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This dissertation, SURVIVING AND THRIVING: A DESCRIPTION OF THE EXPERIENCES OF TEACHERS AND MENTORS DURING A CALIFORNIA INDUCTION PROGRAM, was prepared under the direction of the candidate's Dissertation Committee. It is accepted by the committee members in partial fulfillment of the requirements for the degree of Doctor of Education in the School of Education, Concordia University Irvine.

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SURVIVING AND THRIVING: A DESCRIPTION OF THE EXPERIENCES OF TEACHERS AND MENTORS DURING A CALIFORNIA INDUCTION PROGRAM

by

Hugo Sierra

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ABSTRACT

Beginning teachers' success in School District A (in Southern California) was developed during their participation in the districts Beginning Teacher Support and Assessment (BTSA) Induction Program. BTSA was established to create support to all preliminary credential candidates during their early stages of teaching in classrooms throughout California (Breaux & Wong, 2003; Marquez-Lopez & Oh, 2010; Moir, 2003). The induction program at School District A in the Inland Empire was developed during the passage of California Senate Bill 2042. The primary goal of the induction program is to provide ongoing training, support, and retention to beginning teachers to become qualified, capable, and effective teachers (Breaux et al., 2003).

This mixed methods study examined beginning teachers' experiences during an induction program. The primary purpose was to gain insight into which aspects of the program are the most supportive and which areas need improvement. Using the theoretical framework of Lev Vygotsky (1978) and Malcolm Knowles (1980), a case study methodology was used to research educators' induction experiences in School District A. Literature review consists of research on mentoring, induction programs, new induction program standards and professional development. Survey data were collected from 56 teacher candidates and 24 mentors. Following the survey, 14 participants maintained interest in a further group interviews. The findings of the study reveal that teacher candidates grew to accept the induction program and become more accommodating of School District A's Induction Program over time. Furthermore, the findings indicated Districts A's success through the qualities of mentorship, collaborations, online portfolio, choice on professional learning, and program modifications.

Keywords: mentoring, induction, BTSA, professional development, just in time support, adult learning, teacher candidates, California Commission on Teaching Credentialing

TABLE OF CONTENTS

TABLE OF CONTENTS i

LIST OF TABLES iv

LIST OF FIGURES v

ACKNOWLEDGEMENTS vi

CHAPTER 1: INTRODUCTION 1

Statement of the Problem 1

Purpose of the Study 3

Research Questions 3

Theoretical Framework 4

The Significance of the Study 7

Gaps in the Research 8

Definition of Terms 9

Limitations 12

Delimitations 12

Summary 13

Organization of the Study 13

CHAPTER 2: REVIEW OF LITERATURE 14

Introduction 14

Mentoring 15

Induction Programs 30

The 2016 California Induction Program Standards 43

Professional Development and Learning 48

Summary 60

CHAPTER 3: METHODOLOGY 61

Introduction 61

Setting and Participants 63

Sampling Procedures 69

Instrumentation 70

Data Collection 77

Data Analysis 78

Ethical Issues 81

Summary 82

CHAPTER 4: RESULTS 83

Introduction 83

Participant Demographics 82

Research Question One 85

Research Question Two 93

Focus Group Interviews 99

Summary 113

CHAPTER 5: DISCUSSIONS, IMPLEMENTATIONS, AND RECOMMENDATIONS 115

Introduction 115

Research Question One 111

Research Question Two 120

Hypothesis 126

Implications for Practice 135

Recommendations for Further Research 137

Conclusions 138

Summary 139

REFERENCES 141

APPENDICES 145

Appendix A: 2018-2019 Induction Professional Development Menu 145

Appendix B: Mentor Meetings 146

Appendix C: New Teacher Orientation 147

Appendix D: Introductory Email 150

Appendix E: End of the Year Survey-Teacher Candidate 151

Appendix F: End of the Year Survey-Mentor 156

Appendix G: Focus Group Questions 160

Appendix H: School District A Approval 161

Appendix I: Audio Consent Form 162

Appendix J: Individualized Learning Plan (ILP) 163

Appendix K: Early Completion Option 164

LIST OF TABLES

Table 1. CTSP Standards 36

Table 2. Descriptions of New Induction Standards 45

Table 3. Induction Standards 15-20 50

Table 4. Teacher Candidate Interview Questions 73

Table 5. Mentor Interview Questions 74

Table 6. Research Questions Data Based on Survey and Interview Questions 79

Table 7. Hypotheses Data Based on Survey and Interview Questions 80

Table 8. Participant Age and Year of Candidate 84

Table 9. Number of Teaching Years Breakdown by Mentors 86

Table 10. Effectiveness of Teacher Candidate 87

Table 11. Teacher Candidate's Satisfaction 88

Table 12. Level of Induction Perception 89

Table 13. Frequency Count of Keywords for First-Open Ended 89

Table 14. Participant Teachers on Changes to the Induction Program 91

Table 15. Frequency Count of Keywords from Open-Ended Survey Item 93

Table 16. Teacher Candidate ILP Effectiveness Frequency 94

Table 17. Effectiveness of Mentoring 97

Table 18. Mentor Statements for First Open-Ended 98

Table 19. Areas of Improvements 99

Table 20. Frequency Count of Keywords for Mentor Improvements 101

Table 21. Mentor Effectiveness Frequency 102

LIST OF FIGURES

Figure 1. Vygotsky's Theory of the Zone of Proximal Development 5

Figure 2. Learning to teach continuum. California Credentialing 36

Figure 3. BTSA Clusters 42

Figure 4. Pie graph of participant teachers from School District A Induction Program 67

