WHAT CAMPUS PRINCIPALS NEED TO KNOW: THE SIGNIFICANCE OF ON-LINE MENTORING ON ALTERNATIVE CERTIFICATION INTERNS IN TEXAS

A Doctoral Thesis Presented to the
Faculty of the College of Education
University of Houston

In Partial Fulfillment
of the Requirements for the Degree

Doctor of Education
in Professional Leadership

by

Zenaida Kalie

May, 2012

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ABSTRACT

All new Texas first year teachers enter the classroom with the hope of receiving an attentive campus mentor. However, there is no guarantee that these new teachers may have such a mentor assigned to them. A variety of obstacles can prevent an effective mentoring relationship. In an effort to fill in these gaps and provide new teachers the opportunity to interact with a dedicated mentor and to communicate with other Texas new teachers in the same alternative teacher certification program, an on-line mentoring program was created. The on-line mentoring program provides study modules on the topics of the lesson cycle, lesson planning, and classroom management in addition to the opportunity for mentors and interns to communicate on-line.

This study is designed to examine the impact that the on-line mentoring program may have on new teacher perception of support in three domains of the EC-12 PPR TExES exam, the significant difference that the on-line mentoring program may have on the test scores of the new teachers, and to examine what themes are involved in the questions and topics of discussion that first year teachers have with their mentor and/or fellow first year teachers on-line.

A mixed methods approach was used to analyze EC-12 PPR TExES scores on domains 1-3 from interns (N=62) who participated in on-line mentoring and from interns who did not participate in on-line mentoring, survey responses from interns who

participated in on-line mentoring, and text analysis for themes in postings made by interns in the on-line mentoring course.

The findings of this study have implications for campus principals, mentors, and administrators of teacher preparation programs. Challenges expressed by interns and the methods interns found successful and took it upon themselves to share with others are discussed. Survey data shows in what areas and which type of mentor interns felt impacted their teaching effectiveness. Although overall mean scores on the EC-12 PPR TExES in domains 1-3 of those that participated in on-line mentoring were greater than those who did not participate in on-line mentoring, t-tests showed that there was no significant difference between these test scores.

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Statement of the Problem

In an attempt to provide schools with teachers needed to teach high demand content areas and provide opportunities for individuals who have work experience in the content areas but did not graduate with a degree in teaching, teacher alternative certification programs were created in states across America (U.S. Department of Education, 2009). Results from a 2005 nationwide survey of alternative certified teachers, 54% who had a professional occupation prior to becoming a teacher stated that if alternative certification programs did not exist, they would not have become teachers (Feistritzer, 2005). A shortage of male and minority teachers also exists (Learning Point Associates, 2007). Urban or rural school districts that have difficulty in recruiting teachers from traditional certification programs, look to alternative certification programs for potential staff (Bureau of Labor Statistics, 2010). Through alternative certification programs in The United States, more racial minority, more male, and more educated teachers are in classrooms (National Center for Education Information, 2011). As of 2010 all states and the District of Columbia have an alternative route to education program (Bureau of Labor Statistics, 2010).

Texas is also experiencing a shortage of qualified teachers (Texas State Board of Education, 2010). The need for teachers in Texas public school districts, Texas Education Agency Accredited private schools, and charter schools is not being met by the number of certified Texas teachers that are produced by university teacher certification programs,

whether they are baccalaureate or post baccalaureate programs. These programs are considered the traditional route to teacher certification in Texas. The Texas Workforce Commission (2010) predicts a growth rate of 35.9% of public school teachers from 2008-2018. The Department of Education (2010) reports that teacher shortages are in the areas of bilingual education, mathematics, science, Spanish, special education, and technology applications.

In an effort to respond to a projected teacher shortage, the State of Texas approved the first alternative certification program in 1985 (National Center for Education Information, 2011). These programs must meet Texas State Board of Education requirements and receive accreditation by the Texas Education Agency. After successful completion of the teacher alternative certification program and passing of at least two Texas Examinations of Educator Standards, the alternative certification program recommends to the Texas State Board of Education that the candidate receive a standard teaching certificate. This certificate allows the candidate to teach the specified content area(s) to the specified grade levels in Texas (Texas State Board of Education, 2011).

Data from the State Board of Education (Texas State Board of Education, 2011) showed that consistently from the 2006-2011 school years, the greatest number of teachers who have received their initial certification have been from alternative certification programs (Table 1). Since alternatively certified teachers are increasing in number in public schools in Texas, the study of the best methods of support of these teachers is of great concern.

Table 1

Number of Texas Teachers Receiving Initial Certification by Preparation Program Type

Certification Program Type	8/1/06-7/31/07	8/1/07-7/31/2008	8/1/08-7/31/2009	8/1/2009-7/31/2010	8/1/2010-7/31/2011
Traditional Route	10,140	10,323	10,503	10,461	9,467
Post baccalaureate program	2,880	2,327	1,997	1,811	1,689
Alternative Certification Program	11,656	13,150	13,484	13,413	12,791

Need for Mentoring.

As with traditional university program routes to certification, alternative certification programs must meet the same requirements regarding curriculum norms, TExES preparation, and support of candidates, in accordance with Chapter 228 of the Texas Administrative Code (2010). The Texas Education Code requires that a campus based mentor is to be selected by a campus administrator and must undergo training provided by the alternative certification program or by the intern's school district, with proper documentation (Texas Administrative Code 228.35, 2010). The mentor is to support the beginning teacher in a recommended variety of ways and is to give reports on the progress of the beginning teacher to the educator certification program (Texas Administrative Code 228.2, 2010).

On-line Mentoring.

According to research by Maxwell et al. (2010) on-line mentoring can support for a large number of beginning teachers particularly when peer support has a formatted role. Moir (2009) explained that teachers can participate in discussions on-line with their peers and can also pose questions to their mentor, whose answer is visible to all beginning teachers in the course. Many on-line learning management systems also have a feature to submit private messages to the mentor on-line. Moir (2009) also maintained that the mentor relationship can be extended through on-line support and face to face meetings are supplemented by such support. Christopher et al. (as cited in Maxwell et al., 2010) reported that support to beginning teachers can be given by employers or professional associations through the creation of on-line support environments, especially if the environment provides support that the new teacher is not able to access in the school.

Significance of the Study

According to Morgan and Kritsonis (2008), "Hard-to-staff campuses must invest in a full-time teacher mentor as well as retired teachers to provide intense mentorship and relevant professional training" (p.1). As school districts, campuses and educator preparation programs strive to provide new teachers with the support to make them successful, barriers to this support may exist which include lack of time, inconvenience due to scheduling, mismatching of mentors in regard to grade level or subject taught, and inactive mentors. Anthony et al. (2011) argued that researchers should not only examine the effectiveness of information and technology (IT) but also document how technology is being used in particular manners. Furthermore, since alternative certification's

definition and types of programs differ, context specific research is necessary in order for decisions as to how to use technology to support teacher training can be made by the directors of the various alternative certification programs. In an effort to overcome these barriers and provide new teachers with the mentoring they need, on-line delivery of mentoring to new teachers in a learning and discussion forum by retired school administrators will be examined as a possible solution.

Purpose of Study

The purpose of this study is to investigate the impact that on-line mentoring by a retired school administrator and communication with other first year teachers has on interns in a Texas educator alternative certification program who also have a principal appointed, on-campus certified teacher mentor The results of the interns' perception of effectiveness of on-line mentoring is of concern as it may be an effective replacement of an absence of effective on-campus mentoring.

One of the requirements that all teacher candidates seeking teacher certification in Texas must meet is a passing score on the Pedagogy and Professional Development (PPR) TExES. An exploration of the significance that on-line mentoring may have on performance of interns who participated in on-line delivery of mentoring to new teachers in a learning and discussion forum by retired school administrators in addition to on-campus mentoring, on domains 1-3 of the PPR TExES, will be conducted. Domains 1-3 of the PPR TExES test knowledge and critical thinking skills of new teachers in the areas of classroom management, lesson planning and the lesson cycle (Texas Education Agency, 2010b). Domain 1 of the PPR tests designing instruction and assessment to

promote student learning. Domain 2 tests creating a positive, productive classroom environment. Domain 3 tests implementing effective, responsive instruction and assessment (Texas Education Agency, 2010a).

Theoretical Framework

Andragogy is used to describe a theory of teaching adults with the goal of being lifelong learners. According to Knowles (1973) the assumptions of andragogy are (a) a change in self concept moving from total dependency to increased self direction; (b) experience, due to maturation, increases the individual's basis to which he or she can relate new things that are learned and one becomes defined by his or her experience; in addition; learners are a rich resource for learning (c) adults' willingness and desire to learn increases because of what one must learn as they take on new roles such as employment, parenthood, leaders, etc; rather than because they are obligated academically to learn; (d) Adult orientation to learning is problem centered rather than subject centered as with pedagogy; (e) What is learned is assumed to be for immediate application; (f) adults are intrinsically and extrinsically motivated; (g) adults' willingness to learn increases if the adults understand why they need to know what they are to learn.

Knowles argues that the characteristics of an educational environment are (a) participation in making decisions; (b) freedom of expression and the availability of information; (c) respect for personality; (d) mutual responsibility in planning and carrying out activities and defining goals or competencies, and evaluation; (e) access to resources, both material and human experts, which are used proactively rather than

reactively. Knowles makes note of the use of standard print resources but also mentions multimedia available at the time of his publication in 1973, including closed circuit television, multimedia system consoles, equipment for telelectures, computer-assisted instruction and simulations and games.

The goal of andragogy is to create adults who are lifelong learners. Learners are aware of where they are now and what they want to be, so providing the learner with tools to assess themselves and procure data about one's development is essential to andragogy (Knowles, 1973).With andragogy, mentors become facilitators and serve the role of a resource to allow for the new teachers to conduct self directed inquiry throughout their lifetime. According to Mager (1992), "After preservice preparation, the experience of becoming a teacher continues into the inservice years of a teacher's career. A teacher continues to learn about teaching as the practice is carried out" (p. 4).

Research Questions

1) Is there a significant difference in scores on domains 1-3 in the EC-12 Pedagogy and Professional Responsibility Texas Examination of Educators of interns who received on-line mentors in addition to on-campus mentors, as compared to interns who received only on-campus mentors?
2) Is there a difference between the perception of mentoring effectiveness reported by interns between their on-campus mentors and their on-line mentors?
3) Is on-line mentoring perceived by interns to have a greater positive influence on their effectiveness as teachers than on-campus mentoring?
4) What are the most common themes for which interns ask assistance or discuss on-line with their fellow interns or on-line mentor?

Limitations of the Study

The limitations of the study are as follows**:**

- Data collected spanned only 1 year
- Limited number of respondents (62)
- Survey data was collected from self reports
- Voluntary Response bias due to the fact that survey completion was not mandatory
- There is a potential for bias in the interpretation of qualitative data since the researcher was formally an employee of the department of Region 4 Education Service Center that oversees the Beginning Teacher Seminar on-line program.

Assumptions

Several assumptions are made in this study. The on-campus mentors completed the entire training via cd, as their signature on a verification document states. It is assumed that the interns desired to share suggestions and experiences on the discussion board with their fellow first year teachers and on-line mentor. It is also assumed that the content of the on-line mentoring support was helpful to the interns and that the interns asked for assistance from the on-campus mentor or the on-line mentor each time that assistance was needed. Finally, it is assumed that interns and on-line mentors participated in the on-line mentoring support at times that were convenient.

Definition of Terms

The following key concepts will be used in this study:

1) Beginning Teacher Seminar On-line: Beginning Teacher Seminar On-line is a course which is property of Region 4 Service Center. Completion of this 8 week on-line course is a requirement of the Region 4 Teacher Certification Program. The modules in Beginning Teacher Seminar relate to three topics: the lesson cycle, lesson planning, and classroom management. Each of these topics is included in domains 1-3 of the EC-12 PPR TExES.
2) Cyber Site Coordinator: A certified Texas school administrator who works on a contract basis for the Region 4 Service Center's Teacher Certification Program. Cyber site coordinator receives reports from the on-line field supervisor regarding intern participation and intern issues.
3) Field Supervisor: The field supervisor is a retired Texas certified principal and/or superintendent. The field supervisor is chosen by the Region 4 Teacher Alternative Certification Program. The field supervisor observes the interns on-campus and may or may not be the on-line field supervisor selected by the Region 4 Teacher Certification Program, who participates in Beginning Teacher On-line. Intern: A Region 4 Alternative Certification program participant who is a teacher of record on a Texas campus who has a Texas one year probationary teaching certificate and meets the No Child Left Behind Act of 2001 (NCLB, 2008) definition of "Highly Qualified" in that the first year teacher has passed the appropriate TExES content exam(s) for his or her

certification area(s) or has 24 hours of the content which he or she is teaching, on his or her college transcripts.

4) On-Campus Mentor: A certified teacher that was chosen by the intern's campus principal to observe lesson taught by the intern, to counsel the intern, to allow the intern to observe lessons taught by the on-campus mentor, to provide collegial support and answer questions that the intern may have regarding teaching, curriculum, best teaching practices, questions relating to parent issues and student issues.
5) One Year Texas Probationary Teaching Certificate: This teaching certificate is given to an intern by the State Board of Education based on the recommendation of the intern's alternative certification program. This teaching certificate allows the intern to teach in a Texas public school, a Texas Education Agency accredited private school in Texas or a charter school for one year.
6) On-line Field Supervisor: The on-line field supervisor, also noted in literature as an on-line coach, is a retired Texas certified principal and/or superintendent. The on-line field supervisor is chosen by the Region 4 Teacher Alternative Certification Program and serves as the on-line mentor. The on-line field supervisor may or may not be the field supervisor selected by the Region 4 Teacher Certification Program, who visits the intern on-campus at least 6 times per year. The on-line field supervisor must perform mentoring duties on-line through the use of Blackboard©.

7) Region 4 Education Service Center: Region 4 Education Service Center provides education related services and products to its assigned 53 Texas school districts as well as to any American or International school or business. (Region 4 Education Service Center, 2010).
8) Region 4 Teacher Certification Program: The Region 4 Teacher Certification Program is Texas Education Agency accredited teacher alternative certification program. The Region 4 Teacher Certification Program provides training and support for its participants with the goal of standard teacher certification in Texas.
9) TExES (EC-12 PPR): The EC-12 Pedagogy and Professional Responsibility Texas Examination of Educator Standards is one of at least two examinations that teachers who wish to become certified public school teachers in Texas must pass. This exam is required for Texas teachers who teach any grade from Early Childhood- 12th grade.

Chapter Two

Review of the Literature

Introduction

This chapter will examine research on the need for mentoring, barriers to effective on-campus mentoring, on-line mentoring, on-line mentoring as a form of support for beginning teachers, and the use of veteran teachers as mentors.

