

THE RELATIONSHIP BETWEEN NEW VIRTUAL TEACHER JOB SATISFACTION  
AND MENTORING

A Dissertation

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The Faculty of the Education Department

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Requirements for the Degree

Doctor of Education

By

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A handwritten signature in cursive script that reads "Alison Branch". The signature is written in black ink on a light-colored, slightly textured background.

Alison Branch

March 31, 2016

## **Abstract**

### **THE RELATIONSHIP BETWEEN NEW VIRTUAL TEACHER JOB SATISFACTION AND MENTORING**

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Research supports the use of mentoring programs to assist in the beginning teacher's transition and in retaining quality teachers. The research literature for mentoring in the traditional brick and mortar school environment is extensive, but there is little research documented regarding mentoring in the virtual school environment. The purpose of this quantitative study was to determine if there is a direct relationship between the number of hours new virtual teachers spent directly working with a mentor and a reported increase in the job satisfaction of the new virtual teacher. The study was completed at 18 virtual schools and included 341 new virtual teachers and 50 teacher mentors. The subjects participated in the study by completing appropriate online survey tools to determine what factors influenced their relationship and if there was an increase in job satisfaction relative to the number of hours the new virtual teacher was in direct communication with the mentor. Three surveys were used to collect the necessary data for the study: Mentor Record, Teacher Mentor Teacher Satisfaction, and Teacher Pulse Check. The data analysis allowed for an understanding of the relationship between the hours spent in mentoring to the overall new virtual teacher's job satisfaction level. The data analysis provided guidance as to what the new virtual teachers value as key factors of a successful mentoring program.

## **Dedication**

I dedicate this dissertation to my family, who have encouraged, supported, and believed in me through this journey, especially:

- To my husband who provided me a loving, safe landing as I experienced the many highs and lows through this adventure of life;
- To my mom who persevered through the many life challenges that crossed her path and expected nothing less than excellence from me;
- To my sister who has been my brainstorming partner through this doctoral process; and
- To my son for living life to the fullest every day and reminding momma what is most important in life.

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## **CHAPTER 1**

### **Purpose and Organization**

#### **Introduction**

Teaching is one of the greatest professions and it is one that is ever evolving. Within the field of education there is a trend toward virtual education. Approximately 310,000 students are enrolled in full-time K-12 online schools in the United States as of 2012-2013 placement (Fast Facts About Online Learning, 2013). As online learning becomes increasingly mainstream, teachers must be adequately prepared to support students in this new and challenging learning environment. Due to the trend towards online instruction, there are many exciting opportunities along with many challenges for new teachers (Meyen, Aust, Gauch, & Hinton, 2002). Many new virtual teachers have classroom teaching experience and bring with them knowledge of curriculum content, strong technology skills and an interest in using technology in the classroom. A significant number have participated in an online course, however all new virtual teachers can benefit from a mentoring relationship (Wortmann, Cavanaugh, Kennedy, Beldarrain, Letourneau, & Zygouris-Coe, 2008).

New virtual teachers need support and guidance to assist them in a successful integration into the virtual education classroom (Billingsley, Israel, & Smith, 2011). Virtual teachers must be trained, provided continuous opportunity for professional development, and given the opportunity to practice the instructional methods and student

engagement strategies on a regular basis. Mentors for new virtual teachers can be a key component for success and be used to retain as well as support new teachers (Kennedy & Cavanaugh, 2010). The ever-changing field of education is very challenging and adding the component of virtual instruction brings a higher need for quality mentoring and guidance for new teachers (Villani, 2002). As accountability expectations continue to rise, the importance of mentoring is undeniable (Mullen, 2005).

### **Statement of the Problem**

School districts are expected to provide a high quality education to all students. With the increase in accountability required by No Child Left Behind Reauthorization Act of 2008 (NCLB), school districts are under increased pressure to ensure all students demonstrate academic achievement. The increased pressure is visible for traditional and virtual schools. The difference in learning environments does not change the requirements of student academic success. The shift in the delivery of instruction from traditional brick and mortar to the virtual teaching environment creates a demand for highly qualified teachers willing to take on the transition (Fast Facts About Online Learning, 2013).

Virtual education programs require students to attend synchronous sessions and work independently on coursework also known as asynchronous education (Molnar, 2013). Whether new virtual teachers have years of experience in brick and mortar instruction or are new graduates of educational programs, training, support, and mentoring are essential in ensuring teachers' success and, consequently, student academic outcomes (Davis, Roblyer, Charania, Ferdig, Harms, Compton, & Cho, 2007).

Instructional strategies are critical in keeping students engaged, actively working with the content, and in the end, proving academic gains on state standardized assessments.

Often, traditional classroom teachers accept new virtual teaching positions with limited to no training in the virtual setting (Bolliger & Wasilik, 2009). New virtual teachers struggle with various aspects of their positions. Virtual teachers must manage individualized learning plans, instructional schedules, special education regulations, classroom management, and deal with external stress such as lesson planning based on state instructional standards, scrutiny by parents, and maneuvering many technology aspects (Boyer & Lee, 2001). It is essential to provide new virtual teachers with support and tools for success throughout the transition to virtual education.

New teachers enter the classroom with excitement and anticipation, but may experience failures within the first few months (Delgado, 1999). They may not feel prepared for the reality of teaching, experience a feeling of isolation, and are reluctant to ask for assistance to avoid appearing inadequate (Ingersoll, 2002). With the feeling of isolation, failure, and inadequacy it is not surprising that many new teachers leave the field of teaching after only a few years. Research shows that after three years in the field, approximately 29% of new teachers have left the classroom and 39% leave after five years (Ingersoll, 2002). Teacher attrition is plaguing school districts because of its negative effect on financial resources and student academic success (Alliance for Excellent Education, 2008). The National Commission on Teaching and America's Future (2007) estimates the financial impact on school districts at over \$7 billion annually. Based on its 2004-2005 Teacher follow-up Survey, the U.S. Department of Education reported that teacher attrition had grown by 50% in the 15 years prior to the

study. In some cases, teacher “dropout” rates were higher than those of students (U.S. Department of Education, 2006). The shortage of teachers may cause school districts to lower their standards for teacher quality (National Commission on Teaching and America’s Future, 1997).

### **Purpose of the Study**

The intent of this study was to explore the effectiveness of quality mentoring programs with regards to new virtual teachers. Particular attention was paid to the new virtual teachers and their perceived job satisfaction as related to the time spent with the new teacher mentor. This study contributes to the knowledge base of teacher mentoring and its impact on new virtual teacher training and job satisfaction.

### **Theoretical Framework**

The theoretical framework for understanding the mentoring process and systems of support was based on the adult learning theory as adopted by Malcolm Knowles. The adult learning theory (andragogy) denotes the practice of teaching and educating adult learners and is based on six assumptions (Pappas, 2013). The assumptions concerning the characteristics of adult learners are:

- **Self-concept:** As a person matures, his self-concept moves from being dependent towards independence.
- **Prior Experience:** With maturity comes a growing bank of knowledge that increasingly becomes a resource for learning.
- **Readiness to Learn:** The adult learner also becomes oriented gradually to the developmental tasks of his roles.

- Orientation to Learning: Adult learners prefer to engage in experiences that allow immediate application of learning.
- Motivation to Learn: With maturity, the motivation to learn is internal.
- Need to Know: Adult learners must understand the relevance for certain information.

Knowles also suggested that four principles are applied to adult learning. First, adults need to be involved in the planning and evaluation of their position. Second, experiences good and bad provide the foundation for learning activities. Third, adults show highest interest in areas that are directly related and impactful to their jobs or personal lives. Finally, adult learning is problem-centered versus content-oriented (Kearsley, 2010).

An understanding of Knowles six assumptions and the four principles regarding adult learning help mentors gain an insight into the problems, concerns, beliefs, and practices of new teachers. Mentors are facilitators of new virtual teachers and need to know the concepts of the adult learning theory and incorporate the practices into their mentoring style (Kearsley, 2010). New virtual teachers will learn how to teach effectively in a virtual environment, use classroom observation and formal assessment data to determine the best plan of instruction, and will become a reflective practitioner through the mentor's guidance.

The active learning theory was used as the conceptual framework to gain understanding of the role of a mentor and the perceived satisfaction of the mentee in the first semester of virtual teaching. The concept of active learning is a technique for

increasing the effectiveness of teaching, introduced in the early 1990s by Charles C. Bonwell and James Eison. The active learning theory focuses the responsibility of learning on the learner. Bonwell and Eison (1991) outlined key strategies to promote active learning:

- The learner is involved in more than listening.
- Emphasis of learning is on developing the learner's skills.
- Higher-order thinking is involved in learning.
- The learner is engaged in activities such as reading, discussing or writing about the topic of study.
- Greater emphasis is placed on the learner's exploration of his own attitudes and values.

Throughout the learning process the adult learner is active and engaged. The active learning theory requires the learner to complete tasks and think about the tasks they are completing. The mentee should participate in self-reflection, research, collaboration, and practice guided by the mentor. These best practices will mimic the strategies upon which Bonwell and Eison's active learning theory are based.

### **Research Question**

The purpose of this study was to provide insight into the expectations and outcomes of the mentoring process for a successful first semester for new teachers in the virtual environment. Respondent data was examined to identify themes among new virtual teachers. The research question guiding this study was:

Is there a direct correlation between a new virtual teacher's level of job satisfaction and the time spent directly interacting with the new teacher mentor?

### **Limitations**

Quality ongoing professional development for mentors was a critical component of the mentoring program. Although mentors were veteran virtual teachers, they may have struggled with mentoring in the electronic forum versus traditional face-to-face mentoring.

A key limitation to mentoring is communication interpretation. The ability to respond to an email or discussion board while delivering an appropriate message can be challenging. New virtual teachers are under many pressure points so the need to interpret messages in a positive manner is imperative. The mentor will need to remain aware of perceived meanings in all communication with the mentee. Technology must be considered as well. Although most teachers today are well versed in using email and many have used message boards, it is crucial that all be trained and ongoing support provided. The potential positive impact of mentoring could fail if technology is a roadblock.

The quantitative study also had the limitation of the sample of participations. The participants were teachers working for one educational management company at only 18 virtual schools. This was not a comprehensive look at all new virtual teachers; rather, it was a view of teachers' perceptions as a way to examine mentor effectiveness.

### **Assumptions**

- The participants of this research study answered the survey questions honestly.
- The generalizability of the study was limited to new virtual teachers with assigned mentors.

- The mentors and mentees were able to develop a relationship over the time period of five months.
- The study was limited to new virtual teachers who participated in a formal mentoring program.
- Respondents understood the questions asked in the survey instrument.

### **Definition of terms**

*Brick and mortar school* is a traditional school setting held in a physical building allowing for face-to-face learning situations.

*E-mentoring* is assistance and advice provided over the internet by someone with experience in a given area to someone less experienced (Cambridge, 2014).

*Induction* is instructional and psychological support that should be provided to novice teachers (Gold, 1996).

*Mentor* is the experienced virtual teacher providing assistance, guidance, teaching, support, and socialization for the new virtual teacher. For this study, the participants had an assigned mentor and a separate instructional coach.

*New virtual teacher* refers to any person hired and who has been involved in the official mentoring program of the educational management company.

*Distance education* allows students to study at their own pace, in any location, and without face to face contact with a teacher. Technology is a critical component of distance education. (Bates, 2008).

*Online school* (Virtual school) refers to the form of distance education where the teacher and student instruction are more than 80% of the time offered with geographical separation (Berge & Clark, 2005).

### **Organization of the Study**

Chapter 1 established the need for the study. The purpose of chapter 2, the literature review, was to present an overview of the significant research and theory surrounding online instruction, characteristics of an online teacher, teacher attrition, overview of mentoring, support of new virtual teachers, the role of mentors, mentoring process, e-mentoring, face-to-face versus e-mentoring, team teaching, the mentor as a collaborative coach, critical conversations, and challenges in mentoring. The key issues and challenges were highlighted in the literature review. Chapter 3 provided an overview of the methodology that was utilized in the study, including the research design, the population and sample, the instruments and survey, the procedures that were followed, and the data analyses that were used. Chapter 4 provided an overview of the quantitative findings. Chapter 5 provided a summary and conclusions of the results as well as recommendations for future research.

## **CHAPTER 2**

### **Literature Review**

#### **Introduction**

Over the past 20 years, the teaching profession has changed in many ways (Carver & Feiman-Nemser, 2008). In order to ensure academic success for the student, teachers are providing instruction using new strategies and differentiate the lessons to meet the students learning styles (Carver & Feiman-Nemser, 2008). An estimated 1,816,400 students enrolled in at least one distance education course in K-12 school districts in 2009-2010 with the highest level of enrollment falling into categories of credit recovery, dual enrollment, and advanced placement (Fast Facts About Online Learning, 2013). Approximately 310,000 students are enrolled in full-time online schools as of 2012-2013 placement (Fast Facts About Online Learning, 2013). This type of educational environment opens up school choice for families and provides additional appropriate learning environments for many students.

Due to the trend towards online instruction, there are many exciting opportunities along with many challenges for new teachers (Meyen, Aust, Gauch, & Hinton, 2002). In an effort to understand the mentoring process and how it can impact new virtual teachers, several key areas were explored. Key terms such as online education, mentoring, new

virtual teachers, professional development and online learning were used as search criteria for portions of this literature review.

For the virtual learning environment to be successful, teachers must be trained, provided continuous opportunity for professional development and given the opportunity to practice the methods on a regular basis. Mentors for new virtual teachers can be the key component for their success and be used to retain as well as support teachers (Kennedy & Cavanaugh, 2010). The ever-changing field of education is very challenging and adding the component of virtual instruction brings a higher need for quality mentoring and guidance for teachers (Villani, 2002).

As the need for more educators to move into virtual teaching positions grows, new challenges in instruction may be encountered that were not seen in the traditional classroom setting (Ham & Davey, 2005). For those who have never taught in the virtual learning environment, it is often assumed that the online teaching job is easy. However, the online teacher might state the online teaching environment is more demanding and time-consuming than the traditional classroom setting (Cavanaugh, 2005).

Each year new teachers enter the field of education. New teachers, more specifically new virtual teachers need support and guidance to assist them in a successful integration into the classroom (Billingsley, Israel, & Smith, 2011). Many times the new virtual teacher is hired based on their highly qualified certification. The experience the teacher has teaching online is often very limited or non-existent. This lack of experience can lead to frustration for the teacher in determining the best way to deliver the academic content in a successful manner that positively impacts student growth (Lari, 2008). In

order to meet each student's needs, teachers must be versed in many different teaching strategies, classroom management and fully maintain accurate state mandated student files. Due to the high expectations to which virtual teachers are held, mentoring has become an essential tool for their success. Without a required process of mentoring, the new teacher can easily fall into routines without soliciting guidance from tenured teachers (Hoerr, 2011). Although informal mentoring can be effective in certain areas, a formal mentoring program will establish goals, outcomes, and place accountability to ensure success (Leidenfrost, Strassnig, Schutz, Carbon & Schabmann, 2014).

### **Online Instruction**

According to the International Association of K-12 Online Learning (iNACOL), online learning is "Education in which instruction and content are delivered primarily over the internet" (The online learning definitions project, 2011). To gain a full understanding of the differences new virtual teachers may encounter in online teaching, various components of virtual teaching should be reviewed. Some components that will need to be considered are the design and delivery of online coursework, an elevated need for communication with students and families, and the isolation from being present in a brick and mortar teaching environment.

Online teachers must establish specific structures and processes within a virtual classroom. First-time online teachers must remember it is the pedagogical practices not the technology that is crucial to the success of the online course, and therefore, student achievement (Palooff & Pratt, 2001). However, technology allows the delivery of instruction and online teachers must develop strong knowledge of the online tools. Palooff

and Pratt (2001) noted that online teaching is not for all faculty members. New virtual teachers must be provided techniques and methods needed to be successful in the online classroom. Research shows that only 1.3% of teacher education programs address the skills necessary for teaching virtually (Kennedy & Archambault, 2012). Because teacher education programs are responsible for preparing educators for the classroom, the need to include preparation for the K-12 online learning is evident as the online learning environment options expand.

