordings and the participant coding matrix will be stored in a password-protected location and permanently deleted two years after the study's conclusion.

N. If there are any risks involved in the study, are there any offsetting benefits that might accrue to either the subjects or society?

There are no risks involved in the study. Benefits of participation include the opportunity for participants to provide additional feedback and guidance towards meeting their needs related to professional development. The information provided by the participants could eventually help improve the professional development initiatives in which they participate and could potentially influence professional development design for other K-12 virtual educators at similar virtual school organizations.

O. Will any data from files or archival data be used? If so, please describe.

Institutional email addresses for 2023-24 NKV educators and a list of NKV professional development participants in 2022-23 were obtained to ensure that the recruitment email was only sent to participants who met the study's criteria. No other data from files or archival data will be used.

## Appendix D. Baker University IRB Approval



### *Baker University Institutional Review Board*

December 19, 2023

Dear John Gorman, Regena Aye, and Kayla Supon Carter,

The Baker University IRB has reviewed your project application and approved this project under Expedited Status Review. As described, the project complies with all the requirements and policies established by the University for protection of human subjects in research. Unless renewed, approval lapses one year after approval date.

Please be aware of the following:

1. Any significant change in the research protocol as described should be reviewed by this Committee prior to altering the project.
2. Notify the IRB about any new investigators not named in original application.
3. When signed consent documents are required, the primary investigator must retain the signed consent documents of the research activity.
4. If this is a funded project, keep a copy of this approval letter with your proposal/grant file.
5. If the results of the research are used to prepare papers for publication or oral presentation at professional conferences, manuscripts or abstracts are requested for IRB as part of the project record.
6. If this project is not completed within a year, you must renew IRB approval.

If you have any questions, please contact me at [skimball@bakeru.edu](mailto:skimball@bakeru.edu) or 785.594.4563.

Sincerely,

Scott Kimball, PhD  
Chair, Baker University IRB

Baker University IRB Committee  
Jiji Osiobe, PhD  
Tim Buzzell, PhD  
Susan Rogers, PhD

## Appendix E. Recruitment Email

John Gorman  
Doctoral Candidate, Instructional Design and Performance Technology  
Baker University  
[Date]

[Participant's Name]  
[Participant's Address]

Dear [Participant's Name],

Subject: Informed Consent for Participation

I hope this letter finds you well. I am writing to invite you to participate in a research study I am conducting as part of my Doctoral program at Baker University. This study's purpose is to explore virtual educators' perceptions of their professional development opportunities and examine which types of professional development they feel are most beneficial, relevant, and needed. I am recruiting 10 virtual educators who are willing to provide informed consent to participate in the study outlined below.

**Study Overview:** This study involves participating in a one-on-one interview to discuss your perceptions regarding the benefits and relevance of your professional development experiences. The interview will take 45-60 minutes and will be video and audio-recorded for accurate transcription and analysis. The interviews will take place on Zoom and be conducted by an impartial third-party interviewer who will be trained to follow a strict interview protocol I developed.

**Voluntary Participation:** Your participation in this study is entirely voluntary. You have the right to withdraw from the study at any time without providing a reason, and this decision will not affect your relationship with Baker University or any associated parties.

**Confidentiality:** Your identity will be kept confidential throughout the entirety of the study. Any information shared during the interview will be anonymized, and all data will be stored securely. This data will be destroyed after a period of two years. Only I, as the researcher, will have access to the stored data.

**Potential Risks and Benefits:** There are minimal anticipated risks associated with participating in this study. However, you may find certain aspects of your experiences uncomfortable to discuss. The decision to proceed is entirely at your discretion.

By participating in this study, you contribute valuable insights that may enhance our understanding of the types of professional development virtual educators deem beneficial and relevant, which could benefit both academic research and potential real-world applications.



**Contact Information:** If you have any questions about this study that you would like me to address before agreeing to participate, please contact me at [johnhgorman@stu.bakeru.edu](mailto:johnhgorman@stu.bakeru.edu). If you have any concerns about the ethical aspects of this study, you can contact Baker University's Institutional Review Board at [irbproposals@bakeru.edu](mailto:irbproposals@bakeru.edu).

**Consent:** By agreeing to participate, you indicate that you have read and understood the information provided in this letter. Your consent is voluntary and can be withdrawn at any point in the study, even if you provide informed consent.

If you are willing to participate, please contact me at [johnhgorman@stu.bakeru.edu](mailto:johnhgorman@stu.bakeru.edu). We will then schedule an interview date and time. You will be asked to sign an informed consent form prior to your interview.

Thank you for considering participating in this study. Your contribution is greatly appreciated.

Sincerely,

John Gorman  
Doctoral Candidate  
Baker University  
[johnhgorman@stu.bakeru.edu](mailto:johnhgorman@stu.bakeru.edu)

## Appendix F. Consent Form

### **K-12 Virtual Educators' Perceptions of Professional Development Experiences**

I have read and understand the information provided in the recruitment email regarding the phenomenological research study conducted by John Gorman. I have had the opportunity to ask questions and have received satisfactory answers regarding my participation in this study.

I understand that my participation in the interview about past and future professional development offerings of my district and building is entirely voluntary, and I may withdraw from this study at any time without consequence. I also understand that the interviews will be recorded but that my interview responses are confidential, and my identity will be protected at all times.

Name: \_\_\_\_\_ Date: \_\_\_\_\_