A review of the literature reveals that the examination of mentoring programs for new teachers and the introduction of mentoring via the web began in the late 1980's and is still being researched today. However, there is little research which examines any impact that on-line mentoring provided by a retired school administrator and teacher, may have on first year teachers that also are assigned practicing on-campus teachers as mentors, especially on what research has identified as the three areas in which new teachers report that they need more assistance: lesson planning, the lesson cycle and classroom management. Additionally, less research has been published on the impact that on-campus and on-line mentoring has on first year teachers that are participating in an alternative certification program.

Need for Mentoring

According to research by Danielson (as cited in Holloway, 2001) mentoring helps new teachers to confront new challenges through participation in professional conversations and activities which allow for reflection. According to Chelsea, Wood, and Zepeda (as cited in Anthony, Gimbert, Fultz, & Parker, 2011) new teachers, lacking

sufficient knowledge, instead of providing students with the best possible learning experiences may rather focus on survival. Research by Chelsey (as cited in Anthony, Gimbert, Fultz, & Parker, 2011) found that teachers from alternative certification programs report that they need additional assistance with topics such as effective instructional planning and classroom management.

The Texas Education Code requires that a campus based mentor is to be selected by a campus administrator and must undergo training provided by the alternative certification program or by the intern's school district, with proper documentation (Texas Administrative Code 228.35, 2010). Therefore, the amount of observations conducted by the mentor of the intern, the availability of the on-campus mentor to the intern to answer questions or concerns, provide assistance with lesson planning, provide assistance with classroom management, parental communication, delivery of lessons, and other related topics varies among alternative certification programs.

Since a mentor's reporting to the campus principal on the beginning teacher's progress was omitted in code, a campus principal may or may not require that the assigned mentor provide a progress report on the intern's teaching success. Since there is no uniform list of task specific mentor action requirement in code, each Texas beginning teacher receives a varied amount of support from a campus mentor and the beginning teachers' perception of support that was given by the on-campus mentor will vary. The amount of mentoring and the specific required duties are left to the school district or campus to decide, in addition to any requirements by the educator preparation program (Barerra, Braley & Slate, 2008). Thus, the intern's satisfaction with the on-campus

mentor will vary. Kilburg (2007) reported that due to desire for expediency, the selection process of mentors is often compromised.

In addition to mentoring being necessary due to its requirement in many education policies in the United States, mentoring is also necessary due to its influence on teacher attrition. Research by McCoy (2003) identified inactive mentors as one of the top 3 reasons that teachers left the profession during the first three years of employment.

Barriers to Effective On-Campus Mentoring

Although mentoring programs may be clearly designed and expectations are expressed, barriers to effective mentoring programs on-campus may arise. Research shows that such barriers are lack of time to devote to observations and meeting with the mentee, placing a mentor with a mentee whose classroom location on-campus is at a considerable distance or mentors' lack of participation with their duties at all (Kilburg and Hancock, 2006).

Marshall (in Fry, 2010) argued that mentors' responsibility to regularly observe teachers is one which is easy to cease with compliance. Mentors often face a lack of time in their daily schedule to attend to their mentor responsibilities. Ganser (2002) argued that many of the teachers who are most qualified to serve as mentors are also chosen to devote their time to hiring committees, curriculum committees, etc. Research by Garza (2009) reported that the instances of a mentor being appointed rather than choosing to become a mentor, can have a damaging effect on the mentor-new teacher relationship. According to Garza (2009), "Mentors must be committed to the task and consciously

provide quality time and assistance if our beginning teachers are to grow professionally and enhance their pedagogical knowledge and skills" (p. 52).

The assignment of mentors that do not match the content area or grade level that the mentee is teaching is barrier to effective mentoring. Research by Gilbert (in Fry, 2010) indicated that poor matches of mentors with mentees are common. Stanulis, Nevins, Burril, and Ames (2007) have found that in many cases, the assignment of mentors to mentees is made by districts that already must devote attention to national and state initiatives. Research by McCoy (in Guerra, Flores, & Claeys, 2009) found that one of the reasons that new teachers leave the profession during the first three years is because they have inactive mentors. Research by Stanulis, Meloche, & Ames (in Stanulis, Meloche, & Ames, 2007) mentioned that one new teacher in their study mentioned that he was ignored when he approached his mentor for help with curriculum.

Kilburg and Hancock (2006) found reoccurring barriers to mentoring over the span of a 4 year study of new teachers who were assigned a mentor. These barriers were lack of time to meet, the amount of duties that the mentor has as a teacher in addition to the duties of a mentor, and distance between classroom locations on-campus. Steadman and Simmons (as cited in Anthony et al., 2011) reported that the problem of varied quality of mentoring experiences is exacerbated when veteran teachers, who already have heavy workloads of their own, are also expected to serve as mentors. Kilburg (as cited in Kilburg and Hancock, 2006) found that new teachers can lack confidence, become frustrated, and feel insecure if emotional support is not provided or is limited. Research by Brewster and Railsback (as cited in Kilburg and Hancock, 2006) indicated that if a mentor takes authority from the new teacher, makes a decision that mentoring is not a

high priority, or decides to not collaborate with the new teacher; the mentoring collaboration becomes ineffective.

Aside from barriers that prevent effective mentoring opportunities, research shows that there can be negative effects from mentoring. Research by Scandura (1998) on mentoring relationships found that sabotage, bullying, spoiling, submissiveness, deception and taking credit for the mentee's work are types of negative effects.

Many mentoring programs are successful, however, focus should be on what issues cause mentoring programs to be unsuccessful (Kilburg and Hancock, 2006). Although success for many in mentoring programs is a positive result, it is not positive for students of the new teachers who did not benefit from the mentoring program in which he or she participated. Taking into consideration that every child should have an effective teacher and not passively excuse the strong possibility that a student may not have had the advantage of a whole school year's worth of learning, as other students may have had, because the student had a new teacher. Therefore, any issues that prevent a new teacher from obtaining an effective mentoring experience must be examined in order to provide solutions to ensure that all students have an equal opportunity to learn.

On-line Mentoring

According to Long (2009), "Mentoring alone has been unable to stem the flow of resignations" (p.1). Young (1992) found that beginning teachers had suggestions for additional types of support that they thought would have been helpful to them. Some beginning teachers mentioned that the first year that they had on-site means of support such as principals, mentors, other teachers, and district trainings.

As technological availability increases in schools, Texas school districts now offer professional development and trainings on-line. The Texas Education Agency has also moved towards providing training state wide with its initiation of test administrator on-line modules that can be used by an individual or by a group of teachers at a campus (Texas Education Agency, 2010a).

When teachers attend professional development trainings on-line, teachers have the ability give more attention to their studies and reflect on what they have learned since they are able to train at a convenient time and place, with less distraction. As opposed to attending professional development sessions or trainings in person, on-line delivery allows the teachers to pause and review text or multimedia content. Christopher et al. (as cited in Maxwell et al., 2010) found that on-line delivery provides learners the opportunity to have more time than in face to face training to process information and format responses.

On-line technology provides school districts and educator preparation programs the opportunity to provide professional development, trainings, and support to beginning and experienced teachers regardless of the barriers of distance, time, lack of paper materials, and scheduling conflicts which would otherwise prevent teachers from being able to receive training. Christopher, Thomas and Tallent-Runnels (as cited in Maxwell, Harrington, & Smith 2010) reported that on-line learning can be asynchronous so that the teachers have the convenience of selecting a time and place for learning. Teachers may be able to attend work instead of having to be absent to attend an off campus training. Teachers may be able to log into an on-line training during planning time, after school, on the weekend, at home, or in a group during campus professional early release days.

The ability for teachers to communicate on-line allows teachers to overcome the barriers of finding a time for mentor and mentee to meet and fitting in time to develop professionally within a busy schedule of teaching and related non-instructional tasks that teachers are called upon to perform. Teachers are looking for virtual, on-line support that cannot be achieved through on-campus means. Additionally, research by Berry and Naussbaum-Beach (as cited in Gareis and Nussbaum-Beach, 2007) suggested that an advantage of on-line mentoring is that since mentors have the time on-line to develop their responses, they may be more thoughtful and reflective than those given by face to face mentors in an "on-demand" fashion.

Members can choose the professional development concept or topic that they need, rather than being given a pre-determined topic which may or may not be of use to the teacher, as may be the case with district mandated professional development. On-line supports allows members the opportunity to choose the professional development concept or topic that they need, rather than being given a pre-determined topic which may or may not be of use to the teacher, as may be the case with district mandated professional development. New teacher on-line mentoring programs that are created by regional service centers, campuses, or school districts can allow for learning and mentoring on subjects that are specific to the needs of new teachers in the area or district.

On-line support allows teachers from a number of locations across the city, state, country or world to have a platform to interact with each other, share ideas, share resources, and communicate using a variety of multimedia tools. According to Christopher et al. (as cited in Maxwell et al., 2010), on-line learners have the opportunity to learn from each other's practical experiences, insights and theories. It was also found

that on-line learners' sharing may enable learners to be exposed to diversity in information and ideas which will allow them to apply knowledge to new contexts and make new connections.

Teachers, new and experienced, create communities of peer to peer communication to share ideas and plan projects. This sharing allows teachers and opportunity to grow and learn as a teacher. Some sites that allow for this peer to peer teacher interaction are Classroom 2.0 which in 2008 had 6,000 members, and The Global Education Collaborative which had 400 members in 2008. The number of teachers that use on-line sources for professional development and to communicate ideas and questions to fellow teachers is rising. As of March 9, 2012, Classroom 2.0 had 64,613 members (Haragon, 2012). The Global Education Collaborative had 10,016 members as of March 9, 2012. However, The Global Education Collaborative has had 17,841 visitors to the site from January 1, 2012-March 9, 2011 alone. These visitors have been from each of the 50 states of the U.S. plus 115 other countries (Gray, 2012).

A study by Rock, Gregg, Gable, & Zigmond (as cited in Anthony et al., 2011) indicated that teachers, through the use of e-coaching, teachers reported viewing technology as effective in supporting learning and teaching and gained deeper content knowledge, and were reported to have improved student engagement.

Research by Gold (1987) found that helpful mentors are retired teachers that do not have teaching duties to fulfill which would remove scheduling conflicts that would prevent them from mentoring dedication. According to Foster (2010), many novice teachers are leaving the teaching field while at the same time, experienced teachers are retiring or are close to retiring. These retiring teachers will not be on-campus to serve as

mentors so beginning teachers will not have mentors with experience to assist them and share their knowledge which could benefit new teachers.

However, on-line mentoring is not without criticism. According to Ensher, Heun, & Blanchard (2003) the amount of time that it takes to develop a relationship on-line is longer than the time it takes to develop a relationship face to face. Gackenbach (as cited in Ensher, Heun, & Blanchard, 2003) found that any misunderstandings on-line stemming from written content can become hostile due to the feeling of anonymity. An on-line user may be more likely to lower his or her inhibitions on-line if he or she does not know the person that he or she is communicating with on-line. Flaming, which is written responses on-line that are negative in nature and very emotional, can occur as a result. Mis-interpretation or misunderstanding that occur on-line due to the inability to grasp the tone or intent of written responses on-line due to the inability to hear tone or other verbal cues or view body language, may lead to the absence of trust due to poor advice (Ensher, Heun, & Blanchard, 2003).

In regard to on-line mentoring, it may be ineffective due to the fact that the mentee would not be able to view his or her mentor in action ((Ensher, Heun, & Blanchard, 2003), if only written communication was used instead of written and visual tools. Segall (as cited in Ensher, Heun, & Blanchard, 2003) found that those that do not possess goods written communication skills may not find on-line communication useful since they may not be able to fully or express their feelings or questions. In this case, the mentor and mentee relationship may not be effective since the details of the new teacher's problems or concerns cannot be accurately identified which makes the assistance that the mentor gives inappropriate or inaccurate. Additionally, computer

malfunctions or internet connectivity issues may occur at any point in time, which may delay communication and assistance.

On-line Mentoring Support for Beginning Teachers

Mentoring is just one part of a high quality support structure (Ganser, 2002). Research suggests that effective mentoring improves beginning teacher skills, satisfaction with the profession, build self confidence, improves teacher performance, and increases teacher retention rates (Martin in Freemyer, Townsend, Freemyer & Baldwin, 2008; Daughtry, A., 2010). Since the early years of teaching require a beginning teacher to make decisions rapidly, especially those that relate to classroom management, most new teachers need a type of support that can help them to learn the skills to make such decisions (Maxwell, Harrington, and Smith, 2010). The beginning teacher will be able to his or her mentor's intangible knowledge and skills that have been acquired through time and experience, which no educator preparation program can provide (ERIC Clearinghouse on Teacher Education, 1986).

Driscol (in ERIC Clearinghouse on Teacher Education, 1986) argued that the mentor is the one who teaches beginning teachers the skills to comply and also cope with rules that the school administration has in place. Mentors may be able to identify any issues, which would otherwise go undetected without close supervision, which may affect instruction or issues that would discourage new teachers (ERIC Clearinghouse on Teacher Education, 1986). Research by The National Commission on Teaching and America's Future (in Weiss and Weiss, 1999) found that beginning teachers who were

mentored have a lower rate of leaving the profession and tend to put their focus on student learning, compared to teachers that did not receive mentors.

Logistics and inability to coordinate schedules for new teachers and mentors to meet has been reported as a barrier to effective mentoring programs but Rossett and Marino (as cited in Anthony et al., 2011) reported that on-line coaching sessions can be stored electronically and retrieved should they be needed in the future and that e-coaches can provide their expertise and support to a larger number of individuals and organizations. The problem of scheduling may also be overcome by the use of electronic written feedback. This written feedback can be reviewed as many times as one would like and also serves as a way for the mentors to assess the mentee's development over time (Garza, 2009). According to research by Maxwell et al. (2010), the most useful discussions for beginning teachers in their first semester, which was found to be the time that new teachers reported the greatest need of support, pertained to classroom management, teaching strategies, and resources.

Research by Feiman-Nemser, Schwille, Carver & Yusko (1999) found that many new teachers are not open to sharing problems with a fellow teacher or ask for help since it is believed that a good teacher will be able to solve his or her own problems. Finding that teaching in the United States is seen as a private activity, teachers may not want to risk their autonomy by sharing. Also, it is questioned whether having one-on–one time with a mentor will add to the privacy of teaching where in the mentor may share only his or her ways of dealing with issues rather than introduce research and a variety of methods that exist, rather than promoting the use of specific techniques that may or may not be researched based.