One perception among educators is that effective teachers in the brick and mortar classroom will be effective online teachers. Many principles of effective teaching apply no matter the delivery method. Through an examination of the 2011 iNACOL teaching standards, it is obvious they are consistent with good instructional practice, even when instruction is conducted virtually. Online teaching is different than traditional brick and mortar instruction in some key ways (Brennan, 2003). Treacy (2007) described four major differences between face-to-face teaching and online teaching:

- The delivery of the curriculum is different. Students are expected to read and explore the content on their own. While online teachers provide guidance and expectations, the responsibility falls greatly on the student. The online teacher must have clear writing skills and be able to communicate in writing with students on varied reading levels.
- The social aspects of virtual education are also different than traditional brick and mortar classrooms. Students are working independently and must engage to be an active learner in the virtual classroom. Online teachers must respond

promptly to assignments and provide quality feedback. Time management must also be considered due to 24/7 access to curriculum and communications for the online teacher. Teachers must know when to walk away and find balance.

- Online courses provide assessments to students that also allow the online teacher to track student performance. Many times the assessment strategy may not provide the online teacher all of the information he or she needs to gauge student achievement. The online teacher must be equipped and prepared to offer individualized assessments and project-based learning.
- Technology challenges may impede the online learning environment. The online teacher needs to be comfortable with the technological tools and able to respond to students in need of assistance with patience.

In the online teaching environment, the online teacher must combine instructional and content knowledge to provide effective instructional strategies to individual students while depending on technology as the means of communication.

### **Characteristics of an Online Teacher**

Teachers who have excellent teaching skills and engaging personalities in the traditional classroom already have many characteristics necessary to be effective online teachers (Shriner, 2015). The delivery modalities are different and there are some qualities that allow some teachers to be more effective in the online environment than others. Effective online teachers are passionate for the subject, enjoy teaching and find

value in the online environment, possess strong time management skills, are open to feedback, build community in the classroom, maintain responsiveness, and are trained on the appropriate online learning system (Shriner, 2015). Bain (2004) stated that the online teacher should foster student engagement, stimulate intellectual development, and build rapport with students.

In order to promote a supporting, challenging, rigorous and effective instructional environment, online teachers must be VOCAL (Savery, 2005). Dreon (2014) appreciated Savery's VOCAL framework due to the simplicity of the approach and how it promotes good online instruction. The VOCAL model applies to courses that are fully online, blended (face-to-face classes with some online components), or hybrid (some face-to-face classes with the majority of the class content online) (Schindelka, 2012). The key characteristics of the VOCAL approach are for virtual teachers to be visible, organized, compassionate, analytical, and a leader-by-example. This approach was intended to support new virtual teachers.

**Visible.** In the traditional brick and mortar teaching environment, the teacher and students interact face-to-face daily. This creates an environment where teachers and students learn about each other through visible cues and interactions. In an online environment, the teacher may never meet the student in person. Interaction is very different than that of the brick and mortar classroom. In order to build a strong relationship and establish trust, teachers must be visible to the student. In the online classroom interaction takes place through text and in synchronous sessions the microphone may be used.

The students and teachers may feel isolated in the online environment (Savery, 2005). If the teacher is not responsive in a timely fashion on grading assignments, responding to communications or providing feedback, students may interpret the lack of response as the teacher being unconcerned about them as individuals. Savery (2005) suggested that teachers build relationships with students in order to eliminate such students concerns. Online teachers must be ‘visible’ with the students and maintain high, timely amounts of communication.

**Organized.** Savery (2005) noted that the online teacher must be organized and prepared. By the online teacher providing expectations at the beginning of the class, students will be able to plan their calendar and meet the requirements of the school. Online teachers should provide assignments, due dates and the grading requirements in a timely manner. A side product of the online learning environment is that the responsibility falls more greatly on students to meet the expectations of the course (Smith, 2002).

Organization also means being able to anticipate what is going to happen. Just as experienced brick and mortar teachers plan ahead to prepare when a lesson may not meet the students’ needs, online teachers must also be prepared. Savery (2005) explained that online teachers must prepare the online calendar in advance and allow students access in order that the student is prepared. Providing a structured, detailed syllabus explaining the assignments and grading expectations allows students understanding of the course requirements. Savery (2005) also mentioned that the online teacher must learn how to manage the online learning management system (LMS). Within many LMS platforms,

the online teacher will have the option to selectively release materials. This option allows the online teacher to manage the student's access to new materials once the student has shown mastery of current topics.

**Compassionate.** Online teachers must recognize the student's level of understanding and perseverance when the technology does not work properly. Some students may stop working and become disengaged. Other students may push through the technology mishap and continue on a successful path. Online teachers must have the ability to reach out to students who are struggling and continue to engage them in learning (Savery, 2005).

Online learners tend to be surprisingly intimate and open in their communications with the online teacher (Savery, 2005). Students are willing to share private and personal information due to the safety of the online classroom distance. Online teachers must share a level of compassion that is required for the unique scenarios that students may share. Online teachers must deal with each situation in a fair manner that provides safety and support for the student.

**Analytical.** Online teachers must know how to use the LMS and quickly be able to identify needs of students. Many LMS platforms provide reporting and easy access to student records to ensure tracking is manageable. Online teachers have the added time requirement of regular data analysis and communication of that data to students to ensure academic achievement remains the main focus (Savery, 2005). The online teacher should check on the student's course completion and engagement on a consistent basis. Having a thorough understanding of where to find the student data in the LMS, what key data

components are most important and how to interpret student data are essential in the success of the online teacher. The task of tracking student data can be very time consuming and inefficient if the online teacher is not trained effectively.

**Leader-by-example.** Best practices in teaching should be the model that all virtual teachers follow in the online classroom (Savery, 2005). Through quality instruction, consistent communication, and timely grading, students will follow the example of the online teacher in areas of visibility, organization and compassion. The online teacher sets the norm for the expectations of the students. Through deliberate and conscious application, the online teacher will set the stage for a successful and positive online learning environment for the student.

### **Teacher Satisfaction**

The MetLife Survey of the American Teacher, sponsored by MetLife and Harris Interactive, (2012) showed that as of 2012, teacher job satisfaction had dropped by 15 percentage points since 2009, from 59% to 44% of teachers being very satisfied. This drop marked the lowest job satisfaction score since the survey was first conducted in 1984. The 2012 survey was conducted through quantitative and qualitative methods to gauge attitudes and perceptions among teachers, students, and parents on teaching, engagement and economy-related concerns with a target population of K-12 public school teachers, students, and parents (MetLife, 2012). The 2012 survey found several key areas that indicated a significant decrease in job satisfaction. Teachers' likelihood to leave the profession had increased from 17% in 2006 to 29% in 2012. The report stated that the percentage of teachers who do not feel secure in their jobs increased from eight

percent in 2006 to 34% in 2012 (Ward, 2015). According to the Survey, contributors to lower job satisfaction were increase in class size, reduction of staff in schools, an increase of responsibilities without corresponding compensation, and outdated educational technology and materials. The Survey stated that teachers with the lowest job satisfaction reported an increase in students and families needing health or social services (70% vs. 56%), students arriving to school hungry (40% vs. 30%), students leaving to go to another school (22% vs. 12%), and students being bullied (17% vs. 10%) from 2010 to 2011 (MetLife, 2012). The National Education Association President Dennis Van Roekel stated that the MetLife Survey results should be a wake-up call (NEA.org, 2013).

With the staggering results from the MetLife Survey of the American Teacher (2012), The Project on the Next Generation of Teachers at the Harvard Graduate School completed a study to determine what factors would positively impact teacher job satisfaction (Armstrong, 2012). The study reported three key areas that would potentially increase teacher job satisfaction including collegial relationships, supportive leadership, and school culture. Additionally, Guyton and Hidalgo (1995) noted that new teachers with mentors showed an increase in teacher job satisfaction. New teachers with a mentor develop strong communication skills and those who met on a regular basis were more likely to stay in the teaching profession (Scherer, 1999).

### **Teacher Attrition**

The first year of teaching potentially sets the tone for a teacher's career. A negative first-year experience may lead the new teacher to exit the teaching profession (Paris, 2013). In schools that experience high teacher turnover, this debilitating drain on

the profession contributes to the loss of public funding, instability, and potentially lower academic outcomes (Ingersoll & Strong, 2011). Although elementary and secondary teachers are highly interactive with students, the work for the teacher can be isolating. This isolation can lead the new teacher to succeed or fail within the classroom without input from peers (Ingersoll & Strong, 2011). With a shortage of new teachers, the negative consequence of isolation points to the high levels of turnover (Ingersoll & Smith, 2003). Many beginning teachers reported the decision to leave the teaching profession was partially due to lack of support (Alliance for Excellent Education, 2005).

The national cost of public school teacher turnover could be over \$7.3 billion a year (National Commission on Teaching and America's Future, 2007). This estimate is based on a new teacher leaving the school or district. It does not consider the cost associated with teachers moving within the district to another school. Teacher attrition has grown by 50% over the last 15 years (National Commission on Teaching and America's Future, 2007). Additionally, U.S. Secretary of Education, Richard W. Riley, who served from 1993 to 2001, warned the need to hire new teachers would drastically increase due to the number of baby boom retirements. Ingersoll and Smith (2003) noted the effort to recruit more teachers will not solve the staffing problems plaguing schools.

The National Commission on Teaching and America's Future (2007) found that school leaders can assist in reducing the high number of teachers that leave the profession. Through strong support, hiring well prepared teachers, and continued professional development, new teachers may be retained. With the high rate of early attrition, new teachers are often not allowed the necessary time to become experienced,

knowledgeable, and confident long-term educators before leaving the profession. Life for a new teacher can be a sink-or-swim environment (Ingersoll & Smith, 2003). New teachers need to feel accomplishment, achievement, and a sense of success early in the first years of teaching (Vierstraete, 2005). Increasing administrator support, and providing enough classroom supplies and new teacher mentors will assist in the improvement of the working conditions for new teachers (Ingersoll & Smith, 2003). School administrators are key in the development of mentoring programs that assist new teachers in finding early success.

In a study where retention data were collected for two groups of teachers involved in a mentoring program, the turnover rate for participants was four percent after four years, compared to nine percent for the average beginning teachers who did not participate in a mentoring program (Ingersoll & Smith, 2004). When there is a scarcity of resources in education, Ingersoll and Smith (2003) and Berry (2004) advocated attention to teacher retention to minimize the drain of money spent on recruitment.

### **Overview of Mentoring**

Mentoring began in the United Kingdom during the Industrial Revolution, where new teachers served as apprentices (Vierstraete, 2005). The practice of mentoring migrated to the United States in the 1880s when apprentice teachers were expected to follow the teachings of an experienced teacher (Vierstraete, 2005). By the 1950's, formal education certification programs became the requirement for new teachers. In the early 1980s, mentoring was introduced to the education field as a way to begin dealing with the high rates of attrition (Ianchu-Haddad & Oplatka, 2009).

Teachers who participate in an induction program and work with a mentor are less likely to leave the profession or transfer schools. Beginning teachers need direction in the areas of psychological support, technical understanding, and instructional best practices, including guidance regarding rules and regulations (Wang & Odell, 2002). Mentoring provides new teachers the direct guidance of a veteran teacher, which in turn assists in teacher retention, school culture and professional growth (O'Brien, 2015). It should be noted that mentoring relationships vary in quality and are challenging to maintain (Paris, 2013).

Research reveals several definitions of mentoring. Mentoring is a mode of learning where a novice teacher is supported by an experienced teacher (Ambrosetti & Dekkers, 2010). Mentoring is the communicative and transformative practice between an experienced teacher and a novice teacher where conversations are based on experiences, and focused on student learning (Hudson, 2004). Accountability is considered and reflection is key. Hudson (2004) suggested this type of mentoring is significant in guiding the development of the new teacher.

Mentoring has also been described as the nurturing process through which experienced teachers coach, encourage and counsel less experienced teachers for the overall purpose of gaining in professional development and personal growth (Ianchu-Haddad & Oplatka, 2009). Mentoring may focus on pedagogical areas, emotional support and process support with some mentors having evaluative roles as well.

In order for the mentoring process to be successful, several conditions must exist (Kram, 1985). There must be adequate opportunity for open dialogue to take place

between the mentor and the mentee. The mentor must have strong interpersonal skills and the desire to assist the mentee as well as the willingness to commit appropriate time to mentorship. The culture of the school must also support the mentoring process.

Virtual education programs require students to attend synchronous sessions and work independently on coursework also known as asynchronous education (Molnar, 2013). For new virtual teachers instructional strategies are critical in keeping the students engaged, actively working with the content and in the end assessing successfully on state standardized tests. Mentoring can serve as a retention strategy for new virtual teachers by providing emotional support, technical support, peer coaching, instructional guidance and a friend in a profession that could otherwise be isolating (Huling-Austin & Murphy, 1987).

New virtual teachers struggle with various aspects of their positions. They must manage individualized learning plans, schedules, paperwork, student compliance and deal with external stress such as lesson planning based on state instructional standards, scrutiny by parents, and maneuvering many technology aspects (Boyer & Lee, 2001). New virtual teachers have the opportunity to reflect, evaluate, and modify their current practices, allowing them to restructure traditional classroom roles and relationships (Jaffee, 1997). Diekelmann, Schuster, and Nosek (1998) described the virtual educational environment as a new dimension in the field of education that prevents experienced teachers from teaching in the more comfortable setting of the traditional classroom, thus setting the stage for reflection and evaluation of their own teaching style. In other words, methods that worked in the traditional classroom may challenge teachers in the virtual

environment often resulting in a review and evaluation of their own practices as teachers (West, Waddoups, & Graham, 2007). It is essential that new virtual teachers are provided with tools for success and support through the process in order to address the needs of their students, their roles, and help reduce stress and turnover (Carroll, 2007).

### **Support of New Virtual Teachers**

Each year new teachers enter the classroom. They feel well prepared from the pedagogical aspects and have mastered a collegiate level of study as well as passed all required teacher certification assessments (Womack-Wynne, Dees, Leech, LaPlant, Brockmeier, & Gibson, 2011). Excitement fills the first few days of the academic year. Many new teachers come to realize that being prepared for a diverse classroom of learners is a dual challenge, along with learning the rules and regulations of the school district. Most new teacher training programs do not adequately prepare them for these myriad issues (National Commission on Teaching and America's Future, 1997). The same scenario exists when a new virtual teachers begins the journey in the virtual classroom.

There is increased importance in providing support for new virtual teachers that addresses the unique needs of their students, their roles, and that helps to reduce stress and turnover. Currently there is a high rate of attrition in the teaching profession (Carroll, 2007). Few teacher education programs prepare new teachers for positions in the virtual environment (Kennedy & Cavanaugh, 2010). The need for support varies based on the individual teacher, but a strong mentoring process will set the required elements in place (Ianchu-Haddad & Oplatka, 2009).

Providing new virtual teachers with tools for managing the critical aspects of the job is essential to their long-term success. Virtual schools must focus on mentoring and induction programs (Davis et al., 2007). Within the virtual environment, the mentor becomes the information-finder, technology guru, coach, and new teacher champion (Rothwell, Jackson, Knight, & Lindholm, 2005). Effective mentoring programs can have a positive impact on the overall performance of the new teacher (Rowley, 1999). Teachers who participate in the mentoring process are less likely to transfer schools or leave the profession (Ianchu-Haddad & Oplatka, 2009).

### **Role of Mentor**

A mentor in education provides support and assists in retaining teachers. Teachers are less likely to change schools when support and mentoring is in place (National Commission on Teaching and America's Future, 2007). Mentors provide guidance, encouragement, peer coaching, and instructional support. Mentors are typically experienced teachers in the virtual environment who have delivered quality instruction with a proven track record of successful student achievement (Kennedy & Cavanaugh, 2010). Mentors provide individual support, model collaboration and instructional excellence, as well as promote professional growth (Petersen, 2007). Mentors assist teachers with taking what they learned in an academic institution and implement the concepts, strategies and methods into classroom (Ianchu-Haddad & Oplatka, 2009). Mentors also have to establish a relationship that assists the new virtual teacher in linking curriculum to grade level content for students who do not display grade level proficiency. Another area where new virtual teachers need mentoring is in regards to communication

and relationship building. The virtual teacher must immediately build a trusting and respectful relationship with the parent or guardian of each student (National Education Association, 2003). The parent-teacher relationship is essential in the success of the student's academic and developmental goals (Hanline, Hatoum, & Riggie, 2012).

Mentors must also complete necessary professional development to have a clear understanding of the mentoring process, goals, and individual novice teacher needs (Ianchu-Haddad & Oplatka, 2009). There is evidence provided in a study by Ianchu-Haddad and Oplatka (2009) that the mentoring process also benefits the mentor in having a much stronger knowledge and long-term success in the teaching role.

McMillian and Parker (2005) noted that mentors must be trained to foster appropriate attitudes and dispositions in the mentee. Key elements of training should include (Aspfors & Fransson, 2015):

- Activities that constitute effective and appropriate interactions;
- communications skills and opportunity to practice with challenging scenarios;
- listening skills that guide the mentor to fully understand and interact with the mentee;
- training on constructive feedback and positive support;
- scaffolding activities that gradually lessen with the mentees experiences; and,
- modeling to allow the mentor to develop positive, beneficial attitudes and dispositions.

Mentors should be held accountable for the mentoring activities after they have been trained (Brock, 1999).

Few education programs prepare teachers for virtual school environments. Due to the problem of training new teachers effectively (Mittler, 1992), virtual schools must go a step further to insure each student has the best instruction provided, to promote strong teacher communication with students and parents and to meet the daily needs of special education students (Barbour & Mulcahy, 2004, 2009). The mentor becomes the lifeline for the new virtual teacher.

James Rowley spent many years researching the role of the mentor and qualities needed for a positive, effective mentoring program. Through his research, he determined there were six essential qualities that a good mentor should possess (1999). The six essential qualities were:

1. The mentor must be committed to the role of mentoring. The mentor is focused on helping others and finds satisfaction in this support. The mentor stays available and engaged with the new teacher throughout the process. It is imperative the mentor recognizes the mentoring process is challenging, and that it requires significant time and energy.
2. The mentor is capable of accepting the new teacher. New teachers are developing, have many questions, need guidance on various concepts and lack experience and perspective of the role. The mentor should recognize the changing stressors that occur during the school year and anticipate when the new teacher would need additional support or guidance.
3. The mentor should be skilled with instruction. Through the mentor's experiences, the new teachers should have support in classroom instruction. Mentors have

experienced evaluations and taken part in many professional development opportunities. The mentor will need to be able to observe the new teacher and provide valuable feedback that is safe and provides the new teacher opportunity to grow and improve classroom practices.

4. The mentor will need to be able to understand that each mentee is unique. The approach for each mentor should be to engage with the new teacher and build a relationship. Different mentees may react differently to feedback from the same mentor. This is not an indication of lack of communication by the mentor, but simply a variance in the personalities and demeanors of the new teacher and mentor.
5. A good mentor models continuous learning and personal growth. Good mentors should be transparent about their own needs for growth. When the new teachers asks questions, the mentor should show the mentee how to seek the answers. When the mentor provides all of the answers, the new teacher does not have the opportunity to learn how to work through situations independently.
6. The mentor communicates with hope and optimism. The mentor should have an ability to recognize the challenges and accomplishments of the new teacher and provide support through trying times. Good mentors should share their own struggles, frustrations and how they overcame them. The mentor should conduct this sharing in a supportive manner.

There is little research addressing the benefits of mentoring for the mentor.

Mentoring may provide the mentor the opportunity for personal and professional growth,

enhance self-esteem and allow the mentor the avenue to pass on personal values and experiences (Tauer, 1998). The mentor may also view his or her role as mentor to be a personal accomplishment and an indicator from leadership that he or she is valued as a team member (Vierstraete, 2005). Mentors may also enhance their own self-reflection practices and team cooperation, as well as an increase their own professional knowledge due to interactions with the new teacher (Lataille, 2005). The mentor may also experience an increase in the level of collaboration, thereby lessening the feeling of isolation (Elliott & Calderhead, 1993). The process of mentoring may allow the mentor to experience rejuvenation through the new teacher's enthusiasm, innovation, and creativity.

### **Induction Programs**

Induction programs formalize the process of welcoming new teachers to the profession and prepare them to be effective in their roles and responsibilities. Induction programs mark the beginning of the facilitation of a new teacher progressing through the various paths of development (Sweeny, 2008). Ingersoll (2012) contended that induction programs are needed because teaching is a complex profession, teachers are not prepared adequately, and significant portions of the teacher's knowledge can be acquired on the job. Based on Ingersoll's research, schools must provide an environment where teachers gain the necessary knowledge and practice to be capable to teach, survive, and succeed in the profession (Ingersoll, 2012). Ingersoll (2012) noted that new teachers participating in induction programs grew from 50% in 1990 to 91% by 2008 in the United States public schools K-12.

The purposes of induction programs include:

- To provide continuous assistance to beginning teachers in an effort to reduce problems that are known to be common
- To support development of skills and knowledge that beginning teachers need in order to be successful in the initial teaching roles
- To integrate new teachers into the culture and social system of the school, school district, and the community
- To provide an opportunity for reflection, analysis, and coaching for the new teacher with assistance from veteran teachers
- To initiate the foundation for continued study of teaching practices for new teachers
- To increase the positive attitudes for new teachers with regards to the new teacher perspective of the teaching profession
- To increase the retention of new teachers that bring quality instruction and practice to the profession (Huling-Austin, et al. 1989).

### **Mentoring Process**

The mentoring process is comprised of a series of phases and transitions. Based on research gathered from teachers, Sweeny (2008) recommended the following schedule for the mentor and new teacher.

Year 1: Provides a strong support structure.

Week before school: Daily meetings.

First week of school: Meetings each afternoon.

Until October: Meetings occur three to four times each week.

October until the end of school year one: Meetings should be one to two times each week.

Year 2: Continued support is in place.

Monthly: Meetings occur four to six times a month during this year.

Sweeny (2008) noted that the mentoring process may vary depending on personalities of the mentor and mentee. If the mentor and new teacher are both social in nature, the sessions may occur more frequently and last longer. At other times, the mentor may establish a strong professional relationship first that focuses on the tasks and requirements of teaching, then continue to deepen the relationship moving towards trust and personal connections (Sweeny, 2008). It should be stated that when the mentor and the new teacher have differing personalities and approaches, the mentor will need to take the professional approach and stay task-oriented.

Sweeny's recommended mentoring process facilitates professional growth of new teachers and mentors alike as well as promotes a more collaborative school culture. The mentoring model usually occurs over two school years. The recommended process stages and mentoring activities were offered as a guide to mentoring.

#### PROCESS STAGES

Introduction

#### MENTORING ACTIVITIES

Introductions, sharing of backgrounds, interests and personal information.

Foundation	Explanation of the roles, mentoring process, and set expectations.
Orientation	Orientation support for the district, school, grade, and community. Review of job responsibilities, curriculum, and school expectations.
Collaboration	Work together prior to the start of school and share ideas regarding room layout, management plans, and creating a teaching and learning environment.
Problem Solving	Shared analysis of issues, problems, and stresses. Create options, strategies, and plans to implement new ideas. Evaluation plan should be included.
Personal Framework	Build strong relationships. Reinforce the new teacher's self-esteem and build confidence.
Professional Framework	Establish an understanding for big-picture ideas. Planning, assessing, and reviewing results to ensure learning is the priority.
Professional Development	Build a relationship of mutual feedback and support for learning. Establish peer relationships. Create learning and support resources.

The mentor needs to help establish collaboration between the new teacher and other teachers to ensure once the mentoring process is completed the teacher continues to be reflective, seeks collaboration and strives for professional growth. Mentoring allows

the new teacher to gain insights into the mentor's experience, knowledge, and skills. Mentoring may facilitate change, improvement, and professional growth for the new teacher. Change is inevitable within the mentoring process based on the needs of the new teacher (Nejedlo, 1987).

### **E-Mentoring**

As mentoring programs become much more essential to the long-term success of teachers it is worthwhile to examine e-mentoring (Smith & Israel, 2010). E-mentoring is computer-mediated communication. Such tools as e-mail, discussion boards, chat rooms, blogs, and web conferencing provide the means for e-mentoring to take place. E-mentoring is designed to support new teachers through differentiated experiences based on the needs and concerns of the mentee (Smith & Israel, 2010). The e-mentor is typically an experienced teacher providing support for the novice teacher in regards to instructional strategies, classroom management, and the specific areas in which the novice teacher needs guidance (Jaffe, Moir, Swanson, & Wheeler, 2006).

One of the benefits of e-mentoring is that the mentor does not have to be at the same physical location as the mentee. The mentor assigned is based on the new teacher's needs versus the location of the mentor (Hamilton & Scandura, 2003). This form of mentoring provides a greater opportunity to match mentors and mentees who will best meet the needs and areas of support. E-mentoring opens up the options for mentees to be assigned specific mentors that in the short and long term will be the most beneficial to the growth of the new teacher. E-mentoring also offers the novice teacher opportunities to interact with mentors by asking questions, seeking experience related to similar problems

and when necessary, providing someone to whom he or she can simply vent frustrations by offering understanding of the novice teacher's point of view (Smith & Israel, 2010)..

It is important to note that careful recruitment of mentors is a critical step in the success of the e-mentoring model. Some schools hire retired teachers to serve as mentors (Ianchu-Haddad & Oplatka, 2009).

E-mentors also need continued support through professional development as they take on the mentor role. Mentors must have a full understanding of their role, the expectations for the new teacher's growth and the strategies necessary for the new teacher to be successful. Training on tools, strategies for interaction, providing positive feedback, as well as how to adapt to mentoring in the virtual environment are important topics to cover with the mentor (Ensher & Murphy, 2005). There also may be a need to have a facilitator in place to support the mentor through the process. The facilitator would provide support on technical issues, answer questions for the mentor, provide ongoing professional development, and support the mentor (Smith & Israel, 2010).

For schools considering E-mentoring, several factors should be taken into account. The technology and support must be in place in case of outages or system issues. The mentor and the new teacher must both be comfortable in the tools and how to use them effectively (Ensher & Murphy, 2005). Thirdly, training on ways to support new teachers from a distance must be offered. When teachers are interacting face-to-face, the emotion is visible and evident. Through the e-mentoring model, mentors must be able to determine the emotion of the new teacher without having a visual indicator (Avolio & Kahai, 2003).

The limitations of time are eliminated for e-mentoring. The mentor can respond as a free moment is presented. The new teacher has an avenue to reach out no matter the time of day. This capability can provide a strong connection but also should be monitored to ensure the mentor does not become exhausted in the mentoring process. If evidence presents concerning the new teacher's lack of limits, the facilitator may need to set expectations and schedules to assist the mentor (Workman, Kahnweiler & Bommer, 2003).

### **Face-to-Face versus E-mentoring**

Mentoring is a strategy enabling new teachers to develop in their roles and grow into their positions as virtual teachers (Shrestha, May, Edirisingha, Burke & Linsey, 2009). This process allows time for collaboration and reflection between the mentor and mentee. Mentoring face-to-face does provide a sense of relationship and support. E-mentoring may also fit into schedules more easily because communication takes place when the teacher is available, rather than during required meetings between classes or after school. In an age when the majority of teachers use smart phones and have constant access to the Internet, e-mentoring can be effective (Smith & Israel, 2010).

Through e-mentoring teachers may feel there is greater safety in communications about difficult situations (Single & Single, 2005). When the e-mentoring approach is used, it appears the social aspects are limited and the interactions are more focused. E-mentoring may increase the teachers' organizational commitment, loyalty, and retention (Ensher and Murphy, 2005). Ensher and Murphy (2005) stated that e-mentoring can serve as a cost-effective means of orientation, socialization, and support.

### **Mentor as Collaborative Coach**

Just as teachers are expected to model expected behaviors in the classroom, the mentor should model the expected behaviors of the new teacher (Vonk, 1993).

Collaboration is defined as school personnel, team members, including teachers, parents, and service providers working together towards a common vision (McCarthy, Brennan, & Vecchiarello, 2011). Through collaboration the team members may be more motivated to succeed because of the levels of accountability provided. It is important to be deliberate in the collaborative process. McCarthy, Brennan, and Vecchiarello (2011) noted the following steps to establish a productive collaborative relationship:

1. Define roles and responsibilities – All team members must be a part of creating the shared vision. Individual roles and responsibilities should be well defined. There must also be accountability in place for each role.
2. Establish a shared vision – The shared vision should consist of goals and future outcomes. All team members should contribute to a shared vision to ensure ownership by each member. A strategy should be created on how to implement the shared vision, including short and long-term goals.
3. Develop a Collaborative Strategic Plan – The goals created to support the shared vision should be observable, measurable and specific. Placing timelines for each goal will provide structure to the strategic plan.
4. Assess and Adjust – The collaborative is a dynamic relationship. The team should review goals on a regular basis. As areas of improvement are identified, adjustments in the plan are appropriate.

Teachers who work together observe improvement in student achievement, behavior and attitude (Inger, 1993). In schools where teachers work collaboratively, there is an overarching sense of coherence and consistency of expectations. Inger (1993) noted that teachers who work together on projects, curriculum alignments, and instructional strategies were better equipped for the classroom and exhibit higher job satisfaction. Inger (1993) mentioned several whole-school benefits that resulted from teacher collaboration.

- The teachers were able to work through challenging times and varying viewpoints because collaboration expectations were established and followed.
- Teachers and administrators were afforded the opportunity gain knowledge together through training, study groups, and teaching conversations.
- Teachers were more equipped to support the strengths and weaknesses of each other.
- Through working together, planning time was reduced and the quality of the lessons increased.
- The school was better prepared and organized to acquire new knowledge, strategies, and resources.
- The organization of the school allowed the opportunity to support new teachers and reinforce staff values, traditions and goals.

Teachers that work together in collaboration grow as a team and a mutual respect is formed. Schools structured to support collaboration, create coherence in the daily work of teachers (Inger, 1993). School improvement becomes possible with strong collaboration in place. Along with change, the school environment and culture become focused on learning.

### **Critical Conversations**

Critical mentoring conversations enable new teachers to build strong practice-theory based around classroom exchanges, observations and critiques (Edwards-Groves, 2014). Mentoring allows for new teachers to develop their practice and enhance opportunities to learn within the context of teaching (Lai, 2005). Mentoring is both a relationship and a process. The mentor relationship allows for novice teachers to seek guidance from and collaboration with experienced teachers. Without this explicit guidance, mentors can default to their own practices as learned through their own experiences, which might not always be best practices to share with novice teachers (Love, 2009).

The structure of mentoring should be based on inquiry as a basis of learning and include a number of effective mentoring components. Timperley (2001) identified these components as: dialogue on observing data, sharing of strengths and challenges, discussing reasons for particular practices, giving advice with reasons and inquiring about consequences. When particular conditions are in place, learning to teach and learning about teaching are strengthened (Edwards-Groves, 2014).

The key areas that need to be addressed in practice between the mentor and new teacher are how to interpret data and strategies for teaching diverse learners. Accountability to professional practice and reflective learning will need to be considered. Through strong mentoring conversations, new teachers will participate in dialogue that is based in pedagogical practice.

### **Challenges in Mentoring**

There are many positive benefits of the mentoring process, but new virtual teachers must also be aware of the potential challenges. Student confidentiality takes on a higher level of importance and the Family Educational Rights and Privacy Act (FERPA) must be adhered to at all time (U.S. Department of Education, 2014). All students have privacy rights and student records must be held to the utmost confidentiality. For the virtual teacher using an e-mentor, student information must be kept at the highest confidentiality. The electronic world of tools could potentially open up a privacy issue and put student identity at risk (Lowenthal & Thomas, 2010). As such, strict guidelines on communication must be established at the beginning of the mentoring process and be adhered to throughout the mentoring timeframe.

Another key challenge that must be addressed is the understanding of how to use e-mentoring tools. Whitesel (1998) stated that effective teachers teach students, the technology does not teach. Training on electronic communication and technology related to the online classroom is essential to the new virtual teacher's success (Palloff & Pratt, 2000). New virtual teachers need training in shifting from the traditional brick and mortar model to the virtual environment, including time management and delivery of curriculum

content. The availability of face-to-face training should be considered. Most teachers can adapt to the technology, but providing the training upfront could create a more collaborative environment versus new teachers spending time on learning the tools in isolation (McLinden, McCall, Hinton, Weston, & Douglas, 2006).