A concern to new teachers is the embarrassment of asking for help from colleagues on-campus. On-line mentoring allows for new teachers to ask for help without feeling embarrassed since colleagues are not included in the on-line mentoring program. Participants in a web administrated mentoring study at the University of Texas stated that they preferred on-line mentoring support due to the fact that they were embarrassed to ask for help from people in their own districts and because they felt that they received emotional support, and felt less isolation (Heider, 2005). Dodor, Sira, & Hausafus (2010) suggested that the on-line discussion boards that the teachers used in their study may have allowed timid teachers more of an opportunity to participate in conversations than they would have in a face to face situation. The ability to communicate in a virtual arena allows teachers the freedom from being judged by co-workers on-campus if the new teacher shares fears or expresses times when he or she learned from mistakes made as a new teacher (Costello-Dougherty, 2008).

The Use of Veteran Teachers as Mentors

Given barriers to effective mentoring of novice teachers by practicing teachers, research suggests that the use of veteran, retired administrators or teachers as mentors achieves positive results. Research by Haberman (as cited in Anthony et al., 2011) found that the use of on-line coaches, also referred to as on-line mentors or on-line field supervisors; when provided in conjunction with mentors on-campus; was effective in increasing teacher retention rates and in preparing teachers who were part of an alternative certification program.

Ellen Moir, Executive Director of the New Teacher Center at the University of California at Santa Cruz, stated, "Mentors must be chosen not only for their teaching experience but also for their skill with working with other adults, and they need the training and the time to do their job well." (Rubinstein, 2007, p. 2). Retired administrators have experience as teachers as well as experience communicating with and leading adults as campus leaders.

In addition to their skill, retired teachers or administrators as mentors are able to overcome the barrier of lack of time, since they do not also have their own classes to manage in addition to mentoring. Morgan and Kritsonis (2008) found that in schools which have a large percentage of socioeconomically disadvanged students, a difficult teaching environment, an undesirable school location, and low academic student achievement; retired teachers can provide mentoring which helps to reduce attrition and helps to introduce new teachers to the school social system. It was helpful that mentors did not have teaching duties which may have conflicted with their mentoring duties.

Bloom, Castagna & Warren (as cited in Anthony et al., 2011) found that coaches who are experts that are removed from the educational environment in which the new teacher is employed, can lessen the new teachers' concerns about privacy.

Chapter 3

Methodology

Significance of the Study

According to Morgan and Kritsonis (2008), "Hard-to-staff campuses must invest in a full-time teacher mentor as well as retired teachers to provide intense mentorship and relevant professional training" (p.1). As school districts, campuses and educator preparation programs strive to provide new teachers with the support to make them successful, barriers to this support may exist which include lack of time, inconvenience due to scheduling, mismatching of mentors in regard to grade level or subject taught, and inactive mentors. Anthony et al. (2011) argued that researchers should not only examine the effectiveness of information and technology (IT) but also document how technology is being used in particular manners. Furthermore, since alternative certification's definition and types of programs differ, context specific research is necessary in order for decisions as to how to use technology to support teacher training can be made by the directors of the various alternative certification programs. In an effort to overcome these barriers and provide new teachers with the mentoring they need, on-line delivery of mentoring to new teachers in a learning and discussion forum by retired school administrators will be examined as a possible solution.

Purpose of Study

The purpose of this study was to investigate the impact that on-line mentoring by a retired school administrator and communication with other first year teachers has on

interns in a Texas educator alternative certification program who also have a principal appointed, on-campus certified teacher mentor The results of the interns' perception of effectiveness of on-line mentoring was of concern as it may be an effective replacement of an absence of effective on-campus mentoring.

One of the requirements that all teacher candidates seeking teacher certification in Texas must meet is a passing score on the Pedagogy and Professional Development (PPR) TExES. An exploration of the impact that on-line mentoring may have on performance of interns who participated in on-line delivery of mentoring to new teachers in a learning and discussion forum by retired school administrators in addition to on-campus mentoring, on domains 1-3 of the PPR TExES, was conducted. Domains 1-3 of the PPR TExES test knowledge and critical thinking skills of new teachers in the areas of classroom management, lesson planning and the lesson cycle (Texas Education Agency, 2010b). Domain 1 of the PPR tests designing instruction and assessment to promote student learning. Domain 2 tests creating a positive, productive classroom environment. Domain 3 tests implementing effective, responsive instruction and assessment (Texas Education Agency, 2010a).

Research Questions

As stated in Chapter One, the purpose of this study was to investigate the impact that on-line mentoring by a retired school administrator and communication with other first year teachers has on interns in a Texas educator alternative certification program who also have a principal appointed, on-campus certified teacher mentor The results of

the interns' perception of effectiveness of on-line mentoring was of concern as it may have been an effective replacement of an absence of effective on-campus mentoring.

Specifically, the questions being addressed were:

1) Is there a significant difference in scores on domains 1-3 in the EC-12 Pedagogy and Professional Responsibility Texas Examination of Educators of interns who received on-line mentors in addition to on-campus mentors, as compared to interns who received only on-campus mentors?
2) Is there a difference between the perception of mentoring effectiveness reported by interns between their on-campus mentors and their on-line mentors?
3) Is on-line mentoring perceived by interns to have a greater positive influence on their effectiveness as teachers than on-campus mentoring?
4) What are the most common themes for which interns ask assistance or discuss on-line with their fellow interns or on-line mentor?

Research Design

This study will use a mixed methods design. According to Johnson and Onwuegbuzie (2004), the goal of mixed methods research is not to replace quantitative or qualitative research but instead to enable the drawing of strengths and minimization of the weaknesses of both approaches in single research. Tashakkori and Teddlie (2003) argued that mixed method research allows the researcher to at once answer confirmatory and exploratory questions which allows for the verification and generation of theory in the same study.

Sample

The sample was composed of 62 interns who have completed the Region 4 Alternative Certification Program for the 2010-2011 school year. These interns completed their first year of teaching at the end of the school year, as scheduled. The population was composed of males and females of differing races and ethnicities. These interns chose to complete an internship in primary or secondary grade levels in Texas. The certification areas of the participants varied. Each of the interns completed the on-line mentoring program as a requirement of the Region 4 Alternative Certification Program. These interns had not attempted the EC-12 Pedagogy and Professional Responsibility Texas Examination of Educators (TExES) before completing the on-line mentoring program. The Region 4 Alternative Certification Program only issues test registration approval after completion of the on-line mentoring program is verified.

The sample size of 62 was composed of the number of interns that completed the on-line mentor program and chose to submit the voluntary on-line survey that was sent to them after the completion of the Region 4 Teacher Certification Program in 2010-2011. The sample studied consisted of all survey respondents. The demographic representation of the sample surveyed by ethnicity and gender is represented in Table 2. 71% of the interns that responded to the survey were female and 29 percent of the interns that responded to the survey were male. The majority of the interns that responded to the survey were White, making up 66% of the population. The number of Hispanic and the number of African-American interns were similar. 18% of the interns were Hispanic while 16% of the interns were African-American. 60% of the total number of interns

(n=37) had their on-line mentor as their field supervisor. 40% of the total number of interns (n=25) did not have their on-line mentor as their field supervisor.

Table 2

Demographics of the Interns Who Participated in On-line Mentoring

Interns	Number	Percentage
Male	18	29
Female	44	71
African-American	10	16
Hispanic	11	18
White	41	66
Total	62	100

The interns who responded to the survey were seeking certification in various areas. Some interns were eligible for more than one certification area, but for the purposes of this study, the intern was classified in Tables 3- 6 based on their primary area of certification. Interns represented all Texas public school grade levels from (Pre-Kindergarten (Early Childhood) to 12th grade. Table 3 represents the demographics of the interns that were seeking certification in a generalist area. The greatest number of interns (n=10) in the generalist area were seeking certification in EC-6 Generalist. The area of certification with the lowest number of interns seeking certification was 4th-8th Generalist/Bilingual (n=1).

The lowest number of certification seekers were those in the areas of 6th-12th grade (n=6). Table 4 represents the demographics of these certification areas. No African-American interns were seeking certification in the 6th-12th areas. The number of Hispanic interns equaled the number of White interns.

Table 5 represents the demographics of interns seeking certification in the 8th-12th grades. No Hispanic or African-American interns were seeking certification in these areas.

Table 6 represents the demographics of the interns seeking a type of All Level Certification (grades Kindergarten-12th grade). The greatest number of interns in this area is seeking special education certification. There are no Hispanic interns seeking any type of All Level certification.

Table 3

Demographics of the Generalist Certification Areas

Certification Area	Number	Male	Female	African-American	Hispanic	White
Early Childhood-4th Grade Generalist/Bilingual	2	1	1	--	2	--
Early Childhood-4th Grade Generalist/English as a Second Language	3	--	3	--	--	3
Early Childhood-4th Grade Generalist	2	--	2	--	--	2
Early Childhood-6th Grade Generalist/Bilingual	5	1	4	--	5	--
Early Childhood-6th Grade Generalist/English as a Second Language	3	--	3	1	--	2
Early Childhood-6th Grade Generalist	10	1	9	4	1	5
4th -8th Grade Generalist/Bilingual	1	1	--	1	--	--
4th -8th Grade Generalist/English as a Second Language	2	1	1	--	--	2
4th -8th Grade Generalist	5	1	4	1	1	3

Note. -- indicates 0 interns.

Table 4

Demographics of the 6-12 Certification Areas

Certification Area	Number	Male	Female	African-American	Hispanic	White
Business	3	2	1	--	2	1
German	2	1	1	--	--	2
Spanish	1	1	--	--	1	--

Note. -- indicates 0 interns.

Table 5

Demographics of the 8-12 Certification Areas

Certification Area	Number	Male	Female	African-American	Hispanic	White
English	1	--	1	--	--	1
Family and Consumer Science	1	--	1	--	--	1
History	1	1	--	--	--	1
Life Sciences	1	--	1	--	--	1
Math	3	3	--	--	--	3
Physical Science	1	1	--	--	--	1
Science	2	--	2	--	--	2
8-12 Social Studies	1	--	1	--	--	1

Note. -- indicates 0 interns.

Table 6

Demographics of the All Level Certification Areas

Certification Area	Number	Male	Female	African-American	Hispanic	White
Art	1	--	1	--	--	1
Music	1	1	--	--	--	1
Physical Education	1	1	--	--	--	1
Special Education	9	2	7	3	--	6

Note. -- indicates 0 interns.

Instrumentation and Data Collection

On-line Mentoring Intern Survey.

Data from an on-line survey that was emailed to the 2010-2011 school year interns in May 2011 by The Region 4 Teacher Certification Program was analyzed. The reason for this methodology was that an on-line survey was the most efficient and expedient method for obtaining research from a wide variety of demographics and because this survey yielded responses from interns that had recently completed the on-line mentoring course so their memories of their experiences and opinions would be better than their memories of their experiences solicited by a phone call or other type of survey almost a year after their completion of on-line mentoring. The survey analyzed in this study consisted of 23 questions which had Likert-type scales for responses (see Appendix 1 for survey questions). The end of the survey had a space for any additional

feedback that the intern would have liked to add. The questions asked about satisfaction of their on-line and campus mentors, perception of assistance on classroom management, lesson cycle, and lesson planning (domains 1-3 on the PPR TExES) that the on-line mentoring course provided, number of times they visited with their mentor, and amount of communication on-line between their on-line mentor and fellow interns in the on-line mentoring course.

The survey was created in and delivered by SurveyGizmo. Region 4 purchased a license from SurveyGizmo which allowed Region 4 to secure access to data that was available in SurveyGizmo. A specific Region 4 employee was designated as the administrator and is responsible for granting employee access to SurveyGizmo and also limited the access to functionality and data that each employee has once access to SurveyGizmo had been granted. Each approved user was given a unique username and password to use to access SurveyGizmo.

Each intern was sent an email invitation to complete the survey and a link which, when clicked, gave the intern access to the survey. The email stated that participation in completing the survey was voluntary.

The survey consisted of three parts. Part one asked for the intern to rate the effectiveness of support from the campus mentor, the on-line field supervisor (on-line mentor), and from reading the postings of fellow new teachers on-line. The interns were asked to consider the effectiveness of support on each area: lesson planning, the lesson cycle and classroom management. These three areas are tested in domains 1-3 in the EC-12 PPR TExES.

Part 2 of the survey asked the interns to rate their satisfaction with the response time to questions from the on-campus mentor and the on-line field supervisor (on-line mentor).

Part 3 of the survey asked the interns to consider what method of mentoring positively influenced his or her effectiveness as a teacher: only face to face mentoring (on-campus mentoring), only on-line mentoring, or both face to face and on-line mentoring.

Intern EC-12 PPR TExES Test Results.

In addition to data collected from survey responses, the scores on domains 1-3 on the EC-12 Pedagogy and Professional Responsibility (PPR) Texas Examination of Educators (TExES) from a sample of interns from the Region 4 Teacher Certification Program in the 2006-2007 school year that did not participate in on-line mentoring, were also collected. The PPR scores on domains 1-3 were also collected for those interns of the 2010-2011 school year that did participate in on-line mentoring.

The selection of data that was collected from the group of interns that did not receive on-line mentoring was based on the matching of race or ethnicity, gender, and certification area to each survey respondent of the 2010-2011 school year that did receive on-line mentoring.

The researcher made a formal written request to the Director of Educator Preparation and Leadership Solutions at The Region 4 Education Service Center for access to the survey, test data, and Blackboard© on-line postings by interns.

After approval was granted, access to all test data was made available through access to a password protected State Board of Education database that is accessible by approved Region 4 Education Service Center employees who worked in the Region 4 Educator Preparation and Leadership Solutions Department. The identity of survey respondents was accessed by pulling a specialized report from SurveyGizmo which revealed the names and corresponding email addresses of each survey respondent from the 2010-2011 school year, along with responses to the survey. These email addresses were entered in the Region 4 Educator Preparation and Leadership Solutions Department Database, which was also password protected. The email search revealed the name of the survey respondent, the certification area, the race or ethnicity, and the gender of the respondent. This data was necessary in order to analyze survey results and to also choose interns from the 2006-2007 school year that best matched each survey respondent in regard to certification area, race or ethnicity, and gender.

Once matches were made, the names of the interns were replaced with codes. Any printed data was kept in a locked file cabinet until it was converted to an electronic Excel file. After this electronic conversion, the printed data was destroyed. All electronic data was stored on an encrypted flash drive that also required a password to access files. All data will be kept by The University of Houston for a period of no less than three years.

On-line Mentoring Intern Postings.

Archival postings made by interns from the 2010-2011 school year made in the Blackboard©. E-Learning Platform were downloaded and analyzed in order to determine

the themes for which the interns requested for assistance from their on-line mentor and also which themes were most discussed amongst the interns on-line involving challenges, stress, and teacher roles or actions that interns found to be unexpected or for which they were not prepared.