Mentoring may bring about negative consequences for the mentor (Ianchu-Haddad & Oplatka, 2009). The mentor may become drained, tired of physical and mental pressures and struggle to allocate enough time to his or her own students and classroom instruction. Finding a balance is critical for the mentor.

When there is a conflict between the mentor and mentee, the overall process can be jeopardized (Ambrosett & Dekkers, 2010). Careful matching of the mentor and mentee must be considered to ensure the overall process is successful and both the mentor and mentee are challenged, grow and meet individual professional goals. Dysfunctional mentoring relationships occur when there is not a benefit for the mentor, mentee, or both (Scandura, 1998). When dysfunction occurs in a mentoring relationship, it may have negative impacts on the performance and work attitudes of the mentee, and may result in increased stress, mentee withdrawal through absenteeism and ultimately could lead to increased turnover. Williams, Scandura and Hamilton (2001) developed a four dimension dysfunctional measure in mentoring (DIM).

1. Negative relationships: This includes psychosocial problems such as bullying, intimidation, overly aggressive behavior, abuse of power, and provoking diversity issues.

2. **Difficulty:** This includes psychosocial problems with good intent such as different personalities, varying work styles, continued conflict, disagreements, and excessive dependence.
3. **Spoiling:** It involves changes in the mentoring relationship that transform from a satisfying to a disappointing relationship. Spoiling may include vocational issues with good intent such as betrayal or regret.
4. **Submissiveness:** This dimension reinforces the balance of power. The mentee is submissive, excessively dependent, and passive behaviors in the mentoring relationship.

Other factors that might lead to dysfunction in the mentoring relationship are jealousy, competition, and deception. If these factors are introduced in the mentoring relationship, suspicion may increase as well as lack of trust in the relationship. Williams, Scandura, and Hamilton (2001) found the perceived dysfunction had a negative effect on the mentor performance and an even stronger negative effect on self-esteem of the mentor.

### **Summary**

The review of literature focused on the history of virtual education, online instruction models as compared to brick and mortar models, characteristics of the online teacher, attrition of teachers, an overview of mentoring, support of new virtual teachers, the role of the mentor, the mentoring process, e-mentoring, face-to-face versus e-mentoring, the mentor as a collaborative coach, critical conversations, and the challenges of mentoring.

The reality of the classroom can be very different than the experiences to which the teacher has been exposed through his or her academic journey. Teaching online requires new skills that must be developed. For new virtual teachers to make a successful transition to the online environment, professional development should be specifically designed for the new challenge (Vaill & Testori, 2012). Virtual teachers who are provided support are less likely to leave their positions (Kennedy & Cavanaugh, 2010). Virtual teachers are challenged with meeting the academic, social and developmental needs of students with diverse needs and backgrounds. They must also become proficient in the online tools necessary to be a successful instructor in the virtual learning environment (Robertson, 1999). Mentoring supports and challenges the new virtual teacher, ensuring progress is made and students remain the number one focus (Ambrosetti & Dekkers, 2010).

Through mentoring, new virtual teachers will know they have a coach to rely on throughout the first year of virtual teaching. The new virtual teachers will have an advocate for their success and know when challenges arise, their mentor is just a phone call, text, Skype session, or email away. Mentors in the virtual teaching environment also know the challenges they faced during their first year, and are able to take his or her own experience to guide the new virtual teacher towards success. The success of the online school is directly tied to the positive training and support provided to its teachers (Vaill & Testori, 2012). Well-trained and supported virtual teachers carry the required skills into the online classroom allowing an improved student experience.

It is critical that schools provide new virtual teachers with the necessary support to ensure student academic success is the highest priority. The increase in the number of teachers leaving the profession during the first five years and the financial impact on districts due to attrition is overwhelming (National Commission on Teaching and America's Future, 2007). Research points to a key component of support for new teachers: mentoring. There are many components of the mentoring process that should be in place to ensure support for the new teacher. Factors such as instructional support and strategies, productive communication and frequency of the support play a part in the new teacher's success (Griffin, 2010).

## **CHAPTER 3**

### **Research Methodology**

#### **Introduction**

The purpose of the study was to understand the perception of effectiveness of the mentoring process from the mentee's point of view. The study strived to examine the relationship of the mentoring process with the job satisfaction of the new teacher. This chapter examined the research methodology including the population and sample, instrumentation, data collection, and described how the researcher analyzed the data.

Mentoring is an essential resource that is often not used to its full capacity (Mullen, 2005). Due to NCLB and increased accountability for student academic achievement, school districts continue to face an increased pressure to demonstrate student academic gains. School districts have turned to mentoring as a way to help acclimate new virtual teachers to the online teaching environment.

A quantitative, correlational research design was used to examine the relationships and differences among the study variables. The independent variable in this study was the effectiveness of the mentoring process as measured through capturing the hours of time spent between the mentor and new virtual teacher. The dependent variable was the perceived job satisfaction of the new virtual teacher.

### **Population and Sample**

The population for this study consisted of K-12 new virtual teachers at 18 online schools managed by the education management company in the United States. The ratio of mentors assigned to new virtual teachers was one mentor for up to five new virtual teachers. The new virtual teacher population at the online schools was approximately 340, which comprised 21% of the total teacher population of the online schools. All new teachers had mentors assigned at the beginning of the school year. Teacher effectiveness scores, which include student growth measure and academic achievement, were not considered as stipulations of the study. Participation in the study was strictly voluntary. The sample was not restricted to any geographical area within the United States. The sample was restricted to new virtual teachers supported by the education management company who responded to the Teacher Pulse Check survey within the date range of January 19, 2016 through January 22, 2016.

The researcher obtained permission to access participant data collected in the study from the executive vice president of School Services for the education management company. Each of the 18 full-time online schools selected for the study employed management personnel reporting to the School Services division of the education management company. The new virtual teachers were employees of the local school authorized organization, the education management company, or school district. The approval from the executive vice president of School Services reflected the executive permission necessary to complete this research study.

### **Description of Instruments**

Since the targeted population for this study was new virtual teachers employed by the same education management company, the most direct and inclusive method to collect data in a timely manner was the survey method. The use of a survey instrument offered advantages to other methods: time, anonymity, ability of the participants to complete the questionnaire at their own convenience, ability to reach virtual schools across the United States, efficiency, and cost effectiveness (Borg & Gall, 1989). The three instruments used for this study were created by the education management company; The Mentor Record (Appendix A), Teacher Mentor Teacher Satisfaction Survey (Appendix B), and Teacher Pulse Check (Appendix C).

The Mentor Record provided the mentor an opportunity to document time spent in the mentoring process with the new virtual teacher. At the beginning of the school year, the mentor participated in mentoring training through a formal presentation facilitated by the mentoring program director. The mentor continued professional development by attending monthly professional learning community sessions.

The Teacher Mentor Teacher Satisfaction Survey offered the new virtual teacher a channel to report the new virtual teacher's satisfaction with the assigned mentor. The Teacher Pulse Check survey was distributed to all teachers at the online schools six times over the school year, beginning two weeks following the school start date. The new virtual teacher's responses were included in this study.

The Teacher Pulse Check survey collected teacher responses regarding his or her level of satisfaction, training, expectations, school morale, and other relevant topics. The

general format of the surveys included multiple-choice and open-ended question items. The researcher used questionnaires because it provided structured responses and questionnaire items that could be analyzed scientifically (Pan & Lopez, 2004).

### **Data Collection**

An application to conduct the research study was submitted by the researcher for approval to the Institutional Review Board at Carson Newman University on November 24, 2015. On January 4, 2016, the Institutional Review Board at Carson Newman University provided electronic approval for the researcher to conduct the study.

The education management company developed the survey, collected the responses, and disseminated surveys via Survey Gizmo and Verint EFM Survey tool. The education management company established the following frequency for each survey.

**Mentor Record:** Weekly the mentors documented the time in sessions with each new virtual teacher.

**Teacher Mentor Teacher Satisfaction Survey:** New virtual teachers were encouraged to complete the survey every other week.

**Teacher Pulse Check:** The Teacher Pulse Check survey was sent out six times over the school year. Three of these distributions occurred in the timeframe for this study. The survey remained open for four days for the distribution.

The respondents' names, IP addresses, and any other identifying information were removed from the data set prior to the education management company providing the data to the researcher. This measure provides an additional layer of confidentiality for the participants.

### Research Design

A quantitative, correlational research design was used for this study. A correlational study is used for exploring relationships between independent and dependent variables (Creswell, 2005). Correlational research design was appropriate for this study because data could be statistically analyzed to identify whether or not mentoring directly affects new virtual teacher job satisfaction.

During this study, the collected data were used to determine if a relationship existed between time spent in the mentoring process (independent variable) and the level of job satisfaction of the new virtual teacher (dependent variable). A Likert-type scale was used to determine the level of new virtual teacher satisfaction with one representing *not at all satisfied* to seven representing *very satisfied*. The results were analyzed to determine if the level of job satisfaction was impacted by the amount of time spent with the mentor.

This chapter examined research methodology including research design, appropriateness of the design, population, instrumentation, data collection, and data analysis.

## **CHAPTER 4**

### **Results of the Data Analysis**

#### **Introduction**

The ever-changing field of education is challenging and the added component of virtual instruction brings a higher need for quality mentoring programs for new virtual teachers (Villani, 2002). Mentors are a primary element for new virtual teachers' success, may contribute to lower attrition rates by new virtual teachers, and through positive support of new virtual teachers may increase the level of job satisfaction for the new virtual teacher (Kennedy & Cavanaugh, 2010). Results of the analysis in this research may contribute to a deeper understanding of the impact of teacher induction, mentoring, and factors that new virtual teachers relate to his or her level of job satisfaction.

The focus and motivation for this research study were to determine if there was a direct relationship between the time spent by the mentor and the job satisfaction level of the new virtual teacher. The study planned to examine new virtual teachers at 18 online schools managed by the same education management company in the United States. Once the study was completed, data were gathered from 17 of the 18 schools in the original plan. The one school without data did not hire a new virtual teacher as originally planned.

The researcher examined instruments used in the study, the Mentor Record (Appendix A), Teacher Mentor Teacher Satisfaction Survey (Appendix B), and Teacher

Pulse Check (Appendix C), to identify and note emerging themes. Understanding the impact of mentoring and its relationship to the new virtual teacher's job satisfaction will aid virtual schools in developing parameters for mentoring programs that lead to higher teacher job satisfaction and potentially positively impact teacher retention.

### **Research Question**

The study was conducted to investigate mentoring and the relationship that may contribute to new virtual teachers' level of job satisfaction. The research question guiding this study was:

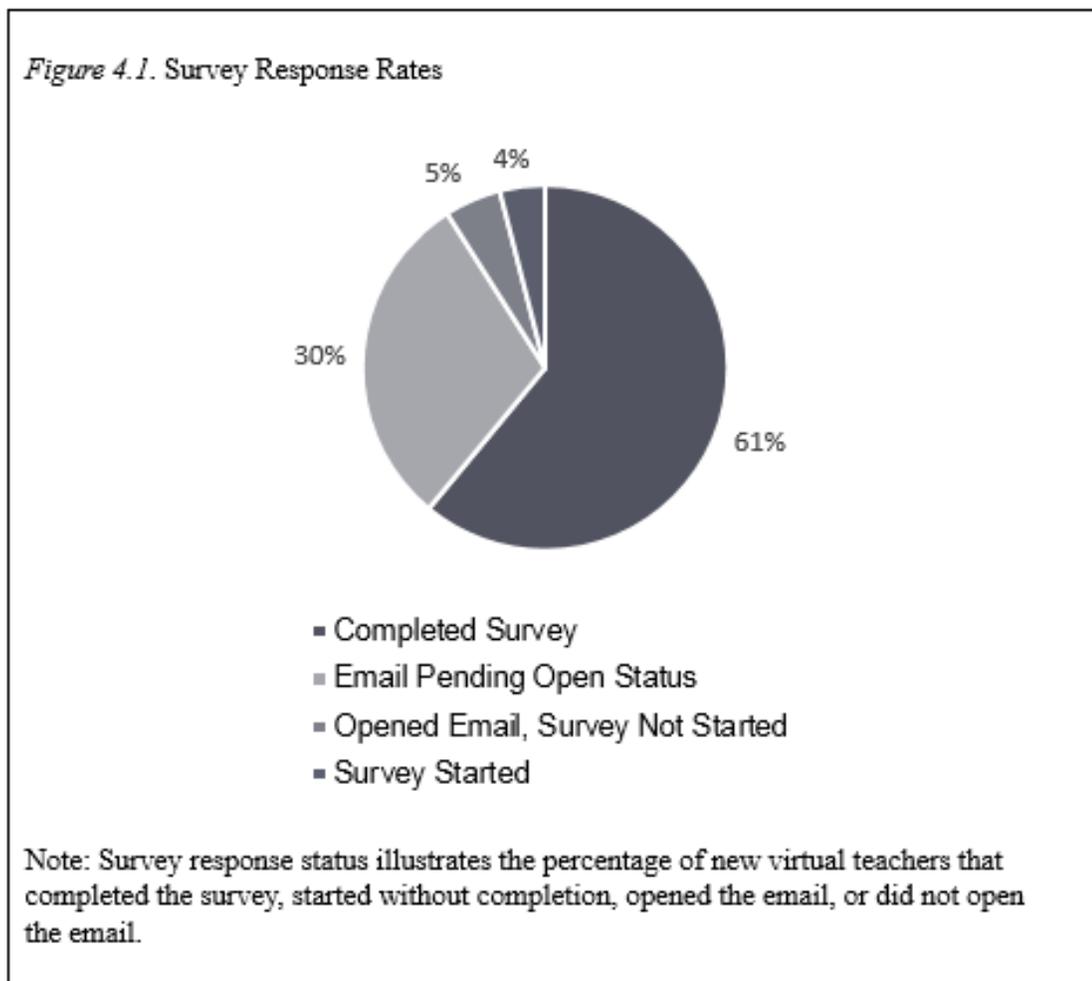
Is there a direct correlation between a new virtual teacher's level of job satisfaction and the time spent directly interacting with the new teacher mentor?

### **Data Collection and Analysis**

The population for this study consisted of K-12 new virtual teachers at 18 online schools managed by the same educational management company in the United States. The ratio of mentors assigned to new virtual teachers was one mentor for up to five new virtual teachers. The new virtual teacher population at the 18 online schools was 241, which comprised 21% of the teacher population of the online schools. All new virtual teachers had mentors assigned at the time of employment. The mentors and new virtual teachers bring to the relationship a variety of levels of experience and many levels of education.

The Teacher Pulse Check Survey (Appendix C) was distributed electronically by the education management company on January 19, 2016. After a three-day window, the

survey response rate was 61%, with 213 complete out of the 351 disseminated. By using the combination of the Mentor Record Survey and the Teacher Pulse Check survey data, the researcher was able to determine if a direct correlation existed between time spent in mentoring and the new virtual teacher's level of job satisfaction. In order for the sample size to be significant, a sample size of at least 180 responses (51%) was needed based on a degree of accuracy plus or minus .05, proportional sample size of .5, and confidence level of 95%. The actual response rate of 213 completed surveys was higher than the minimum sample size of 180. The response rate was significant enough to guide the researcher in answering the research question.



With the ratio of mentors assigned to new virtual teachers being one mentor for up to five new virtual teachers, it was important to review the average number of new teachers supported per a mentor and the total time spent in mentoring by school. Each of the 18 online schools were at various stages of the school life cycle. The online schools consisted of student populations representing elementary, middle school, and high school. Table 4.1 provides detailed overview of the participation by school.