Access to the on-line mentoring course on the Blackboard© E-Learning Platform provided by the Region 4 Teacher Alternative Certification Program was password protected. Only authorized Region 4 employees in the Teacher Alternative Certification Program had a password issued. Each intern also had a unique password in order to access the on-line mentoring course. Postings that are made in the course on the discussion forum were visible only to the interns that were enrolled in that particular course, the on-line mentor for the particular course and Region 4 employees who played an administrative role in the course. The author of each post was displayed to those enrolled in the course. The ability for an intern or mentor to make an anonymous posting was disabled in mentoring course.

Data Analysis

A mixed methods approach was taken in this study. A two tailed *t*-test of independent means (assuming unequal variances) with an alpha level of .05 was conducted on the Intern (2006-2007 and the 2011-2011 groups) EC-12 PPR TExES Test Results. According to Trochim (2008) the *t*-test is the analysis that is appropriate for comparing the means of 2 groups in a post-test only experimental design to evaluate if the means are significantly different. The *t*-test was be applied to the total control and

treatment groups and then additional two tailed *t*-tests of independent means were completed by gender and then by race.

A word analysis was then conducted on the total number of postings made by the interns who participated in on-line mentoring. Because the researcher was a former employee of what is now The Educator Preparation and Leadership Solutions Department, there was a potential for researcher bias given that the researcher had visited on-line mentor courses prior to the 2010-2011 intern group's participation. To safeguard against researcher bias, the names of the interns were replaced by a code before the analysis of postings was conducted. The analysis showed the frequency of words, phrases and sentences in the total number of on-line postings. The original postings were also analyzed to determine the themes for which the interns asked for assistance in the on-line forum and the topics which the interns felt that they were not prepared to teach before they entered the classroom.

Limitations of the Study

The data collected from the on-line postings spanned only one year. The number of respondents may be a limitation to this study and could limit generalizability seeing that the sample size of respondents to the on-line survey was small (N= 62). A small sample size may lead to the failure to reject the null hypothesis when there is a true difference (Robertson and Williams, 2009).

In regard to the survey, data was collected from self reports and voluntary response bias may occur due to the fact that survey completion was not mandatory (Watkins, Scheaffer, & Cobb, 2009). Additionally, there is a potential for bias in the

interpretation of qualitative data since the researcher was formally an employee of the department of Region 4 Education Service Center that oversees the Beginning Teacher Seminar on-line program.

Since the researcher used archival data to code the postings made by interns on Blackboard in the online mentoring course, the researcher did not have the ability to communicate with each intern to clarify any responses or postings on-line. However, the researcher reflected on the data and topics that were available and determined the themes accordingly.

Chapter Four

Results

Comparison of EC-12 PRR TExES Mean Scores

An analysis of test data displaying the EC-12 PRR TExES scores for domains 1-3 of the populations allowed for the identification of the mean scores of the on-line mentoring population, the populations that did not receive on-line mentoring and the respective subpopulations. Table 7 displays the domain 1 mean scores of these populations. It should be noted that in total, the population that received on-line mentoring had a mean that was greater than the total population that did not receive on-line mentoring. These results were also shown in the female, African-American, and White populations that received on-line mentoring when compared with their counterparts that did not receive on-line mentoring. The statistical significance of all mean scores for domain 1 will be examined below.

Table 7

EC-12 PPR TExES Domain 1 Scores

Participants	*M*	*SD*
Total with On-line Mentoring	267.89	15.66
Total without On-line Mentoring	265.19	18.20
Male with On-line Mentoring	261.17	11.74
Male without On-line Mentoring	265.17	13.76
Female with On-line Mentoring	270.64	16.32
Female without On-line Mentoring	265.20	19.87
African-American with On-line Mentoring	268.20	15.87
African-American without On-line Mentoring	253.90	29.57
Hispanic with On-line Mentoring	257.36	19.86
Hispanic without On-line Mentoring	260.91	17.44
White with On-line Mentoring	271.10	12.91
White without On-line Mentoring	269.10	13.40

Note. Maximum domain score is 300.

Table 8 displays the domain 2 mean scores of these populations. It should be noted that in total, the population that received on-line mentoring had a mean that was greater than the total population that did not receive on-line mentoring. These results were also shown in the male, African-American, and Hispanic populations that received on-line mentoring when compared with their counterparts that did not receive on-line mentoring. The statistical significance of all mean scores for domain 2 will be examined below.

Table 9 displays the domain 3 mean scores of these populations. It should be noted that in total, the population that received on-line mentoring had a mean that was greater than the total population that did not receive on-line mentoring. These results were also shown in the female, African-American, and White populations that received on-line mentoring when compared with their counterparts that did not receive on-line mentoring. The statistical significance of all mean scores for domain 3 will be examined below.

Table 8

EC-12 PPR TExES Domain 2 Scores

Participants	*M*	*SD*
Total with On-line Mentoring	266.55	15.57
Total without On-line Mentoring	265.55	19.75
Male with On-line Mentoring	266.01	13.11
Male without On-line Mentoring	264.61	13.24
Female with On-line Mentoring	266.77	16.61
Female without On-line Mentoring	267.95	19.87
African-American with On-line Mentoring	266.10	12.81
African-American without On-line Mentoring	262.10	17.69
Hispanic with On-line Mentoring	265.73	7.36
Hispanic without On-line Mentoring	259.91	20.07
White with On-line Mentoring	267.20	18.16
White without On-line Mentoring	268.44	20.24

Note. Maximum domain score is 300.

Table 9

EC-12 PPR TExES Domain 3 Scores

Participants	*M*	*SD*
Total with On-line Mentoring	265.47	17.34
Total without On-line Mentoring	263.48	18.08
Male with On-line Mentoring	254.56	19.46
Male without On-line Mentoring	261.89	16.23
Female with On-line Mentoring	269.93	14.37
Female without On-line Mentoring	264.14	18.93
African-American with On-line Mentoring	271.40	11.17
African-American without On-line Mentoring	262.70	24.46
Hispanic with On-line Mentoring	259.36	17.29
Hispanic without On-line Mentoring	264.18	15.22
White with On-line Mentoring	265.66	18.34
White without On-line Mentoring	263.49	17.49

Note. Maximum domain score is 300.

Statistical Significance of EC-12 PPR TExES Results.

Although differences in the mean scores of the overall populations and certain subpopulations were discovered, the question of the differences being statistically significant was explored. A two tailed *t*-test was conducted on the EC-12 PPR TExES scores for domains 1-3 of participants that participated in on-line mentoring and the participants that did not participate in on-line mentoring. An alpha level of .05 was used

for all statistical tests that will be discussed throughout the research. There was no significant difference in the EC-12 PPR TExES Domain 1 scores for those that participated in on-line mentoring (*M*=267.89, *SD*=15.66) and those that did not participate in on-line mentoring (*M*= 265.19, *SD*= 18.20) conditions; *t*(119)=1.98, p=0.38. These results suggest that on-line mentoring does not have an effect on participants' EC-12 PPR TExES scores for domain 1.

There was no significant difference in the EC-12 PPR TExES Domain 2 scores for those that participated in on-line mentoring (*M*=266.55, *SD*=15.57) and those that did not participate in on-line mentoring (*M*= 265.55, *SD*= 19.75) conditions; *t*(116)=1.98, p=0.75. These results suggest that on-line mentoring does not have an effect on participants' EC-12 PPR TExES scores for domain 2.

There was no significant difference in the EC-12 PPR TExES Domain 3 scores for those that participated in on-line mentoring (*M*=265.48, *SD*=17.34) and those that did not participate in on-line mentoring (*M*= 263.48, *SD*= 18.08) conditions; *t*(122)=1.98, p=0.53. These results suggest that on-line mentoring does not have an effect on participants' EC-12 PPR TExES scores for domain 3.

Gender.

There was no significant difference in the EC-12 PPR TExES scores in domains 1-3 for males that participated in on-line mentoring and males that did not participate in on-line mentoring. Results for domain 1 showed males that participated in on-line mentoring (*M*=261.17, *SD*=11.76) and those that did not participate in on-line mentoring (*M*=265.17, *SD*= 13.76) conditions; *t*(33)=2.03, p=0.36. Results for domain 2 showed

males that participated in on-line mentoring (*M*=266, *SD*=113.11) and those that did not participate in on-line mentoring (*M*=264.61, *SD*= 13.24) conditions; *t*(34)=2.03, p=0.75. Results for domain 3 showed males that participated in on-line mentoring (*M*=254.56, *SD*=19.46) and those that did not participate in on-line mentoring (*M*=261.89, *SD*= 16.23) conditions; *t*(33)=2.03, p=0.23.

There was no significant difference in the EC-12 PPR TExES scores in domains 1-3 for females that participated in on-line mentoring and females that did not participate in on-line mentoring. Results for domain 1 showed females that participated in on-line mentoring (*M*=270.64, *SD*=16.32) and those that did not participate in on-line mentoring (*M*=265.20, *SD*= 19.87) conditions; *t*(83)=1.99, p=0.16. Results for domain 2 showed females that participated in on-line mentoring (*M*=266.77, *SD*=16.61) and those that did not participate in on-line mentoring (*M*=267.95, *SD*= 19.87) conditions; *t*(83)=1.99, p=0.76. Results for domain 3 showed females that participated in on-line mentoring (*M*=269.93, *SD*=14.37) and those that did not participate in on-line mentoring (*M*=264.14, *SD*= 18.93) conditions; *t*(80)=1.99, p=0.11.

Ethnicity.

There was no significant difference in the EC-12 PPR TExES scores in domains 1-3 for the African-American population that participated in on-line mentoring and the African-American population that did not participate in on-line mentoring. Results for domain 1 showed African-Americans that participated in on-line mentoring (*M*=261.17, *SD*=11.76) and those that did not participate in on-line mentoring (*M*=265.17, *SD*=

13.76) conditions; *t*(33)=2.03, p=0.36. Results for domain 2 showed African-Americans that participated in on-line mentoring (*M*=266, *SD*=113.11) and those that did not participate in on-line mentoring (*M*=264.61, *SD*= 13.24) conditions; *t*(34)=2.03, p=0.75. Results for domain 3 showed African-Americans that participated in on-line mentoring (*M*=254.56, *SD*=19.46) and those that did not participate in on-line mentoring (*M*=261.89, *SD*= 16.23) conditions; *t*(33)=2.03, p=0.23. These results suggest that on-line mentoring does not have an effect on African-American participants' EC-12 PPR TExES scores for domains 1-3.

There was no significant difference in the EC-12 PPR TExES scores in domains 1-3 for the Hispanic population that participated in on-line mentoring and the Hispanic population that did not participate in on-line mentoring. Results for domain 1 showed that Hispanics that participated in on-line mentoring (*M*=257.36, *SD*=19.86) and those that did not participate in on-line mentoring (*M*=260.91, *SD*= 17.44) conditions; *t*(20)=2.09, p=0.66. Results for domain 2 showed Hispanics that participated in on-line mentoring (*M*=265.73, *SD*=7.36) and those that did not participate in on-line mentoring (*M*=259.91, *SD*= 20.06) conditions; *t*(13)=2.16, p=0.38. Results for domain 3 showed Hispanics that participated in on-line mentoring (*M*=259.36, *SD*=17.29) and those that did not participate in on-line mentoring (*M*=264.18, *SD*= 15.22) conditions; *t*(20)=2.09, p=0.50. These results suggest that on-line mentoring does not have an effect on Hispanic participants' EC-12 PPR TExES scores for domains 1-3.

There was no significant difference in the EC-12 PPR TExES scores in domains 1-3 for the White population that participated in on-line mentoring and the White population that did not participate in on-line mentoring. Results for domain 1 showed that

Whites that participated in on-line mentoring (*M*=271.10, *SD*=12.91) and those that did not participate in on-line mentoring (*M*=269.10, *SD*= 13.40) conditions; *t*(80)=1.99, p=0.49. Results for domain 2 showed Whites that participated in on-line mentoring (*M*=267.20, *SD*=18.16) and those that did not participate in on-line mentoring (*M*=268.44, *SD*= 20.04) conditions; *t*(79)=1.99, p=0.77. Results for domain 3 showed Whites that participated in on-line mentoring (*M*=265.66, *SD*=18.34) and those that did not participate in on-line mentoring (*M*=263.49, *SD*= 17.49) conditions; *t*(80)=1.99, p=0.58. These results suggest that on-line mentoring does not have an effect on White participants' EC-12 PPR TExES scores for domains 1-3.

Research Question One

Research question one asked if there is a significant difference in scores on domains 1-3 in the EC-12 Pedagogy and Professional Responsibility Texas Examination of Educators of interns who received on-line mentors in addition to on-campus mentors, as compared to interns who received only on-campus mentors. Given the data from the actual mean domain scores, the total population of those who participated in online mentoring (N=62) outscored the comparison population of those who did not participate in online mentoring in all three domains. However, when 2 tailed *t*-tests for significant statistical differences were conducted on the scores of these groups, no statistical significant difference was found.

When the mean test scores on domains 1-3 of the total male population of the interns that received on-line mentoring were analyzed, the only domain in which these male interns outscored the male interns that did not receive online mentoring was domain

2. However, the results of the *t*-tests on the means of the male populations showed that there was not a significant difference in the mean scores of any of the domains.

When the mean test scores on domains 1-3 of the total female population of the interns that received on-line mentoring were analyzed, the only domains in which these female interns outscored the females interns that did not receive online mentoring were domains 1 and 3. However, the results of the *t*-tests on the means of the female populations showed that there was not a significant difference in the mean scores of any of the domains.

When the mean test scores on domains 1-3 of the total African-American population of the interns that received on-line mentoring were analyzed, the African-American interns outscored the African-American interns that did not receive online mentoring in every domain. However, the results of the *t*-tests on the means of the African-American populations showed that there was not a significant difference in the mean scores of any of the domains.

When the mean test scores on domains 1-3 of the total Hispanic population of the interns that received on-line mentoring were analyzed, the only domain in which the Hispanic interns outscored the females that did not receive online mentoring was domain 2. However, the results of the *t*-tests on the means of the Hispanic populations showed that there was not a significant difference in the mean scores of any of the domains.

When the mean test scores on domains 1-3 of the total White intern population of the interns that received on-line mentoring were analyzed, the only domains in which these White interns outscored the White interns that did not receive online mentoring were domains 1 and 3. However, the results of the *t*-tests on the means of the White

populations showed that there was not a significant difference in the mean scores of any of the domains.