Table 4.1

*Participation by School*

School	Number of mentors	Average number of new virtual teachers	Cumulative hours spent in mentoring
1	3	6	288
2	9	1	253
3	4	3	144
4	5	2	84
5	4	3	216
6	3	2	15
7	1	5	9
8	4	1	59
9	5	5	49
10	4	3	178
11	5	3	315
12	2	4	104
13	1	5	19
14	20	2	684
15	3	3	62
16	12	2	427
17	3	4	192
18	0	0	0

The online schools that had high school students began the 2015-2016 school year using a new online platform. All of the schools in this study implemented mentoring, instructional coaches, and a family support model. It was important to note the variances at the online schools to assist in the understanding of the factors that could have contributed to the level of job satisfaction by the new virtual teacher. On average the participating schools had three new teachers. The largest new teacher population was at

school 16 with 46 new teachers. School 16 had 20 new teacher mentors. It should be noted that participating school one in the study exceeded the mentor-new teacher ratio.

To test the research question, the Mentor Record Survey (Appendix A) was completed weekly by the mentors, capturing the amount of time spent in mentoring sessions with each new virtual teacher. The Mentor Record Survey was completed by 88 mentors between July 27, 2015 and January 19, 2016.

The mentoring initiative started the week of July 27, 2015. The highest amount of time spent in mentoring sessions occurred during the weeks of August 10, 2015 through August 23, 2015 with seven and one-half hours. This period represented the timeframe with the greatest number of research study schools beginning the school year. The 18 schools examined in this study had various school start dates. After the week of August 10<sup>th</sup>, the hours spent in mentoring remained relatively consistent within a range of four to five hours weekly.

The Teacher Mentor Teacher Satisfaction Survey (Appendix B) was completed by new virtual teachers once every other week. The total number of responses to the Teacher Mentor Satisfaction Survey was 945 over the timeframe. A factor that contributed to the new virtual teacher's level of satisfaction was the mentors' ability to have an unbiased approach as indicated in Figure 2 by the satisfaction rating (6.8%).

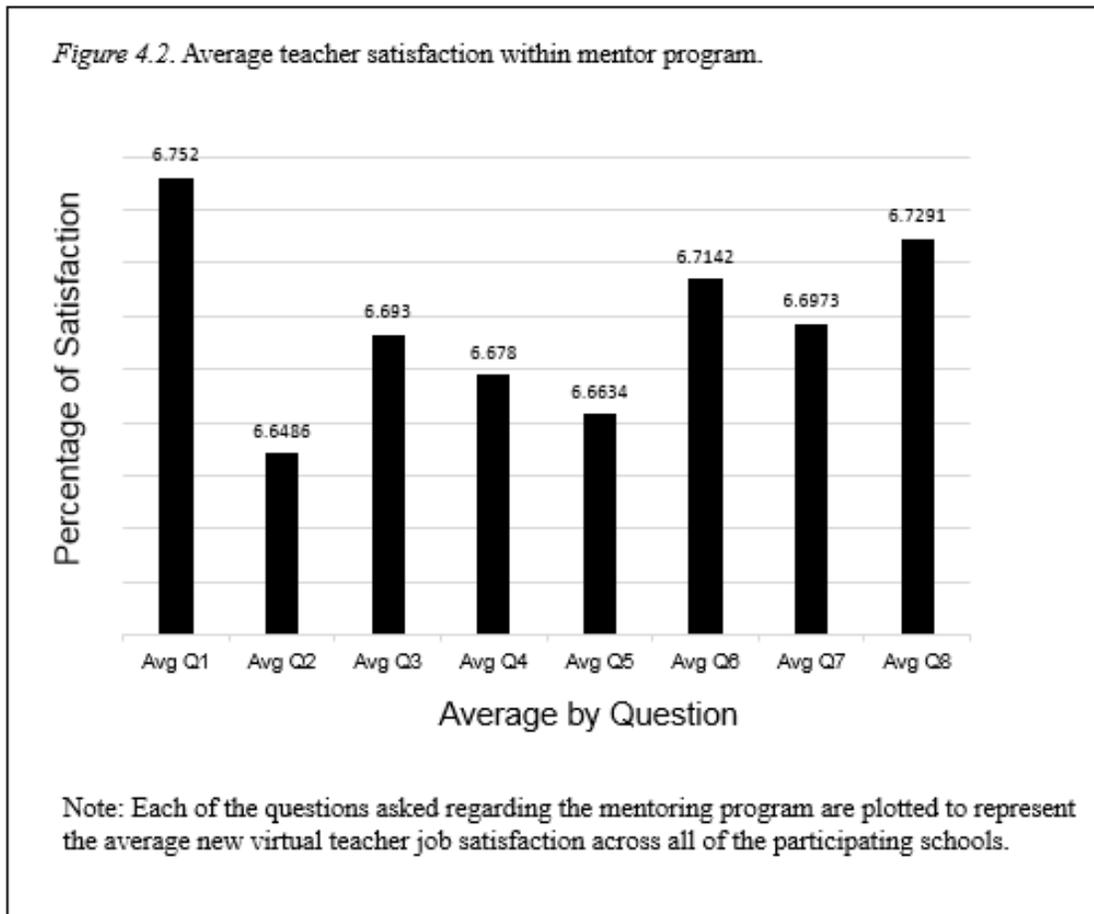


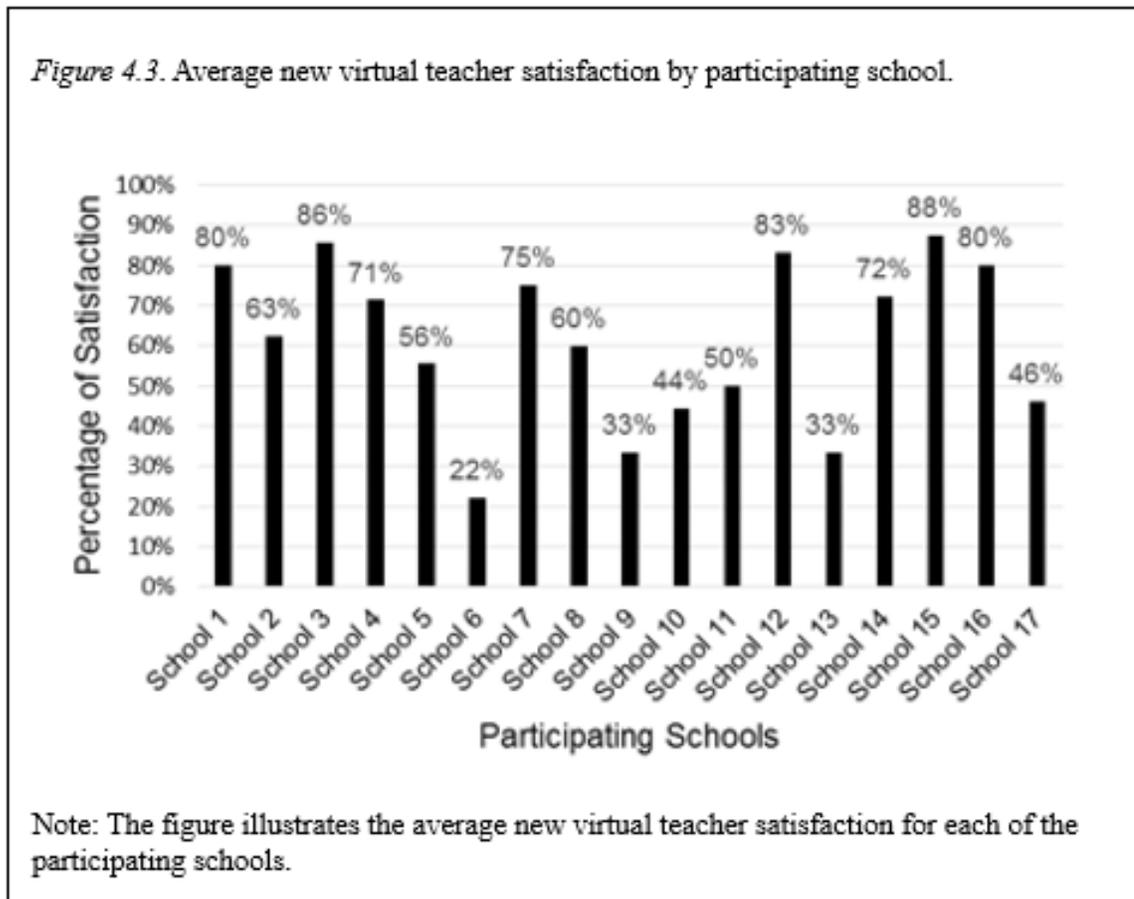
Table 4.2

*Teacher satisfaction within Mentor Program Question Key*

Question Number	Survey Question
1	My Mentor is unbiased in their approach and work with their teachers.
2	My Mentor has conversations with their teachers on a consistent basis.
3	My Mentor is an effective relationship builder with their teachers.
4	My Mentor positively motivates to impact teacher performance.
5	My Mentor transmits knowledge and resources to maximize student engagement.
6	My Mentor has a thorough understanding of the school academic plan.
7	My Mentor is well versed in all learning platforms.
8	My Mentor is seen and acts as a partner and peer to the teacher.

Further analysis of the Teacher Mentor Teacher Satisfaction Survey (Appendix B) revealed that eight participating schools had higher than average satisfaction scores regarding the new virtual teacher ranking the mentor as unbiased in his or her approach (Q1). Participating school six and participating school 12 rated below average across the board on all questions regarding the Teacher Mentor Teacher Satisfaction Survey. The lowest level of satisfaction occurred with the mentor was holding conversations on a consistent basis (Q2). New virtual teachers at nine of the online schools rated the level of satisfaction with the mentor overall above average on questions reported on the Teacher Mentor Teacher Satisfaction Survey.

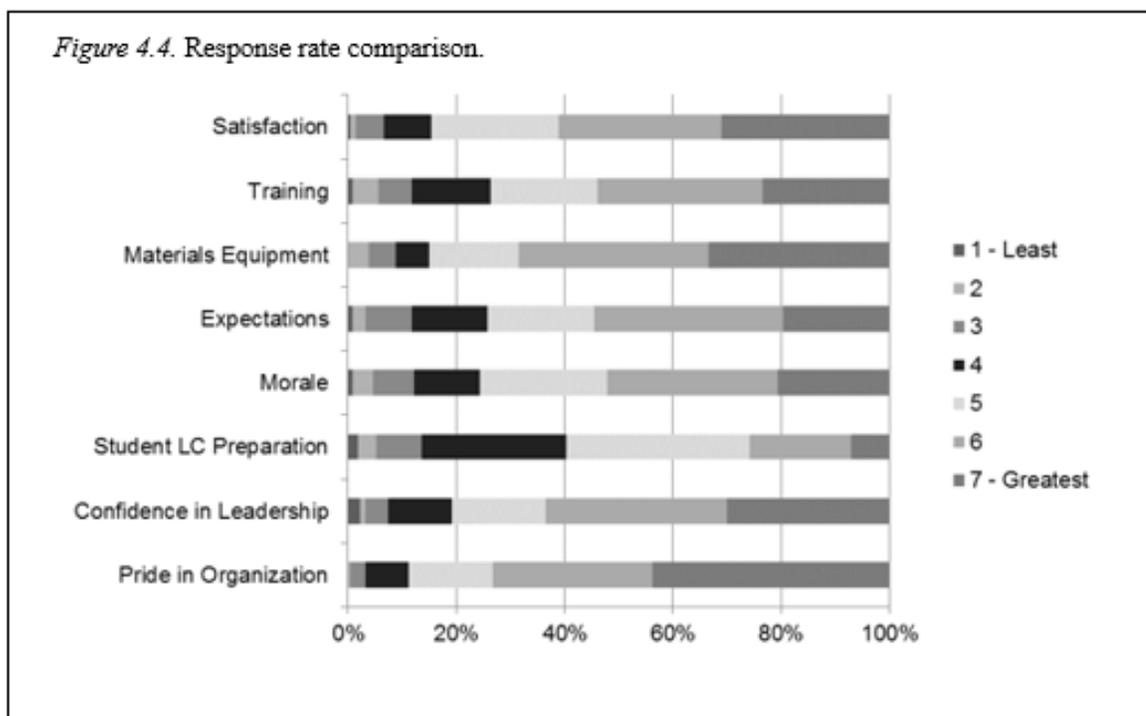
The Teacher Pulse Check (Appendix C) was completed between January 19, 2016 and January 22, 2016. During this timeframe, 213 new virtual teachers completed the survey which was a 61% participation rate.



The overall average level of job satisfaction by new virtual teachers was 61%. The highest level of job satisfaction was at participating school 15 with a job satisfaction rate of 88%. The lowest level of job satisfaction was at participating school six with a job satisfaction rate of 22%. There were nine participating schools with job satisfaction levels above the overall study average of 61%.

The Teacher Pulse Check survey (Appendix C) measured several additional components of job satisfaction. The new teachers' satisfaction score was collected for their level of satisfaction with training, materials and equipment, expectations, morale, time onboarding, student-parent preparation and time spent on non-academic tasks. As

noted in Figure 5, the highest scored items from the survey were questions related to satisfaction (85%), materials and equipment (85%), confidence in leadership (81%), and pride in organization (89%), with all scoring 80% positive responses as represented by a Likert score of six or seven. The highest scored item was related to the new virtual teachers' pride in the organization (89%) consisting of a six or higher rating.



The Teacher Pulse Check survey (Appendix C) examined the new virtual teachers' level of satisfaction in teaching at the school. Of the 17 schools with new virtual teachers in the study, 11 of the schools rated with a higher level of satisfaction in teaching than the overall average of 5.68 satisfaction. Pride in the Organization generated the highest level of satisfaction (6.0) with 14 of the 17 schools reporting higher than average satisfaction. The second highest response of satisfaction was found in the confidence of the decisions of the leadership team (5.6) with 13 of the 17 schools

reporting a higher satisfaction rate. The question that brought the lowest level of approval was related to how well the students and parents were prepared for the school year. This question noted a 4.7 level of satisfaction. Further review and analysis of new virtual teachers view as related to new student and parent preparedness is warranted.

Understanding the expectations of new students would allow virtual schools the guidance to potentially prepare new students and parents more adequately. Table 3 provides a detail overview of the satisfaction score by participating school for each teacher pulse check survey questions.

Table 4.3

*Average Satisfaction Score*

School	Satisfaction	Training	Materials Equipment	Expectations	Morale	Pride in Organization	Confidence in Leadership	Student LC Preparation	Time Onboarding	Time on Non Academic Tasks
1	6.3	5.6	6.3	5.5	6.0	6.7	6.3	5.1	3.4	2.5
2	5.9	5.9	6.0	6.0	6.0	6.0	6.1	5.1	3.3	3.1
3	6.1	6.1	6.0	6.1	6.1	6.6	6.5	5.7	3.0	2.3
4	5.9	5.0	6.0	5.6	5.9	5.9	5.7	3.7	2.3	2.6
5	5.8	6.0	6.2	6.0	5.4	6.1	6.2	4.9	1.8	2.3
6	4.7	4.0	4.9	3.4	2.9	5.2	2.6	3.0	2.6	2.3
7	6.1	5.9	6.2	5.7	5.9	6.4	6.0	4.4	2.4	2.7
8	5.5	5.3	5.5	5.2	5.1	6.1	5.6	4.9	3.7	2.0
9	4.8	4.3	5.0	4.9	4.5	5.3	4.8	4.3	2.7	3.1
10	5.7	4.6	5.7	5.1	5.1	6.1	5.3	4.8	2.0	2.2
11	5.1	5.4	5.6	5.0	4.5	5.9	5.8	5.0	2.1	2.6
12	6.2	6.2	6.3	6.2	5.8	6.5	6.2	5.3	1.8	2.0
13	5.0	5.3	5.3	4.7	4.0	5.0	4.3	4.0	5.3	3.7
14	6.0	5.5	5.8	5.6	5.2	6.2	5.8	4.7	2.9	2.7
15	6.3	5.8	6.1	5.3	5.9	6.1	5.6	4.5	2.5	2.0
16	6.3	5.7	6.5	5.3	6.1	6.2	6.3	5.2	1.3	2.3
17	5.1	4.9	5.1	4.8	4.8	5.4	5.6	4.8	2.6	2.7

Linear Regression and Correlation analysis was used to analyze the relationship between the hours spent in mentoring and the level of new virtual teacher job satisfaction. Figure 5 depicts the linear regression and indicates there was a weak positive correlation.

The magnitude of the correlation coefficient determines the strength of the relationship. Generally, variables with a correlation coefficient less than 0.30 and higher than 0.00 exhibit a weak correlation.