Examination of Survey Responses of Interns Who Participated in On-line Mentoring

Results of the differences in mean scores and their lack of statistical significance when compared to counterparts who did not participate in on-line mentoring, has already been discussed in the present study. As numbers have already been discussed, the human element and voice as to the perception of effectiveness and satisfaction of face to face mentoring and support compared to on-line mentoring and support is also of value. 60% of the interns had their field supervisor who made observation visits on-campus as their on-line mentor. 40% of the interns did not have their field supervisor as their on-line mentor. In the on-line mentoring course, interns also had the opportunity to post messages or questions to fellow interns on-line. On-line interaction between interns was not required so all postings made to one another were made on a voluntary basis. The on-line survey also asked interns to share their experiences with these on-line postings. Intern perception will be identified through the results of survey responses.

62 interns who participated in the Region 4 Teacher Alternative Certification Program for the 2010-2011 school year completed and returned an electronic survey regarding their experience as an intern. These interns are the same interns who composed the on-line mentoring participant group that whose test data was discussed in the present study. Responses to questions that related to on-line mentoring, face to face mentoring, and interaction with the campus principal, and the topics covered in domains 1-3 of the

EC-12 PRR TExES (the lesson cycle, lesson planning and classroom management) were examined due to their significance of topic in the present research.

Support with Lesson Planning.

Interns were asked to rate the effectiveness of the support received from the principal appointed on-campus mentor with lesson planning. Table 10 displays intern responses by total and subpopulation. A total of 87% interns responded that the support from the on-campus mentor on lesson planning was effective or extremely effective.

Table 10

Effectiveness of the Campus Mentor on Lesson Planning

Participant	Not Effective	Somewhat Effective	Neutral	Effective	Extremely Effective
Male	1	--	2	5	10
Female	1	4	1	19	18
African-American	1	--	--	--	9
Hispanic	--	--	1	4	6
White	1	4	2	20	13
Total	2	4	3	24	28

Note. -- indicates no selection.

In contrast, when asked the same question regarding on-line mentor effectiveness, 50% of the interns responded that it was effective or extremely effective in regard to lesson planning. Table 11 shows the responses by total and subpopulations.

Table 11

Effectiveness of the On-line Mentor on Lesson Planning

Participant	Not Effective	Somewhat Effective	Neutral	Effective	Extremely Effective
Male	--	1	1	8	7
Female	--	7	3	18	17
African-American	--	1	--	3	6
Hispanic	--	1	--	7	3
White	--	6	4	16	15
Total	--	8	4	26	24

Note. -- indicates no selection.

When asked the same question regarding on-line posting effectiveness, 66% of the interns responded that it was effective or extremely effective in regard to lesson planning. Table 12 shows the responses by total and subpopulations.

Table 12

Effectiveness of On-line Postings on Lesson Planning

Participant	Not Effective	Somewhat Effective	Neutral	Effective	Extremely Effective
Male	2	2	--	8	6
Female	4	11	2	18	9
African-American	--	1	1	3	5
Hispanic	1	1	--	8	1
White	5	11	1	15	9
Total	6	13	2	26	15

Note. -- indicates no selection.

Support with the Lesson Cycle.

Interns were asked to rate the effectiveness of the support received from the principal appointed on-campus mentor with the lesson cycle. Table 13 displays intern responses by total and subpopulation. A total of 74% interns responded that the support from the on-campus mentor on lesson cycle was effective or extremely effective.

Table 13

Effectiveness of the Campus Mentor on the Lesson Cycle

Participant	Not Effective	Somewhat Effective	Neutral	Effective	Extremely Effective
Male	2	1	1	6	8
Female	--	8	4	15	17
African-American	1	--	--	1	8
Hispanic	1	1	1	4	4
White	--	9	4	16	13
Total	2	9	5	21	25

Note. -- indicates no selection.

Interns were asked to rate the effectiveness of the support received from the on-line mentor with the lesson cycle. Table 14 displays intern responses by total and subpopulation. A total of 87% interns responded that the support from the on-line mentor on the lesson cycle was effective or extremely effective.

Table 14

Effectiveness of the On-line Mentor on the Lesson Cycle

Participant	Not Effective	Somewhat Effective	Neutral	Effective	Extremely Effective
Male	--	2	--	9	6
Female	1	4	1	23	16
African-American	--	1	--	4	5
Hispanic	--	--	--	7	4
White	1	5	1	21	13
Total	1	6	1	32	22

Note. -- indicates no selection.

When asked the same question regarding on-line posting effectiveness, 68% of the interns responded that it was effective or extremely effective in regard to the lesson cycle. Table 15 shows the responses by total and subpopulations.

Table 15

Effectiveness of On-line Postings on the Lesson Cycle

Participant	Not Effective	Somewhat Effective	Neutral	Effective	Extremely Effective
Male	--	3	--	12	2
Female	2	12	3	23	5
African-American	--	1	1	5	3
Hispanic	1	2	--	8	--
White	1	12	2	22	4
Total	2	15	3	35	7

Note. -- indicates no selection.

Support with Classroom Management.

Interns were asked to rate the effectiveness of the support received from the principal appointed on-campus mentor with classroom management. Table 16 displays intern responses by total and subpopulation. A total of 77% interns responded that the support from the on-campus mentor with classroom management was effective or extremely effective.

Table 16

Effectiveness of the Campus Mentor on Classroom Management

Participant	Not Effective	Somewhat Effective	Neutral	Effective	Extremely Effective
Male	1	1	1	6	8
Female	2	7	2	15	19
African-American	1	--	--	2	7
Hispanic	1	1	--	5	4
White	1	7	3	14	16
Total	3	8	3	21	27

Note. -- indicates no selection.

Interns were asked to rate the effectiveness of the support received from the on-line mentor with classroom management. Table 17 displays intern responses by total and subpopulation. A total of 87% interns responded that the support from the on-line mentor with classroom management was effective or extremely effective.

Table 17

Effectiveness of the On-line Mentor on Classroom Management

Participant	Not Effective	Somewhat Effective	Neutral	Effective	Extremely Effective
Male	--	3	--	6	9
Female	1	4	--	20	19
African-American	--	1	--	3	5
Hispanic	--	1	--	7	5
White	1	5	--	16	18
Total	1	7	0	26	28

Note. -- indicates no selection.

When asked the same question regarding on-line posting effectiveness, 66% of the interns responded that it was effective or extremely effective in regard to classroom management. Table 18 shows the responses by total and subpopulations.

Table 18

Effectiveness of Mentoring Postings on Classroom Management

Participant	Not Effective	Somewhat Effective	Neutral	Effective	Extremely Effective
Male	1	1	--	12	2
Female	2	15	2	19	8
African-American	--	1	1	4	3
Hispanic	1	2	--	8	4
White	2	13	1	19	3
Total	3	16	2	31	10

Note. -- indicates no selection.

Satisfaction with Response Time.

Interns were asked to rate their satisfaction with response time to questions posed to the on-campus mentor and the on-line mentor. 90% of the interns responded that they were satisfied or extremely satisfied in regard to the on-campus mentor response time to questions. Table 19 shows the responses by total and subpopulations.

Table 19

Satisfaction with Campus Mentor Response Time

Participant	Extremely Dissatisfied	Dissatisfied	Neutral	Satisfied	Extremely Satisfied
Male	--	2	--	7	8
Female	--	1	3	20	21
African-American	--	--	--	1	8
Hispanic	--	1		6	4
White	--	1	3	20	17
Total	0	3	3	27	29

Note. -- indicates no selection.

94% of the interns responded that they were satisfied or extremely satisfied in regard to the on-line mentor response time to questions. Table 20 shows the responses by total and subpopulations.

Table 20

Satisfaction with On-line Mentor Response Time

Participant	Extremely Dissatisfied	Dissatisfied	Neutral	Satisfied	Extremely Satisfied
Male	--	--	--	8	9
Female	--	--	4	21	20
African-American	--	--	--	3	7
Hispanic	--	--	--	4	6
White	--	--	--	22	16
Total	0	0	4	29	29

Note. -- indicates no selection.

Positive Influence on Teaching Effectiveness.

Interns were asked to rate their agreement that only face to face mentoring positively influenced their effectiveness as teachers. Table 21 displays the results by total population and subpopulation. 44% of the interns responded that they agreed or strongly agreed that only face to face mentoring positively influenced their effectiveness as teachers.

Table 21

Positive Influence of Only Face to Face Mentoring

Participant	Strongly Disagree	Disagree	Agree	Strongly Agree
Male	3	6	8	1
Female	1	25	14	4
African-American	--	8	2	--
Hispanic	1	4	4	2
White	3	19	16	3
Total	4	31	22	5

Note. -- indicates no selection.

Interns were asked to rate their agreement that only on-line mentoring positively influenced their effectiveness as teachers. Table 22 displays the results by total population and subpopulation. 24% of the interns responded that they agreed or strongly agreed that only on-line mentoring positively influenced their effectiveness as teachers.

Table 22

Positive Influence of Only On-line Mentoring

Participant	Strongly Disagree	Disagree	Agree	Strongly Agree
Male	3	8	5	2
Female	3	33	6	2
African-American	1	7	1	1
Hispanic	1	8	1	--
White	4	26	9	3
Total	6	41	11	4

Note. -- indicates no selection.

Interns were asked to rate their agreement that both face to face and on-line mentoring positively influenced their effectiveness as teachers. Table 23 displays the results by total population and subpopulation. 92% of the interns responded that they agreed or strongly agreed that both face to face and on-line mentoring positively influenced their effectiveness as teachers.

Table 23

Positive Influence of Both On-line Mentoring and Face to Face Mentoring

Participant	Strongly Disagree	Disagree	Agree	Strongly Agree
Male	--	1	11	6
Female	--	4	23	17
African-American	--	--	3	5
Hispanic	--	--	7	5
White	--	--	24	13
Total	0	5	34	23

Note. -- indicates no selection.

Amount of Communication.

Interns were asked to share how many times a week they communicated specifically regarding lesson planning. Table 24 displays the complete results for communication with the on-campus mentor, the on-line mentor, or fellow participants on on-line mentoring. In respect to communication with the on-campus mentor regarding lesson planning, the majority of the interns reported that they communicated 2 times a week. In respect to communication with the on-line mentor regarding lesson planning, the majority of the interns reported that they communicated 2 times a week. In respect to communication with fellow participants in on-line mentoring regarding lesson planning, the majority of the interns reported that they communicated 0 times a week.

Table 24

Amount of Weekly Communication Regarding Lesson Planning

Communication Type	0 Times	1 Time	2 Times	3 Times	4 Times	5 Times	5 or More Times
On-Campus Mentor	22	--	28	--	10	2	10
On-line Mentor	23	--	34	1	2	--	2
Fellow Participants in On-line Mentoring	35	--	22	1	4	--	--

Note. -- indicates no selection.

Interns were asked to share how many times a week they communicated specifically regarding the lesson cycle. Table 25 displays the complete results for communication with the on-campus mentor, the on-line mentor, or fellow participants on on-line mentoring. In respect to communication with the on-campus mentor regarding the lesson cycle, the majority of the interns reported that they communicated 2 times a week. In respect to communication with the on-line mentor regarding the lesson cycle, the majority of the interns reported that they communicated 2 times a week. In respect to communication with fellow participants in on-line mentoring regarding the lesson cycle, the majority of the interns reported that they communicated 0 times a week.

Table 25

Amount of Weekly Communication Regarding the Lesson Cycle

Communication Type	0 Times	1 Time	2 Times	3 Times	4 Times	5 Times	5 or More Times
On-Campus Mentor	19	--	33	1	7	--	2
On-line Mentor	26	--	32	1	3	--	--
Fellow Participants in On-line Mentoring	37	--	25	--	--	--	--

Note. -- indicates no selection.

Interns were asked to share how many times a week they communicated specifically regarding classroom management. Table 26 displays the complete results for communication with the on-campus mentor, the on-line mentor, or fellow participants on on-line mentoring. In respect to communication with the on-campus mentor regarding classroom management, the majority of the interns reported that they communicated 2 times a week. In respect to communication with the on-line mentor regarding classroom management, the majority of the interns reported that they communicated 2 times a week. In respect to communication with fellow participants in on-line mentoring regarding the lesson cycle, the majority of the interns reported that they communicated 0 times a week.

Table 26

Amount of Weekly Communication Regarding Classroom Management

Communication Type	0 Times	1 Time	2 Times	3 Times	4 Times	5 Times	5 or More Times
On –Campus Mentor	13	--	36	--	5	--	8
On-line Mentor	26	1	29	2	3	--	1
Fellow Participants in On-line Mentoring	35	--	22	3	1	--	1

Note. -- indicates no selection.

Research Question Two

Research question two asked if there is a difference between the perception of mentoring effectiveness reported by interns between their on-campus mentors and their on-line mentors. A higher percentage of survey respondents rated the on-campus mentor as effective or extremely effective than the on-line mentor only in regard to the area of lesson planning. A higher percentage of survey respondents rated on-line mentoring effective or extremely effective in the areas of the lesson cycle and classroom management. Across the total number of the population (N=62) and all of its subpopulations, the sum of those who rated on-campus and on-line support in each area (lesson planning, lesson cycle, and classroom management) as effective or extremely effective was greater than those who rated each type of support as somewhat effective, not effective or neutral.

Research Question Three

Research question three asked if on-line mentoring perceived by interns to have a greater positive influence on their effectiveness as teachers than on-campus mentoring. The results of the survey showed that more interns reported that they agree or strongly agreed that only face to face mentoring had a positive influence on their effectiveness (44%) than those who reported that they agree or strongly agree that only on-line mentoring positively influenced their effectiveness as teachers (24%). However, 92% of the interns surveyed responded that they agree or strongly agree that both face to face and online mentoring had a positive influence on their effectiveness as teachers.

Those that responded with agree or strongly agree that only the face to face mentor had a positive influence on their effectiveness as a teacher, were asked to report in what areas they were positively influenced (lesson planning, lesson cycle or classroom management). The areas (in descending order in number of responses) were: classroom management, lesson planning, and lesson cycle.

Those that responded with agree or strongly agree that only the on-line mentor had a positive influence on their effectiveness as a teacher, were asked to report in what areas they were positively influenced (lesson planning, lesson cycle or classroom management). The areas (in descending order in number of responses) were: lesson planning, lesson cycle, and classroom management. Of those that responded with agree or strongly agree, 62% responded that their online mentor was also their field supervisor who made observation visits on campus.