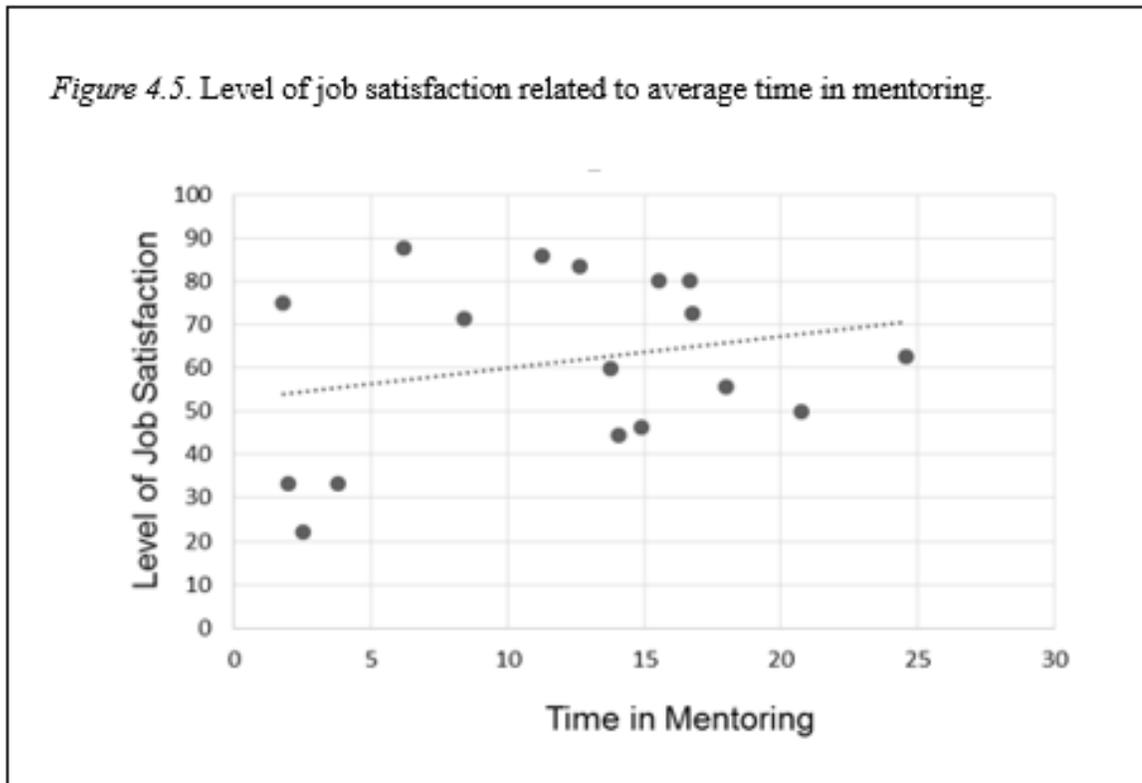


Figure five illustrates the scatterplot of the level of job satisfaction in relationship to the time in mentoring. Completion of a correlational analysis in excel was used to determine the strength of the relationship between the level of new virtual teacher job satisfaction and the time spent in mentoring. The correlational data ( $r = 0.249$ ) suggested that a weak positive correlation exists between the hours spent in mentoring and the level of new virtual teacher job satisfaction. This analysis was based on one set of data from January 2016. Due to the limitation of the data, the relationship between hours spent in

mentoring and the level of new virtual teacher job satisfaction may have been stronger by reviewing the trend over the complete first school year.

### **Summary**

The research question of this quantitative, correlational study examined the relationship between the number of hours spent in mentoring and the level of new virtual teacher job satisfaction. The relationship of the mentoring program to the level of new virtual teacher job satisfaction was determined by surveying 241 new virtual teachers and collecting the hours spent in mentoring by the mentor. This chapter described the response rate, time spent in mentoring, and the overall level of job satisfaction of the new virtual teachers from 18 education managed school that were sampled for this study.

Chapter 5 provides a discussion of the findings as related to the research question, a conclusion, implications and recommendations for further research. Additionally, Chapter 5 presents the relationship between the findings and Knowles' adult learning theory which served as the theoretical framework for the research.

## **CHAPTER 5**

### **Conclusions, Implications, and Recommendations**

#### **Introduction**

Today's teachers are faced with many challenges. The added complexity of virtual instruction brings a higher need for quality mentoring and guidance for new virtual teachers (Villani, 2002). The purpose of this study was to explore the relationship between time spent in mentoring activities with the new teacher's level of job satisfaction. As this quantitative study analyzed the direct correlation between the time spent in mentoring activities and new teacher job satisfaction, the researcher utilized the adult learning theory as the lens through which to examine the data. This chapter summarizes the findings of the study, discusses the conclusions, and provides recommendations for future research. Conclusions were determined based upon careful analysis of the data generated through the multiple survey tools administered. Based on an examination of the gathered data, the researcher was able to understand the relationship between the process of mentoring and new teacher job satisfaction.

#### **Summary of the Study**

As teachers transition into the virtual teaching environment, support must be provided. Through strong induction programs and organized focused mentoring programs, teachers will have the support necessary to successfully transition into the

virtual teaching environment. A review of current literature heightened awareness in the researcher about the need for induction programs, mentoring, and the required continuous support of new virtual teachers. The National Commission on Teaching and America's Future (2007), reported the cost for teacher turnover could exceed \$7.3 billion a year in 2007 which was significantly higher than the estimate of \$4.9 billion in annual costs that was made in a report by the Alliance for Excellent Education in 2005. Over the last 15 years, teacher attrition has grown by 50% (National Commission on Teaching and America's Future, 2007). Lack of support was mentioned as an influence for many beginning teachers decision to leave the teaching profession (Alliance for Excellent Education, 2005). Teacher education programs for the most part do not prepare teachers to successfully teach in the online environment. Further consideration is needed on behalf of virtual schools, as the new virtual teacher needs initial training through induction, mentoring, and support to ensure success, and, consequently the students' academic success (Davis et al., 2007).

### **Research Question**

The research question guiding this study was:

Is there a direct correlation between a new virtual teacher's level of job satisfaction and the time spent directly interacting with the new teacher mentor?

Based upon the findings gathered from the Mentor Record, Teacher Mentor Teacher Satisfaction Survey, and Teacher Pulse Check, the researcher discovered there was limited evidence that the time spent with mentor had a direct impact on the level of

job satisfaction by the new virtual teacher. An administered regression analysis resulted in a correlational coefficient ( $r = 0.249$ ) suggesting a weak relationship between the hours spent in mentoring and the level of new virtual teacher job satisfaction. New virtual teachers (61%) rated his or her level of job satisfaction with a six or seven on the seven-point Likert scale.

There were a variety of additional factors that may have impacted the new virtual teacher level of satisfaction. The online schools in this study consisted of student populations representing elementary, middle school, and high school. The online schools that provided high school for students, began the 2015-2016 school year using a new online platform. All teachers employed by the online high schools had to complete training and become acclimated with the new platform. The high school mentors may have exposed the new virtual teachers to frustrations and challenges unnecessarily due to the new platform.

It should also be noted that all of the schools in this study implemented mentoring, instructional coaches, rigorous instructional schedules, and a new family support model for the 2015-2016 school year. Returning teachers at the study schools experienced many changes during the timeframe when he or she might have also been supporting new virtual teachers through the mentoring process. The variances at the online schools assisted in the understanding of the factors that could have contributed to the level of job satisfaction. These variances could help account for the fact that the data did not provide compelling evidence that the time spent in the mentoring program did not lead to increased new virtual teachers' level of job satisfaction.

## **Theoretical Framework**

The theoretical lens used to examine the mentoring process was the adult learning theory (Pappas, 2013). Knowles (2011) stated six key assumptions within the theory of adult learning. First, an adult learner's self-concept moves from dependence towards independence. The new virtual teachers were assigned mentors by the school administration and had little to no input on their assignments. The new virtual teacher did not have control over the assignment of the mentor, but controlled how they conducted themselves within the mentoring relationship. Based on the hours reported by the mentor and the completion of the teacher pulse check survey by the new virtual teacher, the data showed both the mentor and the new virtual teacher participated in the mentoring process despite the lack of control on the assignment.

The second assumption associated with adult learning theory is that with maturity comes a growing bank of knowledge that increasingly becomes a resource for the adult learner. Each of the new virtual teachers and mentors brought a varied level of education and experience. The new virtual teachers learned about current educational theory, virtual teaching strategies, and management of the virtual teaching role.

The third assumption is the idea that adult learners become oriented gradually to the developmental tasks of his or her roles. The adult learner must have a readiness to learn based on how applicable he or she perceives the knowledge to be for life or work situations. The mentoring process allowed direct support, professional development as needed, and allowed the mentor to transfer knowledge to the new virtual teacher. The mentor was able to provide support and guidance with instructional strategies, tasks

associated with virtual teaching, technology assistance, and other means of support as necessary as the new virtual teacher transitioned into the online teaching environment.

The fourth assumption associated with the adult learning theory is the orientation to learning. This assumption focuses on the adult learner's ability to immediately apply knowledge in a particular situation. The mentor discussed problems such as classroom management, instructional strategies, student assessment, or other issues with the new virtual teacher and then assisted in working through solutions. As reported by the new virtual teacher on the Teacher Mentor Teacher Satisfaction Survey, mentors possessed a thorough knowledge of school academic plan, were well versed in all learning platforms, and were seen as a partner to the new virtual teacher.

The fifth and sixth assumptions focus on the adult learner's internal motivation to learn and the adult learner's need to understand the reasoning of the information. Throughout the mentoring process, mentors provided new virtual teachers with support in ways to effectively work with students in the virtual environment, the necessary tools for completing virtual teacher tasks, how to work in the school's online curriculum, and the necessary skills to effectively teach in the virtual classroom. The motivation for new virtual teachers to continue to learn the components of the virtual classroom comes from the teacher's intrinsic concern for the student's academic success. As the virtual teachers gained stronger understanding of his or her role and responsibilities, the understanding of why tasks and concepts needed to be mastered became clearer.

### **Limitations**

This particular study was conducted with participants who were all teachers working for one educational management company at only 18 virtual schools. This study did not represent a comprehensive look at all new virtual teachers across the nation. The educational management company collected data six to seven times throughout the school year depending on the start date of the online school. This study analyzed the results of the Teacher Pulse Check completed by new virtual teachers in January 2016. The limitation of reviewing the one iteration of the Teacher Pulse Check narrowed the view of the new virtual teachers' level of job satisfaction. Further analysis of the trends presented in all disseminations of the Teacher Pulse Check may lead to additional discoveries.

While training and professional development was systematically provided to mentors, a limitation of the study was the use of a systematic implementation of the mentoring strategies. An improvement to the program could include the development of a rubric outlining mentor performance and an informed timeline for various mentoring topics. The informed timeline could be developed from the teacher year-long work cycle reflecting the nuances of change from school start, to grading assignments, to progress reports, second semester transition, state testing, and end of school year activities.

The recruitment process for mentors at the online schools followed expectations determined by the educational management company. School administrators inquired within the returning staff to solicit experienced teachers interested in mentoring. The minimum requirements were that the mentor have least three years of virtual teaching

experience, a minimum of a bachelor's degree, and an active state teaching license. The school administrator selected the mentor based on the minimum requirements and the expectation the mentor would be someone who could comfortably engage in active listening and problem-solving to help new teachers traverse the challenges of being a first-year teacher in an online learning environment. Since the administrator selected the mentor and then assigned the new virtual teachers, the partnerships might not have allowed for the most cohesive relationship and therefore the benefit of mentoring might not have been obtained fully.

### **Implications for Practice**

Due to new virtual teachers being held to high expectations, mentoring is an essential tool for success. A formal mentoring program will establish goals, outcomes, and place accountability in order for new virtual teachers to be successful (Leidenfrost et al, 2014). Mentoring should be accompanied by an effective induction program for the mentor and the new virtual teacher with clear expectations, timelines, and support for the new virtual teacher (Cookson, 2005). Pololi and Knight (2005) noted that new teachers with a support system providing resources is critical. Teachers who feel supported become more effective, and stay in the profession longer. Administrators must pay close attention to the teacher's specific needs and ensure a positive school climate and culture (Ingersoll, 2012).

## **Induction Programs**

The online schools in this study had a vision to strengthen and support teachers with the goals of maximizing student achievement and teacher retention. The online schools in the study agreed to adhere to creating a collaborative and supportive learning environment.

- School leaders articulated a shared vision for the school that encapsulated a safe, collaborative culture where everyone can support and learn from one another and works together for the advancement of students.
- Mentors were assigned to specific teachers in the school and will meet formally with them at least once a week, but will also have informal contact throughout the week to establish and build a positive relationship with the teacher.
- In order for a mentorship to be effective the mentor was partnered with school leaders. While the mentor provided feedback about resident teachers, their role was strictly that of mentor. The school leadership remained solely responsible for formal teacher evaluations.
- The school administrator supported the mentor through ongoing professional development and met with the mentor on an as needed basis.
- It was important that new virtual teachers actively engaged their assigned mentor, asked questions, posed solutions to challenges, discussed research, and generally participated in building a relationship with their mentor.

Ingersoll (2012) stated that the more comprehensive the induction program, the lower the attrition rate. The two key variables that contribute to a successful induction program are the new teacher having a mentor from the same subject area and the new teacher having a shared collaboration or planning time with teachers in the subject area (Ingersoll, 2012). Other factors that should be considered for a successful induction program are lower caseloads for new teachers, assistance from a classroom paraprofessional, participation in a seminar for new teachers, and a reduced teaching schedule, allowing for more planning time (Ingersoll, 2012).

### **Mentor Selection**

A fundamental component of a successful mentoring program is the quality of mentors selected (Davis, 2007). Mentors must possess the ability to be excellent practitioners, exhibit good interpersonal skills, be continuous learners, and embrace many perspectives. James Rowley spent many years researching the role of the mentor and qualities needed for a positive, effective mentoring program. Through his research, he determined there were six essential qualities that a good mentor should possess (Rowley, 1999). The mentor must be committed to the role of mentoring, capable of accepting the new teacher, skilled with instruction, understand that each mentee is unique, model continuous learning and personal growth, and communicate with hope and optimism. Mentors are more than simply “buddies” for the new teacher.

Administrative staff selected mentors by recruiting current teachers who had at least three years of virtual teaching experience, a minimum of a bachelor’s degree, and an active state teaching license. Along with these minimum requirements, the school

administration recruited mentors who had evidence of improving student achievement in the virtual classroom, were skilled in analyzing and using data for instructional decision-making, were knowledgeable and skilled to implement a standards-based education system, exhibited excellent communication skills, who were capable of empathizing, listening, and building relationships and trust, and who were highly skilled at facilitating teachers' reflection about their classroom practices.

### **Mentor Training**

Mentors are the foundation of high quality induction programs (Moir, 2007). The mentor should be a successful teacher with deep pedagogical knowledge, excellent communication skills, and a passion for not only teaching students, but for training the next generation of teachers (Moir, 2007). McMillian and Parker (2005) noted that mentors must be trained to foster appropriate attitudes and dispositions for the mentee. Key elements of training should include activities that simulate effective and appropriate interactions, communication skills and practice with various scenarios, listening skills that guide the mentor to interact in an understanding manner, training on constructive feedback, and demonstrations of positive attitudes and dispositions (Aspfors & Fransson, 2015).

The mentors at the online schools in this study completed training prior to the beginning of the school year focusing on the fundamental tools, processes, and principles of mentoring. The training was structured to allow the mentors to make progress towards developing skills and techniques enabling the mentor to effectively assist the new virtual teacher. Once school began, the mentors were provided monthly professional learning

communities (PLC). During the monthly PLC, the mentors gained insight regarding Jim Knight's Partnership Principles: equality, choice, voice, dialogue, reflection, praxis, and reciprocity. The mentors may have benefitted from more regular professional development such as an every other week session.

### **Structure of Mentoring Program**

Effective mentoring programs may have a positive, strong impact on the performance levels of new teachers (Rowley, 1999). Sweeny (2008) recommended the mentoring process include components of introduction, foundation, orientation, collaboration, problem solving, personal framework, professional framework, and professional development. Based on research gathered from teachers, Sweeny (2008) recommended the schedule for the mentoring as outlined in chapter 2.

New virtual teachers should be exposed to professional development opportunities, socialization, and provided time to acclimate into the new teacher environment (Schrodt, Cawyer, & Sanders, 2003). The process of preparing new virtual teachers for the online teaching environment must be supported by a mentor who spends time with the new virtual teacher in a beneficial way and includes a system that aids the administration in holding the mentor accountable for assistance or lack of assistance provided (Cookson, 2005).

The online schools in this study followed a recommended mentoring process determined by the educational management company. Prior to the start of school, the mentors attended a half day training focusing on research and best practice regarding coaching and communication with adults as well as content and reflections on partnership

communication Exploring the Partnership Principles. Optional monthly professional learning communities were available for the mentors. The mentor met weekly with the new virtual teachers. Monthly the mentor and new virtual teacher met as a school group to discuss overall new virtual teacher responsibilities.

### **Recommendations for Future Research**

For future research on the relationship between time spent in mentoring and the level of job satisfaction of a new virtual teacher, the following recommendations are suggested.

- Repeat this study collecting data throughout the first two-years of virtual teaching. Compare the level of job satisfaction over the school year as the new virtual teacher continues to receive support from the mentor determining if there is a direct relationship between the time spent in mentoring and the ongoing level of job satisfaction.
- Use different surveys that require the new virtual teacher to answer questions directly to the benefits he or she received from mentoring.
- Explore the level of job satisfaction for new virtual teachers who do not have a mentor compared to the level of job satisfaction for new virtual teachers with a mentor.
- The demographics of the new virtual teachers were not collected or used in this study. Completing a study using demographic information for new virtual

teachers to determine if the level of experience from previous teaching positions impact the level of job satisfaction for a new virtual teacher would be beneficial.

- Explore to determine if certain components of the mentoring process have a greater impact on the new virtual teacher's level of job satisfaction.
- Conduct a study exploring the influences of teacher satisfaction and how they may contribute to reduced attrition of new virtual teachers.

### **Conclusion**

This quantitative study explored the relationship between the time spent in mentoring and the level of job satisfaction of a new virtual teacher. The theoretical framework proposed that adult learning theory requires the learner to complete tasks and think about the tasks they are completing. Throughout the mentoring process, the new virtual teacher had to complete daily and weekly tasks tied to the role and responsibilities of a virtual teacher. The mentoring process implemented an instructional model to be carried out between the mentor and new virtual teacher. The review of literature provided evidence that mentoring along with a quality induction program produced higher job satisfaction, positive outlooks, lower teacher attrition rates, and an overall increase in the quality of the school environment (Schrodt et al., 2003).

Through analysis of the research data, a weak relationship between the hours spent in mentoring and the level of new virtual teacher job satisfaction was established. Although the correlation between the hours spent in mentoring and the level of new virtual teacher job satisfaction was weak, the new virtual teachers (61%) rated his or her level of job satisfaction with a six or seven on the seven-point Likert scale.

The online schools in this study consisted of first year online schools to well established online schools. The veteran teachers at the online schools who were selected to be mentors had a variety of levels of experience in virtual learning and brick and mortar educational environments. Although the study did not capture demographics of the mentors or of the new virtual teachers, it should be noted that these variances may contribute to the new virtual teachers' level of job satisfaction.

All of the schools in this study implemented mentoring, instructional coaching, rigorous instructional schedules, and a new family support model for the 2015-2016 school year. It was important to note the variances at the online schools to assist in the understanding of the factors that could have contributed to the new virtual teachers' level of job satisfaction. These variances could help account for the fact that the data did not provide compelling evidence that the time spent in the mentoring program did not lead to increased new virtual teachers' level of job satisfaction.

Mentoring can play a critical role in preparing new virtual teachers for the virtual classroom. To be effective, mentoring programs must be developed taking into account the complexity of the virtual teaching environment, the needs of the new virtual teachers, and the continuous support for the mentor. Mentoring provides new virtual teachers with the support structure to help ensure they are successful in the virtual teaching environment and remain in the profession. It is essential that school districts provide a support structure for the new virtual teacher and the mentors.

## References

- Alliance for Excellent Education. (2005). Teacher attrition: A costly loss to the nation and states. Retrieved from <http://nctaf.org/wp-content/uploads/TeacherAttrition.pdf>
- Alliance for Excellent Education. (2008). What keeps good teachers in the classroom? Understanding and reducing teacher reduction. Retrieved from <http://all4ed.org/wp-content/uploads/TeachTurn.pdf>
- Ambrosetti, A. & Dekkers, J. (2010). The interconnectedness of the roles of mentors and mentees in pre-service teacher education mentoring relationships. *Australian Journal of Teacher Education*, 35(6). <http://dx.doi.org/10.14221/ajte.2010v35n6.3>
- Armstrong, A. (2012). Build higher levels of job satisfaction. *The Leading Teacher*, 7(6), 3-5. Retrieved from [http://learningforward.org/docs/leading-teacher/may12\\_lead.pdf?sfvrsn=2](http://learningforward.org/docs/leading-teacher/may12_lead.pdf?sfvrsn=2)
- Aspfors, J. & Fransson, G. (2015). Research on mentor education for mentors of newly qualified teachers: A qualitative meta-synthesis. *Teaching and Teacher Education*, 48, 75-86. Retrieved from [http://ac.els-cdn.com/S0742051X1500030X/1-s2.0-S0742051X1500030X-main.pdf?\\_tid=cd5524da-55a1-11e5-893f-00000aacb361&acdnat=1441659092\\_679ab707ff009439ecc507410b52f083](http://ac.els-cdn.com/S0742051X1500030X/1-s2.0-S0742051X1500030X-main.pdf?_tid=cd5524da-55a1-11e5-893f-00000aacb361&acdnat=1441659092_679ab707ff009439ecc507410b52f083)

- Avolio, B., & Kahai, S. (2003). Placing the “E” in e-leadership: Minor tweak or fundamental change. In S. Murphy & R. Riggio (Eds.), *The future of leadership development* (49-70). Mahwah, NJ: Lawrence Erlbaum.
- Bain, K. (2004). *What the best college teachers do*. Cambridge: Harvard University Press.
- Barbour, M. K., & Mulcahy, D. (2004). The role of mediating teachers in Newfoundland’s new model of distance education. *The Morning Watch*, 32(1). Retrieved from <http://www.mun.ca/educ/faculty/mwatch/fall4/barbourmulcahy.htm>
- Barbour, M. K., & Mulcahy, D. (2009). Beyond volunteerism and good will: Examining the commitment of schoolbased teachers to distance education. Proceedings of the Annual Conference of the Society for Information Technology and Teacher Education (779-784). Norfolk, VA: AACE.
- Bates, T. (2008). What is distance education? Online learning and distance education resources. Retrieved from <http://www.tonybates.ca/2008/07/07/what-is-distance-education/>
- Berge, Z., & Clark, T. (2005). *Virtual schools: Planning for success*. New York: Teachers College Press.
- Berry, B. (2004). Recruiting and retaining “highly qualified teachers” for hard-to-staff schools. *National Association of Secondary School Principals Bulletin* 88(638), 5-27.

- Billingsley, B., Israel, M., & Smith, S. (2011). Supporting new special education teachers. *Teaching Exceptional Children, 43*, 20-29. Retrieved from [https://kuscholarworks.ku.edu/bitstream/handle/1808/11038/Smith\\_supporting%20new%20special.pdf?sequence=1](https://kuscholarworks.ku.edu/bitstream/handle/1808/11038/Smith_supporting%20new%20special.pdf?sequence=1)
- Bolliger, D. U., & Wasilik, O. (2009). Factors influencing faculty satisfaction with online teaching and learning in higher education. *Distance Education, 30*(1), 103-116. doi:10.1080/01587910902845949
- Bonwell, C. & Eison, J. (1991). Active learning: Creating excitement in the classroom. ASHE-ERIC Higher Education Report No.1. Washington, D.C.: The George Washington University, School of Education and Human Development.
- Borg, W. R., & Gall, M. D. (1989). Educational research: An introduction (5th ed.). New York: Longman.
- Boyer, L. & Lee, C. (2001). Converting challenge to success: Supporting a new teacher of students with autism. *The Journal of Special Education, 35*(2), 75-83. doi: 10.1177/002246690103500202
- Brennan, R. (2003). *One size doesn't fit all: Pedagogy in the online environment*. Kensington Park, Australia: National Centre for Vocation Education Research, Australian National Training Authority.
- Brock, B. (1999). The principals' role in mentor programs. *Mid-Western Educational Researcher, 12*(4), 18-21.
- Byington, T. (2010). Keys to successful mentoring relationships. *Journal of Extension, 48*(6). Retrieved from <http://www.joe.org/joe/2010december/tt8.php>

- Cambridge Dictionaries Online. (2014). The most popular online dictionary and thesaurus for English. Retrieved from <http://dictionary.cambridge.org/us/dictionary/business-english/e-mentoring>.
- Carroll, T. G. (2007). Policy brief: The high cost of teacher turnover. National Commission on Teaching and America's Future. Retrieved from [http://www.nctaf.org/resources/research\\_and\\_reports/nctaf\\_research\\_reports/](http://www.nctaf.org/resources/research_and_reports/nctaf_research_reports/)
- Carver, C. L. & Feiman-Nemser, S. (2008). Using policy to improve teacher induction: Critical elements and missing pieces. *Educational Policy*, 23(2), 295-328.  
doi:10.1177/0895904807310036
- Cavanaugh, J. (2005). Teaching online – A time comparison. *Online Journal of Distance Learning Administration*, 8(1). Retrieved from <http://www.westga.edu/~distance/ojdla/spring81/cavanaugh81.htm>
- Cookson, P. (2005). A community of teachers: Teachers who work together can create schools where learning is a joy for students. *K-8 Teaching*, Spring, 12, 14.
- Creswell, J. W. (2005). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research* (2nd ed.). Upper Saddle River, NJ: Pearson.
- Davis, B. (2007). A menu for mentor growth. *Reflections*, New Teacher Center, Santa Cruz, California: 9(1): 2-3, 19. Retrieved from <http://www.newteachercenter.org/sites/default/files/ntc/main/resources/Reflections%20Winter07.pdf>
- Davis, N., Roblyer, M., Charania, A., Ferdig, R., Harms, C., Compton, L., & Cho, M. (2007). Illustrating the “virtual” in virtual schooling: Challenges and strategies for

creating real tools to prepare virtual teachers. *Internet and Higher Education*, 10 (1): 27-39. doi:10.1016/j.iheduc.2006.11.001

Delgado, M. (1999). Lifesaving 101: How a veteran teacher can help a beginner. *Educational Leadership*, 56(8), 27-29.

Diekelmann, N., Schuster, R., & Nosek, C. (1998). Creating new pedagogies at the millennium: The common experiences of University of Wisconsin-Madison teachers using distance education technologies. *Distance Education Systemwide Interactive Electronic newsletter*, 5(7).

Dreon, O. (2014, July 7). Online instructors: Be VOCAL! [Web log post]. Retrieved from <https://the8blog.wordpress.com/2014/10/07/online-instructors-be-vocal/>

Edwards-Groves, C. (2014). Learning teaching practices: The role of critical mentoring conversations in teacher education. *Journal of Education and Training Studies*, 2(2). doi:10.11114/jets.v2i2.343

Ensher, E. & Murphy, S. (2005). *Power mentoring: How mentors and protégés get the most out of their relationships*. San Francisco: Jossey-Bass.

Family Educational Rights and Privacy Act. (2014). Retrieved June 16, 2014, from <http://www2.ed.gov/policy/gen/guid/fpco/ferpa/index.html>.

Fast Facts about Online Learning. (2013). Retrieved September 1, 2015 from <http://www.inacol.org/wp-content/uploads/2015/02/fun-facts-about-online-learning.pdf>

- Gold, Y. (1996). Beginning teacher support: Attrition, mentoring, and induction. In J. Sikula, T. Buttery, & E. Guyton (Eds.), *Handbook of research on teacher education* (2nd ed.) (pp.548-594). New York: MacMillan.
- Griffin, C. C. (2010). A summary of research for educational leaders on the induction of beginning special educators. *Journal of Special Education Leadership*, 14-20.  
Retrieved from  
[http://www.casecec.org/documents/JSEL/JSEL\\_23.1\\_Mar2010.pdf](http://www.casecec.org/documents/JSEL/JSEL_23.1_Mar2010.pdf)
- Guyton, E., & Hidalgo, F. (1995). Characteristics, responsibilities, and qualities of urban school mentors. *Education and Urban Society*, 28(1), 40-47.
- Ham, V. & Davey, R. (2005). Our first time: Two higher education tutors reflect on becoming a “virtual teacher.” *Innovations in Education and Teaching International*, 42(3), 257-264. doi:10.1080/01587910500168017
- Hanline, M. F., Hatoum, R. J., & Riggie, J. (2012). Impact of online coursework for teachers of students with severe disabilities: Utilization of knowledge and its relationship to teacher perception of competence. *Research and Practice for Persons with Severe Disabilities*, 37, 247-262. Retrieved from  
<http://tash.org/about/publications/>
- Hoerr, T. (2011). Pretend you're new again. *Educational Leadership*, 69(2), 88-89.
- Hudson, P. (2004). Specific mentoring: A theory and model for developing primary science teaching practices. *European Journal of Teacher Education*, 27(2), 139-146. doi: 10.1080/0261976042000223015

- Huling-Austin, L. & Murphy, S.C. (1987). Assessing the impact of teacher induction programs: Implications for program development. Paper presented at the Annual Meeting of the American Educational Research Association. Washington, DC.
- Huling-Austin, L., Odell, S.J., Ishler, P., Kay, R.P., & Edelfelt, R.A. (1989). *Assisting the beginning teacher*. Reston, VA: Association of Teacher Educators.
- Ianchu-Haddad, D. & Oplatka, I. (2009). Mentoring novice teachers: Motives, process, and outcomes from the mentor's point of view. *The New Educator*, 5:45-65. New York: The City College of New York. doi: 10.1080/1547688X.2009.10399563
- Inger, M. (1993). Teacher collaboration in secondary schools. *CenterFocus*, 2. Retrieved from <http://ncrve.berkeley.edu/centerfocus/cf2.html>
- Ingersoll, R. (2002). The teacher shortage: A case of wrong diagnosis and wrong prescription. *National Association of Secondary School Principals Bulletin*, 86(631), 16-31.
- Ingersoll, R. (2012) Beginning teacher induction: What the data tell us. *Phi Delta Kappan*, 93(8), 47-51. <http://www.kappanmagazine.org/content/93/8/47>
- Ingersoll, R. & Smith, T. (2003). The wrong solution to the teacher shortage. *Educational Leadership*, 60(8), 30-33.
- Ingersoll, R. & Smith, T. (2004). Do teacher induction and mentoring matter? *National Association of Secondary School Principals Bulletin* 88, 28-40.
- Ingersoll, R. & Strong, M. (2011). The impact of induction and mentoring programs for beginning teachers: A critical review of the research. *Review of Educational*

- Research*, 81(2), 201-233. Retrieved from  
[http://repository.upenn.edu/cgi/viewcontent.cgi?article=1127&context=gse\\_pubs](http://repository.upenn.edu/cgi/viewcontent.cgi?article=1127&context=gse_pubs)
- Jaffee, D. (1997). Asynchronous learning: Technology and pedagogical strategy in a distance learning course. *Teaching Sociology*, 25(4), 262-277.
- Jaffe, R., Moir, E., Swanson, E., & Wheeler, G. (2006). Online mentoring and professional development for new science teachers. In C. Dede (Ed.). *Online teacher professional development: Emerging models and methods* (pp. 89-116). Cambridge: Harvard Education Publishing Group.
- Kearsley, G. (2010). Andragogy (M.Knowles). The theory into practice database. Retrieved from <http://tip.psychology.org>
- Kennedy, K. & Archambault, L. (2012). Offering preservice teachers field experiences in K-12 online learning: A national survey of teacher education programs. *Journal of Teacher Education*, 63(3), 185-200. doi:10.1177/0022487111433651
- Kennedy, K. & Cavanaugh, C. (2010). Development and support of online teachers: The role of mentors in virtual schools. *Journal of Technology Integration in the Classroom*, 2, 37-42.
- Knowles, M. S., Holton, E. F., & Swanson, R. A. (2011). *The adult learner: The definitive classic in adult education and human resource development*. Boston: Elsevier.
- Kram, K.E. (1985). *Mentoring at work: Developmental relationships in organizational life*. Glenview, Illinois: Scott, Foresman.