Interns were given the opportunity on the survey to give feedback on their on-campus or online mentoring experiences and suggest changes for improvement. Below are written comments made regarding on-campus mentoring:

- I had really excellent support from my campus assigned mentor and my Region 4 intern supervisor. Both are exceptional professionals who are more than willing to share knowledge and let me grow with it.
- Wish the mentors were pre-screened by Region IV. My ""mentor"" did less for me than other teachers at my campus, and I'm paying her. She did the requirements (observations), but did not help me with the essentials. Very disappointed.
- Excellent support from my Region 4 field supervisor, my mentor, my school supervisor, and the staff at school.
- I would like more feedback/support from my principal
- I received a lot of support from an Instructional Coach on my campus. She was not my mentor, however she helped me throughout the whole year, and without her I don't know how I would have completed the year I am about to complete.
- Mentor needs to be at an objective distance from team environments.
- I would appoint a mentor based on their passion for teaching, and their POSITIVE interaction with students.
- My mentor, X (name omitted to protect identity), was not a mentor. She left me to my own devices. So, I had to learn by trial and error or by consulting other staff and resources. I would make the mentor more accountable to the ACP that she's receiving a stipend from as well from the District. The intern supervisor

needs to be present at some of our meetings; make sure that the mentor conducts meetings and turns in all paperwork; and if there is a problem between the mentor and the mentee as it was in my case get herself and the principal involved to resolve the matter properly. If you can't hold the mentor accountable, then don't pay her. That money that came out my bank account twice a month for this internship was hard-earned and I'd appreciate it if it was actually being put to good use. Don't use X ever again.

- I would've liked to have a specific plan and established boundaries. I feel that there was a lot of support, but it was not in an organized way which sometimes turned into a stressful experience.
- My mentor was accessible and helpful, always ready to share information, train, teach, and help me to succeed.
- I would keep the observations I did to my mentor because I learned a lot watching her teaching.
- We have a good mentoring program in our district and I would not change any aspect of it because it was very helpful.
- I could keep the open communication and the monitoring. I think I would decrease the monitoring to 15 minute increments and increase the number of times the new teacher is monitored, just because of the difficulty to get someone to cover your classroom for 45 minutes.
- Mentors assigned to first year teachers should teach the same subjects as first year teachers. My mentor was not helpful at all in that respect.

- Better selection process for the campus mentor, possibly using other effective mentors from other campuses
- Ms. Y (name changed to protect identity) was right next door, so I could stop by between classes to check to make sure I was presenting material as needed and get ideas for classroom management
- I would keep having the mentor have weekly or daily meetings with the mentee-those meetings were helpful. I would get rid of the classroom visits-scheduling those was hard and stressful for an overworked biology teacher and I felt guilty asking her if she had time to observe me.

Below are examples of the comments made regarding on-line mentoring.

- I really liked being able to share ideas and advice during the online portion of training. I was never disappointed over the help and support that was given when I asked a question or need assistance
- My online facilitator was awesome. I would recommend him to anyone wanting to become a teacher. Feedback was great and allowed me to have the confidence to continue my teaching career.
- Posts from fellow participants were not effective due to lack of effort. Thought and planning were not rewarded more than underdeveloped answers. It would be helpful if appointed on campus mentors were not members of that teacher's team. Having on campus mentors part of the same team limited communication.
- I really liked being able to share ideas and advice during the online portion of training.

- There was only one other teaching candidate, a pre-school teacher, in the online teaching seminar. Our situations had nothing in common other than students under 18. The seminar was just one more task I had to do in a busy work day and really did not prepare me for any of the realities of the classroom. My school appointed Mentor, Ms. W (named changed to protect identity) was extremely helpful and instrumental in my survival this year.
- It worked well for me.
- My online facilitator and I communicated more often than my on-campus principal. He gave me great feedback on my classroom teaching and lesson cycle/planning. He visited my classroom more often than my principal.
- I believe the online mentoring part of the program was appropriate and helpful.
- I think the idea is good, but the face to face interaction is far more valuable.
- I think that I just did not need anything more from it. My on campus mentor provided what I needed. For some others, the online portion may have been more important.
- I would keep it the way it is. I had a positive experience and would not change a thing.
- I would not change anything. There were many valuable tools that could be used in the classroom/gym. It was not too time consuming which is nice for beginning teachers.
- I would probably extend it and make it more interactive throughout the school year.

- My mentor was definitely very helpful. She was and still is a great help in all areas. Because of the fact that I had been in the classroom for 2 yrs. as a Para Professional, the online communication was not of great use, but I see how important it is for someone who has never been in the classroom.
- I would keep the forums because it is a very good interchange of ideas and knowledge.
- Everything I learned through my supervisor from the Beginning Training Seminar was very helpful and was always in a positive way. I would not change anything.
- Keep postings.
- I like that it's flexible and that you have enough time to participate and answer the weekly question. I feel that we need more curriculum (readings and assignments) like it was during pre-service to enhance our discussions and therefore our learning. I think it needs to be interactive. Perhaps, we can have the online facilitator can give live lectures online.
- I would keep the postings. These allow students to review what others are saying, and can thereby perceive ways in which to improve their own instruction.
- I really appreciate all the help.
- I would keep it the way it is. I had a positive experience and would change a thing.

On-line Postings in the On-line Mentoring Course

Interns from the 2010-2011 school year were required to participate in Beginning Teaching Seminar, which was an 8 week on-line course. In addition to the reading of on-line modules focused on the lesson cycle, lesson planning, and classroom management (topics covered on domains 1-3 on the EC-12 PPR TExES), interns were required to make at least one posting a week in response to a question which covered the mentioned topics. The on-line mentor was responsible for reading the response and replying on-line. Additional questions which were posted were also answered. Since the postings were visible to all interns enrolled in the course and to the on-line mentor, interns could pose questions to each other, make replies, or give other comments or tips.

A compilation of all postings made by interns was made and analyzed through the use of text analysis software. Quantitative content analysis allows for the identification of coded features that occur frequently amongst discussions which allow for the identification of themes (Abeyasekera, 2010). A total of 6, 645 sentences were posted in total by the interns. Table 27 displays the most mentioned phrases according to topic in the on-line postings. Interns mentioned phrases which contained “beginning of the school year” and “taking students through the lesson cycle” the most. This suggests that the teachers were greatly concerned with these areas.

Table 27

Most Mentioned Phrases According to Topic

Phrase Topic	Occurrence
Beginning of the school year	295
Taking students through the lesson cycle	238
End of the school day	83
Being prepared to teach at the beginning of the school year	79
Discussion of what they need to work on	53
Discussion of what has been learned	43
Discussion of subject and grade taught	39
Organization challenges	36
Positive relationships with parents	35
Conveying expectations to students	33
The first day of school	24
Ways to build positive relationships	16
parents	11
Feeling adequately prepared to teach students	11
To do lists	7

In examining the single words that were posted online, “students” was mentioned over 1,500 times. The next greatest words posted were “class” 526 times and “classroom,” 511 times. Table 28 represents the most commonly used words and their respective occurrences in the on-line postings.

Table 28

Most Words in Total Postings

Word	Occurrence in All Postings	Word	Occurrence in All Postings	Word	Occurrence in All Postings
students	1581	relationship	56	opportunity	33
class	526	communication	55	contact	32
classroom	511	procedures	54	resources	32
parents	332	skills	53	relationships	32
teach	269	expected	51	easier	31
teachers	159	felt	51	knew	31
lessons	155	curriculum	48	calls	31
activities	148	homework	47	successful	30
parents	11	transitions	47	supplies	30
behavior	136	taught	46	concept	29
learn	126	grades	46	struggle	28
prepared	144	schedule	46	engaged	28
organized	144	problems	44	assignments	28
classes	118	http	40	teachable	27
management	112	worksheets	40	objective	27
transition	102	improve	39	abilities	26
TEKS	101	computer	39	subjects	26
challenge	101	realize	39	effective	26
should	93	organizational	38	professional	25
could	91	assignment	38	consistent	24
trying	90	mentor	38	routine	24
expectations	84	involved	37	pass	24
information	84	weekly	37	provide	24
planning	82	explain	36	required	24
believe	81	centers	36	discuss	24
children	81	issue	36	procedure	24
plans	79	tried	35	philosophy	23
ask	77	creative	35	volunteer	23
team	67	enjoy	34	TAKS	23
problem	63	thinking	34	organize	23
fun	62	consequences	33	confident	23
issues	57	game	33	incorporate	22
difficult	57	expect	33	prepare	22
period	56	asked	33	struggling	22
task	56	instruction	33	resource	22

Research Question 4

Research question four asks are the most common themes for which interns ask assistance or discuss on-line with their fellow interns or on-line mentor. The intern postings were examined and coded to identify emerging themes among the questions that interns posed and comments posted to their on-line mentor and fellow interns. Four themes were identified: Reflections on The School Year or Their Teaching, Requests for Assistance or Tips, Unsolicited Recommendations to Fellow Interns, Challenges Experienced as a New Teacher. The intention of the themes of the questions and statements that interns ask most frequently is so that campus principals may choose to be proactive in responding to future intern needs or desire for clarity or instruction that may not be communicated to them.

The following are the subjects of the postings that fall under the theme of Reflections on The School Year or Their Teaching.

- Need to be consistent with the rules from day one
- Importance of being prepared for every lesson
- Need to slow down when talking to students
- Need to lower volume of voice when teaching
- Need to devote more time for practicing procedures over and over at the beginning of the school year
- The need to be consistent with classroom rules from the first day of school
- Realization that if the teacher exhibits a positive attitude (real or not), that the classroom will run smoothly

- Transitions are importance and much time needs to be devoted to demonstrating to the students how they should be done
- Importance of conducting daily reflections on how they would do a lesson over again next time or in the following school year.
- How they will handle student discipline differently next school year
- The importance of the role that preparation plays in keeping a room clam
- Reflections on how to improve as a teacher next year
- Realization that students in early grades do better with less talking from the teacher and more hands on activities
- Realizing that keeping strict routines and procedures is best for their students in special education
- Realization that they can make their lives better as teachers if they ask more questions
- Realization of the importance of sharing with the students the expectations that the teacher has for them
- Need to learn to ask for advice and be able to take advice
- Realization that they can relax somewhat and not be so critical on their performance as teachers because all new teachers are faced with challenges
- Felt inadequate at the beginning of the school year but now feel more positive since they have learned and have shared experiences so they know what to do differently next school year to be better teachers

The following are the subjects of the postings that fall under the theme of Requests for Assistance or Tips.

- Advice on transitions
- Ways to become better organized
- Ways to keep on schedule
- Ways to manage one's time in a better way
- Ways to motivate students
- Ways to keep students from talking excessively
- What to do with students who finish work long before the others
- How to make time one's day to complete, send out, and review daily folders that are sent to parents
- How not to panic when grades are due
- Suggestions on how to integrate more activities into a lesson and lessen time spent just giving out information to students
- Asked for suggestions on hand-on activities that have worked for others in the classroom
- How to modify lessons appropriately for students with special needs (inclusion settings)

The following are the subjects of the postings that fall under the theme of Unsolicited Recommendations to Fellow Interns.

- Ways to build relationships with others (ideas and referrals to specific websites)
- Integrate YouTube into lessons if the school does not block the website
- Give students lots of positive, immediate feedback
- The teacher needs to set the example for the behavior expected from the students
- Being prepared for lessons reduces one's stress level
- Ways to get immediate feedback from students during lessons
- Shared websites that contain ideas for lessons
- Being positive helps to make a good classroom
- Ways to communicate better with parents
- The importance of having routines and structure in the classroom
- Take advantage of teachable moments even if it causes a change in schedule
- Change the lesson if it is not going well
- The importance of meeting with fellow teachers weekly
- The importance of sharing positive points with parents about their child, not just negative points
- Importance of having learning centers in the classroom and using them consistently

- Importance of having work for students to begin as soon as they enter the classroom
- The importance of modeling behaviors for students
- Recommended ways to use technology in the classroom
- Recommended having students work in groups as much as possible
- Recommended the use of graphic organizers

The following are the subjects of the postings that fall under the theme of Challenges Experienced as a New Teacher.

- Lack of organization skills
- Planning for multiple grade levels
- Planning for students in special education
- Feelings of stress
- Uncertainty about how to integrate Individualized Education Plan (IEP) goals into the lesson cycle in a general education classroom
- Not having enough time to cover the complete lesson cycle
- Uncertainty about how to create more engaging hooks to engage students in the lesson
- Starting the school year with little or no classroom materials
- Absence of planning time with other teachers on campus at the beginning of the school year
- Discipline issues and classroom management issues resulting from being a traveling teacher

- Concern about the number of classes to prepare for in one day
- Concern about not being able to learn the names of all of the students quickly
- Inability to be more creative with lessons and activities due to having to cover too much information in a small amount of time
- Lack of time management skills
- Excessive amount of administrative paperwork to complete
- Having to take an excessive amount of papers home to grade
- Desire to be able to use less worksheets
- Concern about not being able to teach all TEKS due to time spent on benchmarking and test preparation for the state test
- Having to create lesson plans with experienced teachers who do not share all parts of the lesson plan
- Inability to teach all subjects within the given time
- Inability to cover all objectives required in a school year
- Feeling overwhelmed with resources available on campus due to lack of time to review them in order to plan their use effectively
- Frustration with students who do not start the year with basic knowledge required for the grade level
- Lack of time given to teachers to prepare their room for the new school year
- Concern about teaching consuming too much person time

- Special education teachers are challenged with keeping up with student schedules
- Special education teachers have little time to spend teaching due to Admission, Review and Dismissal Committee Meetings (ARDs)
- Concerns about inability to teach students of different achievement levels in the same classroom
- Feeling overwhelmed with the number of meetings and professional development sessions that must be attended during the school year

Within the theme of Reflections on The School Year or Their Teaching, the subject that was most discussed the most was the need to be consistent with the classroom rules starting on the first day of school. Many interns reported that they heard this during training but for unspecified reasons, the interns did not practice consistency until after they encountered issues with discipline. Interns reported that they needed to devote more time at the beginning of the school year to practicing procedures repeatedly. The procedures that the interns discussed were the procedure for passing out school supplies, the procedure for entering and exiting the classroom, and the procedure for walking in the hallways.

Within the theme of Requests for Assistance or Tips, the issue for which the most assistance was asked was transitions. The interns mentioned the following transitions specifically: moving from one subject to another, going to the restroom and getting back to work after returning from the restroom, focusing back on work after returning from lunch, physical education class, or recess, focusing on work after an abrupt change in the daily schedule, entering and exiting the classroom at the start and close of the school day.

Another issue that interns repeatedly asked for assistance with was help motivating students. The interns mentioned needing assistance specifically with motivating students that appear to have no interest in their work, say that they are bored in class, take no pride in their work, and motivating students who do not like a specific subject that is being taught. The subject in this case, that was specifically mentioned, was math. Interns also asked for assistance with ideas for ways that they can stop excessive talking in the classroom. Interns who asked for assistance with talking were those that taught elementary and middle school.

Although interns were not required to communicate with each fellow interns on-line, many took it upon themselves to share and recommend strategies, ideas, or tips for what was successful in their classroom. In these cases, the tips, strategies, or ideas posted were unsolicited, in that these postings were not in response to a fellow intern's request for assistance with a certain problem or issue. Three subjects of these types of postings dominated the discussion board. The three recommendations were: the recommendation of specific websites that provided effective classroom management strategies, the recommendation to display a positive attitude because it will make a good classroom, and the importance of making sure that the teacher communicates with parents on positive subjects regarding the students and does not just communicate with parents to discuss the negative only.

In regard to the recommendation of the use of graphic organizers with students, postings detailed that graphic organizers worked especially well with students who are English Language Learners (ELL). On the recommendation of the teacher being the example for students, many postings specifically cited organization. Many postings

mentioned that the teacher cannot expect students to be organized if the teacher's desk or classroom is not organized. Additionally, interns mentioned that giving the appearance of being organized may increase the teacher's level of professionalism in the eyes of the students' parents.

In regard to the theme of challenges experienced as a new teacher, 5 challenges were mentioned the most by interns. These challenges were: lack of organization skills, lack of proficiency in creating engaging hooks for lessons, lack of time management skills, inability to teach content in the given time, absence of time to review all resources available in order to integrate them effectively into lessons.

Interns mentioned that they were challenged in the areas of planning for multiple grade levels that they are required to teach in middle and high schools. Interns mentioned that they lack the organizational skills to discover ways to reduce clutter in the classroom. Interns also mentioned that they lack the organizational skills to create lessons that also address the IEPs of students with special needs in their classroom (inclusion). Interns mentioned that they believed that their lack of organization skills caused them to feel stressed as teachers.

Interns mentioned that they felt challenged in the area of creating hooks to start lessons that were creative and would engage students in the lesson. These interns expressed their desire to be able to get the students interested in the lesson right at the beginning of the lesson.

Interns also made several postings on the topic of time management. Interns specifically mentioned that they feel that they took too many papers home each night to grade. Interns also mentioned that the amount of administrative paperwork that they are

required to complete interferes with their teaching time. A similar topic that was the subject of a high number of postings was the feeling of being overwhelmed with the number of resources available on campus for teachers to use in their lessons. Interns mentioned the printed material and books in the resource library and technology (software, computers, interactive boards). Interns reported that they do not have the time to adequately review and assess the resources fully in order to be able to integrate them effectively into the lessons taught. Interns also expressed their challenges with not being able to teach all of the subjects within their respective allotted times. Other interns mentioned that they feel challenged in that they feel that they will not be able to find the time to teach all of the objectives that they are required to teach in a school year

Some interns felt challenged when it came to planning in a group with experienced teachers. One intern mentioned that since experienced teachers have been teaching for so long, they do not write down all of the parts of the lesson since they know the lesson by memory and take the lesson cycle for granted. This is a challenge to interns who need each part of the lesson cycle communicated to them as they become more comfortable with teaching a new lesson.

Interns gave specific examples when they felt challenged with teaching a classroom that contains students who are on grade level but also contains students who do not have the basic skills required prior to the current grade level. Examples given were students who enter the fourth grade and do not know who to construct a sentence and students who enter 6^{th} grade and still do not have the multiplication tables memorized. Interns felt insecure with their abilities to help these students catch up yet still keep the rest of the class moving forward. Interns also mentioned that they felt challenged when it

came to being able to teach a class composed of students on many different academic levels.

Some interns mentioned that they were concerned about the amount of personal time that teaching was consuming. Examples given were spending large amounts of time after hours and on the weekends preparing for the next day. One intern mentioned that he did have parent volunteers on campus that could make copies or materials, but he could not make use of them because he was not yet at the point where he could plan in advance.

Interns that taught special education expressed challenges with keeping up with many complex student schedules. Since they taught a variety of grade levels and a variety of students that required additional services all at different times, planning adequately was challenging for them. These teachers also mentioned frustration with the amount of time that they spent away from instruction to prepare for and participate in ARDs.

Intern also expressed the challenges they faced specifically with starting the school year. Some interns reported that they had little or no materials or resources with which to start the school year (preparing the classroom and creating lessons). One intern mentioned that she had to "go begging" to experienced teachers for materials and items for her classroom. Additionally, some interns mentioned that they did not have adequate time to prepare their classroom and plan lessons for the first day and week of school because the days that teachers were required to work before school started were composed entirely of professional development trainings.

Chapter Five

Conclusions and Summary

Introduction

Since school principals are the school leaders and the closest administrator to the faculty, it is important for principals to provide support for all teachers, but especially the new teachers on campus. According to Mager (1992), "After preservice preparation, the experience of becoming a teacher continues into the inservice years of a teacher's career. A teacher continues to learn about teaching as the practice is carried out" (p. 4). Therefore, it is important for principals to know what areas of support new teacher interns need and what areas of teaching need clarification, especially since as a review of the literature has shown, some new teachers do not feel comfortable asking for assistance or advice for a variety of reasons. Once such reason, which was discussed in the review of the literature and in the comments from interns on the survey, is the matching of a mentor that is uncooperative, is absent, or is not familiar with the grade or subject the new teacher is teaching. Online mentoring was studied as a possible tool for allowing new teachers to ask questions, seek advice or tips, assist fellow new teachers in Texas, and reflect on their teaching; in an environment that consists of others who are also new teachers which is supported by an online mentor who is not a campus administrator.

The researcher hopes that the data provided in this study will give principals an insight into the clandestine world of their new teachers so that principals will be able to identify the needs and provide proactive support and professional development opportunities to help new teachers continue in the profession, but most of all, to be the best teacher possible for their students. Additionally, it is the hope of the researcher that

campus principals, by the reading of this study, are reminded of the effect that their selection on an on-campus mentor has for better or worse on new interns and that interns do take notice of the amount of principal involvement and support they receive.

Overview of the Study

The study examined three overlapping sets of data: the EC-12 PPR TExES results for domains 1-3 of alternative certification teacher interns who received and did not receive on-line mentoring, responses on alternative certification survey from interns who participated in on-line mentoring, and the postings made by alternative certification interns in the on-line mentoring course. These data sets overlap in that domains 1- 3 on the EC-12 PPR TExES cover the lesson cycle, lesson planning, and classroom management, which are the three areas of study modules and initial discussion topics in the online mentoring forum. Research by Chelsey (as cited in Anthony, Gimbert, Fultz, & Parker, 2011) maintained that teachers from alternative certification programs report that they need additional assistance with topics such as effective instructional planning and classroom management. This need for assistance coupled with the fact that instructional planning and classroom management are tested on the EC-12 PPR TExES; were the reasons that lesson planning, the lesson cycle, and classroom management were selected as topics of interest in the present study. Postings by the interns in the on-line mentoring course gave insight into the challenges, uncertainties, tips, and celebrations of the interns with lesson planning, the lesson cycle, and classroom management.

Mentoring is just one part of a high quality support structure (Ganser, 2002). On-line mentoring was examined in this study as a possible method of support to interns in the Region 4 Teacher Alternative Certification Program in Texas. It is the hope of the

researcher that the data found in this study will not only serve to assist alternative certification programs in Texas to meet the preparation needs of its interns, but also to serve to assist campus principals to also identify the perhaps clandestine needs of their new teachers. Secondly, it is the hope of the researcher that the data from this study may inspire certification programs or campuses to utilize on-line mentoring as a way overcome mentoring obstacles and to attempt to meet the mentoring needs of interns who require additional or alternative support.

The three data sets: EC-12 PPR TExES domains 1-3 test results, survey responses, and intern postings made in the on-line mentoring course; were analyzed in order to seek answers to the following research questions.

- Is there a significant difference in scores on domains 1-3 in the EC-12 Pedagogy and Professional Responsibility Texas Examination of Educators of interns who received on-line mentors in addition to on-campus mentors, as compared to interns who received only mentors?
- Is there a difference between the perception of mentoring effectiveness reported by interns between their on-campus mentors and their on-line mentors?
- Is on-line mentoring perceived by interns to have a greater positive influence on their effectiveness as teachers than on-campus mentoring?
- What are the most common themes for which interns ask assistance or discuss on-line with their fellow interns or on-line mentor?

Discussion of the Test Results

The scores of domains 1-3 on the EC-12 PPR TExES of two sets of interns were compiled. One set were the scores from the interns in the Region 4 Teacher Alternative Certification Program for the 2010-2011 school year who participated in on-line mentoring. The other set consisted of the scores of interns in the Region 4 Teacher Alternative Certification Program for the 2006-2007 school year who did not participate in on-line mentoring. This data was used to answer the question: Is there a significant difference in scores on domains 1-3 in the EC-12 Pedagogy and Professional Responsibility Texas Examination of Educators of interns who received on-line mentors in addition to on-campus mentors, as compared to interns who received only mentors?

A comparison of the mean scores on domain 1 for each intern data set was conducted. The results showed that overall, the interns who received on-line training had higher scores on domain 1 of the EC-12 TExES PPR than the interns who did not receive on-line mentoring. Upon examination of the subpopulations of these two intern groups, the female, African-American, and White populations that received on-line mentoring also achieved higher test scores than their counterparts that did not receive on-line mentoring. The Hispanic interns were the only population that had a different outcome. In this case, Hispanic interns who did not receive on-line mentoring had higher scores on domain 1 than their counterparts who did receive on-line mentoring. However, when a two-tailed *t*-test of unequal variance was conducted on the domain 1 EC-12 PPR TExES scores of the group of interns who received on-line mentoring and those who did not receive on-line mentoring, the results showed that there was no significant difference

between the scores of the overall population. These results held true for each of the subpopulations as well: male, female, African-American, Hispanic and White.

A comparison of the mean scores on domain 2 for each intern data set was conducted. The results showed that overall, the interns who received on-line training had higher scores on domain 2 of the EC-12 TExES PPR than the interns who did not receive on-line mentoring. These results were also shown in the male, African-American, and Hispanic populations that received on-line mentoring when compared with their counterparts that did not receive on-line mentoring. The female and White interns were the only populations that had a different outcome. In this case, female and White interns who did not receive on-line mentoring had higher scores on domain 2 than their counterparts who did receive on-line mentoring. However, when a two-tailed *t*-test of unequal variance was conducted on the domain 2 EC-12 PPR TExES scores of the group of interns who received on-line mentoring and those who did not receive on-line mentoring, the results showed that there was no significant difference between the scores of the overall population. These results held true for each of the subpopulations as well: male, female, African-American, Hispanic and White.

A comparison of the mean scores on domain 3 for each intern data set was conducted. The results showed that overall, the interns who received on-line training had higher scores on domain 3 of the EC-12 TExES PPR than the interns who did not receive on-line mentoring These results held true for the female, African-American, and White populations that received on-line mentoring when compared with their counterparts that did not receive on-line mentoring. The male and Hispanic interns were the only populations that had a different outcome. In this case, the male interns and the Hispanic

interns who did not receive on-line mentoring had higher scores on domain 3 than their counterparts who did receive on-line mentoring. However, when a two-tailed *t*-test of unequal variance was conducted on the domain 3 EC-12 PPR TExES scores of the group of interns who received on-line mentoring and those who did not receive on-line mentoring, the results showed that there was no significant difference between the scores of the overall population. These results held true for each of the subpopulations as well: male, female, African-American, Hispanic and White.

Discussion of the Survey Results

Interns from the Region 4 Teacher Alternative Certification Program from the 2010-2011 school year were asked to complete a voluntary online survey about their intern experience. 62 interns responded to the survey. A pool of questions that pertained to the current research was analyzed to seek an answer to the research question: Is there a difference between the perception of mentoring effectiveness reported by interns between their on-campus mentors and their on-line mentors? An analysis of the survey showed that a higher percentage of survey respondents rated the on-campus mentor as effective or extremely effective than the on-line mentor only in regard to the area of lesson planning. A higher percentage of survey respondents rated on-line mentoring effective or extremely effective in the areas of both the lesson cycle and classroom management. Across the total number of the population (N=62) and all of its subpopulations, the sum of those who rated on-campus and on-line support in each area (lesson planning, lesson cycle, and classroom management) as effective or extremely effective was greater than those who rated each type of support as somewhat effective, not effective or neutral.

Survey data was also analyzed to seek an answer to the following research question: Is on-line mentoring perceived by interns to have a greater positive influence on their effectiveness as teachers than on-campus mentoring? The results of the survey showed that more interns reported that they agree or strongly agreed that only face to face mentoring had a positive influence on their effectiveness (44%) than those who reported that they agree or strongly agree that only on-line mentoring positively influenced their effectiveness as teachers (24%). However, 92% of the interns surveyed responded that they agree or strongly agree that both face to face and online mentoring had a positive influence on their effectiveness as teachers.

Those that responded with agree or strongly agree that only the face to face mentor had a positive influence on their effectiveness as a teacher, were asked to report in what areas they were positively influenced (lesson planning, lesson cycle or classroom management). The areas (in descending order in number of responses) were: classroom management, lesson planning, and lesson cycle.

Those that responded with agree or strongly agree that only the on-line mentor had a positive influence on their effectiveness as a teacher, were asked to report in what areas they were positively influenced (lesson planning, lesson cycle or classroom management). The areas (in descending order in number of responses) were: lesson planning, lesson cycle, and classroom management. Of those that responded with agree or strongly agree, 62% responded that their online mentor was also their field supervisor who made observation visits on campus.

Interns were asked to give additional feedback in an open answer format on the survey, if the intern so desired. Kilburg (2007) found that obstacles face by new teachers

included feelings of isolation, a lack of confidence and support, issues of time, a lack of balance in their lives, teaching a curriculum they might not be familiar with, and institutional barriers. Research by Patter (2009) also found a lack of a cooperative setting, a lack of time and opportunities to learn from mentors or coaches. It was interesting to note that in addition to comments relaying satisfaction for the Region 4 Alternative Teacher Certification Program and support provided, obstacles in the research were also duplicated by some interns.

Survey responses were also analyzed to seek an answer to the research question: Is on-line mentoring perceived by interns to have a greater positive influence on their effectiveness as teachers than on-campus mentoring? The results of the survey showed that more interns reported that they agree or strongly agreed that only face to face mentoring had a positive influence on their effectiveness (44%) than those who reported that they agree or strongly agree that only on-line mentoring positively influenced their effectiveness as teachers (24%). However, 92% of the interns surveyed responded that they agree or strongly agree that both face to face and online mentoring had a positive influence on their effectiveness as teachers.