- Lai, E. (2005). Mentoring for in-service teachers in a distance teacher education programme: views of mentors, mentees and university teachers. Paper presented at the Australian Association for Research in Education International Education Research Conference, Parramatta. Retrieved from <http://www.aare.edu.au/data/publications/2005/lai05100.pdf>
- Lari, P. (2008). *Understanding teaching experiences; Faculty transitions from traditional to online classrooms*. Retrieved from <http://repository.lib.ncsu.edu/ir/bitstream/1840.16/5818/1/etd.pdf>
- Lataille, L. (2005). Thoughts on teacher mentoring. *New England Mathematics Journal*, 37(2) 61-63.
- Leidenfrost, B., Strassnig, B., Schutz, M., Schabmann, A., & Carbon, C. C. (2014). The impact of peer mentoring on mentee academic performance: Is any mentoring style better than no mentoring at all? *International Journal of Teaching and Learning in Higher Education*, 26(1), 102-111. Retrieved from <http://www.isetl.org/ijtlhe>
- Love, K. (2009). Literacy pedagogical content knowledge in secondary teacher education: Reflecting on oral language and learning across the disciplines. *Language and Education*, 23(6), 41–60. doi: 10.1080/09500780902822942
- Lowenthal, P. & Thomas, D. (2010). Death to the digital dropbox: Rethinking student privacy and public performance. *Educause Review*. Retrieved from <http://er.educause.edu/articles/2010/9/death-to-the-digital-dropbox-rethinking-student-privacy-and-public-performance>

- McCarthy, P., Brennan, L., & Vecchiarello, K. (2011). Parent-school communication in the inclusive classroom: A comprehensive model of collaboration in education. *International Journal of Humanities and Social Science*, 1(15), 55-60. Retrieved from [http://www.ijhssnet.com/journals/Vol\\_1\\_No\\_15\\_Special\\_Issue\\_October\\_2011/7.pdf](http://www.ijhssnet.com/journals/Vol_1_No_15_Special_Issue_October_2011/7.pdf)
- McLinden, M., McCall, S., & Hinton, D. Developing online problem-based resources for the professional development of teachers of children with visual impairment. *Open Learning*, 21, 237-251. Retrieved from <http://taylorandfrancis.metapress.com/link.asp?target=contribution&id=G341275485U2W171>
- MetLife Foundation. (2012). The MetLife Survey of the American Teacher: Teachers, parents, and the economy. MetLife, Inc. Retrieved from <http://files.eric.ed.gov/fulltext/ED530021.pdf>
- Meyen, E., Aust, R., Guach, J., & Hinton, H. (2002). E-Learning: A programmatic research construct for the future. *Journal of Special Education Technology*, 17(3), 37-46. Retrieved from <http://citeseerx.ist.psu.edu/viewdoc/summary?doi=10.1.1.99.6062>
- Mittler, P. (1992) Preparing all initial teacher students to teach children with special educational needs: A case study from England. *European Journal of Special Needs Education*, 1, 1-7. doi: 10.1080/0885625920070101

- Moir, E. (2007). Transforming induction through mentor development. *Reflections*, 9(1), 1, 18. Retrieved from <http://www.newteachercenter.org/sites/default/files/ntc/main/resources/Reflections%20Winter07.pdf>
- Molnar, A. (2013). Virtual Schools in the U.S. 2013: Politics, performance, policy, and research evidence. Retrieved June 17, 2014, from <http://nepc.colorado.edu/files/nepc-virtual-2013.pdf>.
- Mullen, C. (2005). *Mentorship*. New York: Peter Lang.
- National Commission on Teaching and America's Future. (1997). *Doing what matters most: Investing in quality teaching*. New York: National Commission on Teaching and America's Future. Retrieved from <http://nctaf.org/wp-content/uploads/DoingWhatMattersMost.pdf>
- National Commission on Teaching and America's Future. (2007). *Policy brief: The high cost of teacher turnover*. Washington: National Commission on Teaching and America's Future. Retrieved from <http://nctaf.org/wp-content/uploads/2012/01/NCTAF-Cost-of-Teacher-Turnover-2007-policy-brief.pdf>
- National Education Association. (2003). Guide to teaching online courses. Retrieved from <http://www.nea.org/assets/docs/onlineteachguide.pdf>
- National Education Association. (2013). NEA president says MetLife survey of the American teacher results should be a wake-up call: Educator dissatisfaction at an all-time high. Retrieved from <http://www.nea.org/home/54576.htm>

- O'Brien, J. (2015). Mentoring: The foundation for sustainable online instruction. *Virtual School Leadership Alliance*. Retrieved from <http://www.virtualschoolalliance.org/mentoring-the-foundation-for-sustainable-online-instruction/>
- Online learning definitions project, The. (2011). Retrieved from <http://www.inacol.org/resource/the-online-learning-definitions-project/>
- Palloff, R.M., & Pratt, K. (2000). Making the transition: Helping teachers to teach online. Paper presented at EDUCAUSE. Nashville, TN.
- Palloff, R.M., & Pratt, K. (2001). *Lesson from the cyberspace classroom: The realities of online teaching*. San Francisco: Jossey-Bass, Inc.
- Pan, M. L., & Lopez, M. (2004). *Preparing literature reviews: qualitative and quantitative approaches*. Glendale: Pyczak Publishing.
- Pappas, C. (2013). The adult learning theory – Andragogy – of Malcolm Knowles. *eLearning Industry*. Retrieved from <http://elearningindustry.com/the-adult-learning-theory-andragogy-of-malcolm-knowles>.
- Paris, L. (2013). Reciprocal mentoring: Can it help prevent attrition for beginning teachers? *Australian Journal of Teacher Education*, 38(6), 136-158). Retrieved from <http://ro.ecu.edu.au/cgi/viewcontent.cgi?article=1958&context=ajte>
- Petersen, L. (2007). What is the meaning and purpose of mentoring? *The Mentoring Leadership and Resource Network*. Retrieved June 5, 2014, from <http://mentors.net/library/purposeofmentoring.php>.

- Robertson, C. (1999) Initial teacher education and inclusive schooling. *Support for Learning, 14*, 20-29. doi: 10.1111/1467-9604.00125
- Rothwell, W., Jackson, R., Knight, S., & Lindholm, J. (2005). *Career planning and succession management: Developing your organization's talent – for today and tomorrow*. Westport, CT: Prager.
- Rowley, J. (1999). The good mentor. *Educational Leadership, 56*(8), 20-22. Retrieved from <http://www.ascd.org/publications/educational-leadership/may99/vol56/num08/The-Good-Mentor.aspx>
- Savery, J. R. (2005). BE VOCAL: Characteristics of successful online instructors. *Journal of Interactive Online Learning, 4*(2), 141-152. Retrieved from <http://www.ncolr.org/jiol/issues/pdf/4.2.6.pdf>
- Scandura, T. (1998). Dysfunctional mentoring relationships and outcomes. *Journal of Management, 24*, 449-467. doi: 10.1177/014920639802400307
- Scherer, M. (1999). A better beginning: Supporting and mentoring new teachers. Alexandria, VA. Association for Supervision and Curriculum Development.
- Schindelka, B. (2012, October 11). Be vocal: Characteristics of successful online instructors- An article review. [Web log post]. Retrieved from <http://words.usask.ca/gmcte/2012/10/11/be-vocal-characteristics-of-successful-online-instructors-an-article-review/>
- Schrodt, P., Cawyer, C., & Sanders, R. (2003). An examination of academic mentoring behaviors and new faculty members' satisfaction with socialization and tenure and promotion processes. *Communication Education, 52*(1), 17-29.

- Shrestha, C., May, S., Edirisingha, P., Burke, L., & Linsey, T. (2009). From face-to-face to e-mentoring: Does the “e” add any value for mentors? *International Journal of Teaching and Learning in Higher Education* 20(2). Retrieved from <http://www.isetl.org/ijtlhe/>
- Shriner, B. (2015). 7 Characteristics of effective online teachers. *Adjunct World*. Retrieved from <https://www.adjunctworld.com/blog/7-characteristics-of-effective-online-teachers/>
- Single, P., & Single, R. (2005). E-mentoring for social equity: A review of research to inform program development. *Mentoring and Tutoring*, 13(2). doi: 10.1080/13611260500107481
- Smith, M. K. (2002) ‘Malcolm Knowles, informal adult education, self-direction and andragogy’, *the encyclopedia of informal education*, [www.infed.org/thinkers/et-knowl.htm](http://www.infed.org/thinkers/et-knowl.htm).
- Smith, S., & Israel, M. (2003). E-Mentoring: Enhancing special education teacher induction. *Journal of Special Education Leadership*, 23, 30-40. Retrieved from [http://ncipp.education.ufl.edu/files\\_29/SmithIsraelEmentoringJSpeEducLeadership.pdf](http://ncipp.education.ufl.edu/files_29/SmithIsraelEmentoringJSpeEducLeadership.pdf)
- Sweeny, B. (2008). *Leading the teacher induction and mentoring program*. Thousand Oaks, CA: Corwin Press.
- Tauer, S. M. (1998). The mentor-protégé relationship and its impact on the experienced teacher. *Teaching and Teacher Education*, 14(2), 205-218.

- Timperley, H. (2001). Mentoring conversations designed to promote student teacher learning. *Asia-Pacific Journal of Teacher Education*, 29(2), 111-123. doi: 10.1080/13598660120061309
- Treacy, B. (2007). "What's different about teaching online? How are virtual teachers changing teaching?" Reprinted from *Kentucky Virtual High School Newsletter*, October. Retrieved from [www.edtechleaders.org/documents/teachingonline.doc](http://www.edtechleaders.org/documents/teachingonline.doc).
- U.S. Department of Education. (2006). Partnerships for reform: Changing teacher preparation through the title I HEA partnership program. Washington, DC: U.S. Government Printing Office. Retrieved from <http://www2.ed.gov/rschstat/eval/teaching/title2hea/changing-teacher-prep-final.pdf>
- Vaill, A. & Testori, P. (2012). Orientation, mentoring and ongoing support: A three-tiered approach to online faculty development. *Journal of Asynchronous Learning Networks*, 16(2), 111-119. Retrieved from <http://files.eric.ed.gov/fulltext/EJ971048.pdf>
- Vierstraete, S. (2005). Mentorship: Toward success in teacher induction and retention. *Catholic Education: A Journal of Inquiry and Practice*, 8(3), 381-392. Retrieved from <http://digitalcommons.lmu.edu/cgi/viewcontent.cgi?article=1292&context=ce>
- Villani, S. (2002). *Mentoring programs for new teachers: Models of induction and support*. Thousand Oaks, CA: Corwin Press.

- Vonk, J. (1993). *Mentoring beginning teachers: Development of a knowledge base for mentors*. Paper presented at the annual meeting of the American Educational Research Association, Atlanta, GA.
- Wang, J., & Odell, S. (2002). Mentored learning to teach according to standards-based reform: A critical review. *Review of Educational Research*, 72(3), 481-546.  
doi:10.3102/00346543072003481
- Ward, S. (2015). Crisis in American education as teacher morale hits an all-time low. *The Conversation*. Retrieved from <http://theconversation.com/crisis-in-american-education-as-teacher-morale-hits-an-all-time-low-39226>
- West, R.E., Waddoups, G., & Graham, C.R. (2007). Understanding the experiences of instructors as they adopt a course management system. *Educational Technology, Research, and Development*, 55(1), 1-26. doi:10.1007/s11423-006-9018-1
- Whitesel, C. "Reframing our classrooms, reframing ourselves: Perspectives from a virtual paladin." *The Technology Source: Vision*, April 1998.
- Williams, E., Scandura, T., & Hamilton, B. (2001). Dysfunctional mentoring relationships and negative social exchange: Uncovering some unpleasant realities in mentoring relationships. *Southern Management Association Proceedings* (pp.62-66). New Orleans: Southern Management Association Meeting.
- Womack-Wynne, C., Dees, E., Leech, D., LaPlant, J., Brockmeier, L., & Gibson, N. (2011). Teacher's perceptions of the first-year experience and mentoring. *International Journal of Educational Leadership Preparation*, 6(4). Retrieved from <http://files.eric.ed.gov/fulltext/EJ974328.pdf>

- Workman, M., Kahnweiler, W., & Bommer, W. (2003). The effects of cognitive style and media richness on commitment to telework and virtual teams. *Journal of Vocational Behavior*, 63, 199-219.
- Wortmann, K., Cavanaugh, C., Kennedy, K., Beldarrain, Y., Letourneau, T., & Zygouris-Coe, V. (2008). Online teacher support programs: Mentoring and coaching models. *North American Council for Online Learning*. Vienna, VA. Retrieved from [http://www.inacol.org/wp-content/uploads/2015/02/NACOL\\_OnlineTeacherSupportPrograms\\_2008.pdf](http://www.inacol.org/wp-content/uploads/2015/02/NACOL_OnlineTeacherSupportPrograms_2008.pdf)

## Appendices

Appendix A: Mentor Record

**Appendix A: Mentor Record**

1. Week Start Date: \_\_\_\_\_
2. School: \_\_\_\_\_
3. Mentor's First Name: \_\_\_\_\_
4. Approximate Amount of Time Spent with Teachers (in hours): \_\_\_\_\_

Appendix B: Teacher Mentor Teacher Satisfaction Survey

### Appendix B: Teacher Mentor Teacher Satisfaction Survey

1. Date: \_\_\_\_\_
2. School: \_\_\_\_\_
3. Teacher's email address: \_\_\_\_\_
4. Teacher's email address: \_\_\_\_\_
5. Mentor's First Name: \_\_\_\_\_
6. Mentor's Last Name: \_\_\_\_\_
7. Rate your Mentor below (this information is confidential)

	Disagree 1	2	3	4	5	6	Agree 7
The Mentor is unbiased in their approach and work with their teachers.							
The Mentor has conversations with their teachers on a consistent basis.							
The Mentor is an effective relationship builder with their teachers.							
The Mentor positively motivates to impact teacher performance.							
The Mentor transmits knowledge and resources to maximize student engagement.							
The Mentor has a thorough understanding of the school academic plan (specific assessment methods; standards, state as well, observation system, evaluations).							
The Mentor is well versed in all learning platforms.							
The Mentor is seen and acts as a partner and peer to the teacher.							

8. Comments:

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## Appendix C: Teacher Pulse Check

### Appendix C: Teacher Pulse Check

Teacher Email address: \_\_\_\_\_

	Not at all Satisfied 1	2	3	4	5	6	Very Satisfied 7
Reflecting on your experience with this year, how satisfied are you with teaching at this school?							
	Strongly Disagree 1	2	3	4	5	6	Strongly Agree 7
I have been provided the training necessary to perform my job effectively.							
I have the materials and equipment I need to do my job right.							
I know what is expected of me this year as a teacher.							
I have confidence in the decisions made by the senior leadership at my school.							
I am proud to work for my organization.							
	Very Low 1	2	3	4	5	6	Very High 7
How would you rate the teacher morale this year at your school?							
	Very Unprepared 1	2	3	4	5	6	Very Prepared 7
How well prepared for school do you feel your students and their learning coaches are at this point?							

On average, how much time are you spending on a daily basis onboarding students?

- 0 – ½ hour per day
- ½ hour – 1 hour per day
- 1-2 hours per day
- 2-3 hours per day
- 3-4 hours per day
- 4-5 hours per day
- 5+ hours per day

How much time are you spending to support your students and their learning coaches with non-academic issues?

*Examples of non-academic activities include: assistance with transitioning to online learning; development of time management and organizational skills; help with social and emotional issues; connecting families to external resources or time spent following up on disengagement or missing requirements?*

- 0 – ½ hour per day
- ½ hour – 1 hour per day
- 1-2 hours per day
- 2-3 hours per day
- 3-4 hours per day
- 4-5 hours per day
- 5+ hours per day

Feel free to share any additional details regarding your experiences thus far.

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