Research by Haberman (as cited in Anthony et al., 2011) found that the use of on-line coaches, also referred to as on-line mentors or on-line field supervisors; when provided in conjunction with mentors on-campus; was effective in increasing teacher retention rates and in preparing teachers who were part of an alternative certification program. Since there is no research to support the argument that one style or type of mentoring is effective for all teachers worldwide, research on various mentoring programs and their effects on first year teachers should be carried out and the findings

analyzed to discover which mentoring programs are most beneficial to which new teacher populations in an effort to strive to assist all teachers. Although the findings of the present study found that only 24% of the interns responded that they agreed or strongly agreed that only on-line mentoring positively influenced their effectiveness as teachers, on-line mentoring was able to give support to these teachers, who by their survey responses, were not able to report that on-campus mentoring alone had a positive influence on their effectiveness as a teacher. All teachers are of importance, no matter how small the population, so it is argued that further study of on-line mentoring be conducted in order to continue to provide support to those teachers who otherwise would not perceive on-campus mentoring alone to positively influence their effectiveness as teachers.

Those new teacher interns that responded with agree or strongly agree that only the face to face mentor had a positive influence on their effectiveness as a teacher, reported that they were positively influenced in classroom management, lesson planning, and lesson cycle (in descending order in number of responses).

Those that responded with agree or strongly agree that only the on-line mentor had a positive influence on their effectiveness as a teacher reported that they were positively influenced in the areas of lesson planning, lesson cycle and classroom management (in descending order in number of responses). It should be noted that of those that responded with agree or strongly agree, 62% responded that their online mentor was also their field supervisor who made observation visits on campus.

Discussion of the On-line Posting Analysis

The on-line postings made by the Region 4 Teacher Alternative Certification Program interns in the 2010-2011 school year in the on-line mentoring course were compiled and analyzed. Postings were analyzed to seek to answer the following research question: What are the most common themes for which interns ask assistance or discuss on-line with their fellow interns or on-line mentor? The researcher chose this data in an effort to bring to light the areas of need and obstacles faced by interns in their first year of teaching that they may not choose to share with their campus principal or campus appointed mentor, or on-campus colleagues due to fear of judgment, embarrassment, or feelings of lack of support (Heider, 2005; Dodor, Sira, & Hausafus, 2010; Costello-Dougherty, 2008). The identification of the needs, obstacles, and doubts of new teachers that are in the classroom is of special importance since these teachers need to solve issues and resolution immediately. Wei, Darling-Hammond, Andree, Richardson, & Orphanos (2009) argued that millions of dollars are being spent by states and districts on training and support that teachers receive is meaningless because it does not reflect the reality of the classroom and does not help teachers solve day to day problems.

The results of the text analysis made by interns in the on-line mentoring course identified four themes: Reflections on The School Year or Their Teaching, Requests for Assistance or Tips, Unsolicited Recommendations to Fellow Interns, Challenges Experienced as a New Teacher. Chapter Four describes in detail the topics discussed within the four themes.

Within the theme of Reflections on The School Year or Their Teaching, the subject that was most discussed the most was the need to be consistent with the

classroom rules starting on the first day of school. Many interns reported that they heard this during training but for unspecified reasons, the interns did not practice consistency until after they encountered issues with discipline. Interns reported that they needed to devote more time at the beginning of the school year to practicing procedures repeatedly. The procedures that the interns discussed were the procedure for passing out school supplies, the procedure for entering and exiting the classroom, and the procedure for walking in the hallways.

Within the theme of Requests for Assistance or Tips, the issue for which the most assistance was asked was transitions. The interns mentioned the following transitions specifically: moving from one subject to another, going to the restroom and getting back to work after returning from the restroom, focusing back on work after returning from lunch, physical education class, or recess, focusing on work after an abrupt change in the daily schedule, entering and exiting the classroom at the start and close of the school day.

Although interns were not required to communicate with fellow interns on-line, many took the initiative to spontaneously share and recommend strategies, ideas, or tips for what was successful in their classroom. In these cases, the tips, strategies, or ideas posted were unsolicited, in that these postings were not in response to a fellow intern's request for assistance with a certain problem or issue. Three subjects of these types of postings dominated the discussion board. The three recommendations were: the recommendation of specific websites that provided effective classroom management strategies, the recommendation to display a positive attitude because it will make a good classroom, and the importance of making sure that the teacher communicates with

parents on positive subjects regarding the students and does not just communicate with parents to discuss the negative only.

Within theme of challenges experienced as a new teacher, 5 challenges were mentioned the most by interns. These challenges were: lack of organization skills, lack of proficiency in creating engaging hooks for lessons, lack of time management skills, inability to teach content in the given time, absence of time to review all resources available in order to integrate them effectively into lessons. The challenges identified by the interns are echoed by the research by Chelsey (as cited in Anthony, Gimbert, Fultz, & Parker, 2011) which maintained that teachers from alternative certification programs report that they need additional assistance with topics such as effective instructional planning and classroom management. Providing support to Texas interns in these three areas is of great concern as The Texas State Board of Education has also identified these three areas as critical since individuals seeking teacher certification in Texas must prove their competence in these areas by passing the EC-12 PPR TExES, as one of many certification requirements.

Future Research

There are several areas of future research that would be useful in furthering the research in this study. The data collected in this study spanned only one year and had a limited number of intern responses. This limited number of responses may have resulted in the results of no significant differences in the overall mean EC-12 PPR TExES scores in domains 1-3 of the interns who participated in on-line mentoring and those that did not participate in on-line mentoring. It is the hope of the researcher that future research on the

use of on-line mentoring will occur with a larger sample size to examine whether a significant difference in mean scores would result. It is also recommended that on-line mentoring be part of a mentoring program not just for interns and clinical teachers in alternative certification programs, but also for first year teachers from university or post-baccalaureate programs and student teachers as well.

The present study focused on three areas: lesson planning, the lesson cycle and classroom management. However, based on the written feedback from interns on the survey and the theme analysis of the on-line mentoring postings, it is suggested by the researcher that future research be conducted on on-line mentoring with a focus on the topics of concern and interest mentioned by the interns in this study.

Smith and Shoffner (2001) found that although technology availability in schools has increased, reports show that computers are still being used for drill practice. Further research into whether participation in on-line mentoring impacts the use of technology of teachers in their lessons. Furthermore, it is suggested that research be conducted to determine if the practice of reflection on-line by the teachers in on-line mentoring is also used by these teachers with their students using technology, as well.

Conclusions

Although no significant difference in the mean scores on domains 1-3 on the EC-12 PPR TExES were not found between interns who participated in on-line mentoring and those that did not participate in online mentoring, the potential of the effect that on-line mentoring may have the preparation of new teachers is worth additional study. The feedback from the interns on the survey, their comments on the survey, the candid discussion of areas of need and discussion of what is working in classrooms; gives school

administrators a look into what goes on behind closed classroom doors and what goes on behind the seemingly content visage of the new teachers on campus.

Campus principals are the instructional leaders of the school so it is their responsibility to make sure that teachers are effective and that their areas of need are identified and that any gaps are closed, and above all that teachers receive the support and opportunities to grow as professionals and practitioners. If new teachers are reluctant to vocalize their challenges or report that lack of support they are receiving from their assigned mentors; principals may never discover that a new teacher is struggling until it is too late-for the new teacher and for the students. New teachers on campus may feel more comfortable confiding with fellow new teachers or a support person that is not based on campus such as a field supervisor or an online mentor who is no longer practicing but has many years of experience to understand the context of the interns' questions and perspective. Therefore, how will campus principals get to discover the needs and feelings of these new teachers, especially since principals are already stretched thin on campus in regard to their responsibilities and available time?

It is the opinion of the researcher that on-line mentoring may be effective in giving principals insight into the needs of new teachers while giving these new teachers another level of support which may fill areas of need that issues with an ineffective on-campus mentor assignment may cause or fill areas of emotional support that perhaps only another person who is walking in the new teachers' same shoes can provide-a fellow new teacher. Support and suggestions can be given to new teachers by other new teachers, but since they lack experience, the online mentor is there to review comments and make clarifications and give correct direction to a suggestion that may not be effective or

appropriate for the grade level or curriculum. Perhaps most importantly, the online mentor can serve as the light at the end of the tunnel to a new teacher that is struggling and may want to leave the profession. The new teacher can see that the online mentor had also had challenges as a new teacher, but overcame those challenges to become an effective teacher and later an effective administrator. If on-line mentoring can be the piece of a multilevel active program of support for a new teacher, or serve as the only actual support behind a façade of support; then further research into how it can be designed to support teachers in order to give their students the best education should be explored.

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APPENDIX A
SURVEY INSTRUMENT

Dear Interns,

Congratulations on your completion of Beginning Teacher Seminar! Region 4 would appreciate your feedback on the following survey. Your feedback will be used by Region 4 Educator Certification Solutions personnel to help determine what areas of support are helpful to our interns and what areas of support need improvement. Your participation is voluntary. Your responses are confidential and your identity will not be shared with your on-campus principal appointed mentor, field supervisor, or Beginning Teacher Seminar online field supervisor. Your feedback would be greatly appreciated and we thank you in advance for your participation.

Certification Area/Grade Level of your teaching assignment: _____

Was your Region 4 field supervisor also your online facilitator in Beginning Teacher Seminar? _____

_ yes _no

Answer scale for questions below (1-9)

1-Not effective 2- Somewhat effective 3-Neutral 4-Effective, 5- Extremely Effective

Please evaluate the support you received.

1. **The support received from your official on-campus principal appointed mentor in regard to lesson planning was:**

2. **The support received from your official on-campus principal appointed mentor in regard to teaching lesson was:**

3. **The support received from your official on-campus principal appointed mentor in regard to classroom management was:**

4. **The support received from your online facilitator in Beginning Teacher Seminar in regard to lesson planning was:**

5. **The support received from your online facilitator in Beginning Teacher Seminar in regard to teaching lesson cycle was:**

6. **The support received from your Beginning Teacher Seminar Online facilitator in regard to classroom management was:**

7. **The support you received from reading online postings from your fellow participants in Beginning Teacher Seminar in regard to lesson planning was:**

8. **The support you received from reading online postings from your fellow participants in Beginning Teacher Seminar in regard to teaching the lesson cycle was:**

9. **The support you received from reading online postings from your fellow participants in Beginning Teacher Seminar in regard to classroom management was:**

Please feel free to share additional feedback regarding support you received:

10. Please rate the satisfaction that you had with receiving a response to your questions from your on-campus principal appointed mentor:

1-Extremely Dissatisfied 2- Dissatisfied 3-Neutral 4- Satisfied, 5-

Extremely Satisfied

11. Please rate the satisfaction that you had with receiving a response to your questions from your online facilitator in Beginning Teacher Seminar:

1-Extremely Dissatisfied 2- Dissatisfied 3-Neutral 4-Satisfied, 5- Extremely Satisfied

Please rate your level of agreement with the following statements:

12. I feel that only face to face mentoring positively influenced my effectiveness as a teacher.

1-Extremely Disagree 2- Disagree 3-Agree, 4-Strongly Agree

If you answered agree or strongly agree to this question, please state in what area or areas (lesson planning, classroom management, lesson cycle) you were positively influenced. _____

13. I feel that only online mentoring (Beginning Teacher Seminar) positively influenced my effectiveness as a teacher.

1-Extremely Disagree 2- Disagree 3-Agree, 4-Strongly Agree

If you answered agree or strongly agree to this question, please state in what area or areas (lesson planning, classroom management, lesson cycle) you were positively influenced. _____

14. I feel that *both* online (Beginning Teacher Seminar) and face to face mentoring had a positive impact on my effectiveness as a teacher.

1-Extremely Disagree 2- Disagree 3-Agree, 4-Strongly Agree

If you answered agree or strongly agree to the question above, please select which form of mentoring had the greater impact?

_Online (Beginning Teacher Seminar) _Face to Face

If you answered agree or strongly agree to the question above, please state in what area or areas (lesson planning, classroom management, lesson cycle) you were positively influenced. _____

Please feel free to share additional feedback regarding the impact of on-campus principal appointed mentoring and/or Beginning Teacher Seminar online.

Responses for the following:

0

1

2

3

4

5

5 or more

15. **About how many times a week did you communicate with your on-campus principal appointed mentor specifically regarding lesson planning?**

16. **About how many times a week did you communicate with your online Beginning Teacher facilitator specifically regarding lesson planning?**

17. **About how many times a week did you communicate with other participants in Beginning Teacher Seminar Online specifically regarding lesson planning?**

18. **About how many times a week did you communicate with your on-campus principal appointed mentoring specifically regarding classroom management?**

19. **About how many times a week did you communicate with your online Beginning Teacher facilitator specifically regarding classroom management?**

20. **About how many times a week did you communicate with other participants in Beginning Teacher Seminar Online specifically regarding classroom management?**

21. **About how many times a week did you communicate with your on-campus principal appointed mentor specifically regarding the lesson cycle?**

22. **About how many times a week did you communicate with your online facilitator in Beginning Teacher Seminar specifically regarding the lesson cycle?**

23. **About how many times a week did you communicate with other participants in Beginning Teacher Seminar Online specifically regarding the lesson cycle?**

Please feel free to share additional feedback regarding communication with your on-campus principal appointed mentor and your online Beginning Teacher Seminar facilitator:

Optional:

If you were to redesign the on-campus principal appointed mentoring experience, what aspects would you keep and why? What aspects would you change and why?

If you were to redesign the Beginning Teacher Seminar online mentoring experience, what aspects would you keep and why? What aspects would you change and why?

APPENDIX B

HUMAN SUBJECTS APPROVAL LETTER

UNIVERSITY of HOUSTON

DIVISION OF RESEARCH

January 30, 2012

Zenaida Kalie
c/o Dr. Angus MacNeil
Curriculum and Instruction

Dear Zenaida Kalie,

Based upon your request for exempt status, an administrative review of your research proposal entitled "What Campus Principals Need to Know: The Significance of Online Mentoring on Alternative Certification Interns in Texas" was conducted on December 16, 2011.

At that time, your request for exemption under **Category 4** was approved pending modification of your proposed procedures/documents.

The changes you have made adequately respond to the identified contingencies. As long as you continue using procedures described in this project, you do not have to reapply for review. * Any modification of this approved protocol will require review and further approval. Please contact me to ascertain the appropriate mechanism.

If you have any questions, please contact Alicia Vargas at (713) 743-9215.

Sincerely yours,

Kirstin M. Rochford, MPH, CIP, CPIA
Director, Research Compliance

*Approvals for exempt protocols will be valid for 5 years beyond the approval date. Approval for this project will expire **November 1, 2016**. If the project is completed prior to this date, a final report should be filed to close the protocol. If the project will continue after this date, you will need to reapply for approval if you wish to avoid an interruption of your data collection.

Protocol Number: 12189-EX

316 E. Cullen Building Houston, TX 77204-2015 (713) 743-9204 Fax: (713) 743-9577
COMMITTEES FOR THE PROTECTION OF HUMAN SUBJECTS