Figure 5. Induction Teacher Candidate Selection 68

Figure 6. Induction Mentor Selection 69

Figure 7. Mixed-Methods Research Design 79

Figure 8. Type of Credential for Teacher Candidate 84

Figure 9. Type of Credential for Mentors 85

Figure 10. Teacher Level of Effectiveness from three Academic Years 95

Figure 11. Describing Teacher Reflection 103

Figure 12. Describing the Benefits of a Mentor 104

Figure 13. Describing the Challenges of a Mentor 103

Figure 14. CSTP Responses 105

Figure 15. Describing Just in Time and Reflection 105

Figure 16. Describing Modifications 106

Figure 17. Types of Support from Mentors 108

Figure 18. Aspects of Coaching for Mentors 109

Figure 19. Successful Mentor Experiences 110

Figure 20. Challenges from Mentors 111

Figure 21. Modifications to Induction Program 112

Figure 22. Just in Time Support 119

Figure 23. Coaching 128

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CHAPTER 1: INTRODUCTION

Many educators enter the profession believing that they can make a difference and a contribution to students' lives, but their expectations are not always fulfilled (Breaux & Wong, 2003; Moir, 1999). Becoming an educator is exciting. It is the accomplishment of a lifelong dream (Harris, 2015). Beginning teachers should be effective instructors as they complete their university course requirements, but this is not always true. The methodology and pedagogy of subject matter are taught at the university level, but educators need continuous support once they enter the profession (Karge & McCabe, 2014; Strong, 2009).

In the past years, there has been an increased demand for teachers in today's schools. An increase in class size, student enrollment, teacher retirements, and staff promotions all contribute to the need for more educators (Townley & Schmieder-Ramirez, 2012). As new teachers are being recruited to fill the vacant teaching positions, efforts need to be made to retain the newly hired teachers in the teaching profession and to become successful educators (Harris, 2015). Traditionally, when new teachers are hired, they are left to fend for themselves and receive little or no support upon their completion of college preparation and student teaching (Breaux & Wong, 2003; Strong, 2009).

Statement of the Problem

Newly hired teachers enter the profession with little or no experience and often feel that they are isolated from colleagues, administrative tasks, and the school environment during the first couple of years (Breaux & Wong, 2003; Webb & Norton, 2013). Beginning teachers find themselves doing numerous jobs including being a person who helps students learning and learning to teach the content, all while lacking the necessary tools to be successful in the profession (Moir, 2009). Beginning teachers struggle day by day when they enter the teaching

profession. New teachers are expected to provide motivation and to develop appropriate lessons that are founded on high standards while maintaining a good classroom management system (Breaux & Wong, 2003). They are bombarded with new responsibilities and are likely to get difficult classroom assignments, but these skills are merely the foundational practices that help an educator be successful. Inexperienced teachers are placed in classrooms that have demanding needs including the expectation to provide services to students with English Learners needs, special education, and advanced curriculum classes (Breaux & Wong, 2003; Harris, 2015).

Due to new state standards and educational procedures, teachers are looking for innovative ways to increase student engagement and develop students' academic competencies (Koehler & Mishra, 2005; Strong, 2009). According to Marzano (2012), districts and schools are developing and implementing effective new teacher induction programs. Teacher induction programs have been successfully implemented throughout California and the nation to support teachers through the early stages of teaching in the classrooms (Breaux & Wong, 2003; Liston, Whitcomb, & Borko, 2006; Townley & Schmieder-Ramirez, 2014).

Teachers' developmental process includes their own K-12 experience, teacher educational coursework, student teaching experiences, and this process continues through their induction program (Clausen, 2007; Feiman-Nemsar, 2001). In California, teachers exit the teacher preparation program with a preliminary teaching credential (certification). Teachers must participate in an induction program within the first five years of teaching, the induction program is traditionally two years. After completing the two-year program, educators clear their teaching credential via the Commission on Teaching Credential and renew every five years. The induction program is an "intensive, coherent, structure, and sequentially delivered multi-year process designed to train, acculturate, support and retain new teachers into a lifelong professional

development program" (Webb & Norton, 2013, p. 114). The California Beginning Teacher Support and Assessment (BTSA) program was established in 1992 to provide funded professional development opportunities for first and second-year educators who have completed their preliminary or professional credential (Lovo, Cavazos & Simmons, 2006).

Purpose of the Study

The implementation of an induction program in a school district with a clear framework and system to follow is worth studying. A certain formula and factors are needed to successfully implement a protocol that will work and thrive after implementation (Fullan & Quinn, 2016). To successfully implement a program, all stakeholders must have a full understanding of the program's beliefs and why it is necessary for education (Harris, 2015; Lozinak, 2016). The purpose of this case study was to examine a district induction program by (a) exploring ways the induction program provides long lasting support for the new teachers and (b) describing the formulas and protocols that have provided the program success and determine areas of improvement.

It is important to study an induction program at the district level and learn about the experiences of the successful program systematically to see what potential it might have with new educators. A qualitative approach was primarily utilized in this mixed methods study to allow the thoughts and views of induction participants to be recorded, throughout the first two years of teaching.

Research Questions

This study addressed two research questions as it explored and analyzed the perceptions of effectiveness from mentors and teacher candidates in the School District's A Induction Program.

1) How have the teachers' experiences in the induction program within School District A impacted their professional growth as an educator?
    a. What do teacher candidates perceive to be strengths for the induction program?
    b. What do teacher candidates perceive to be areas of growth for the induction program?
2) How have mentors' experiences in the induction program within School District A impacted their mentorship to new teachers?
    a. How do mentors provide support to benefit the teacher candidates in the induction program?
    b. How do mentors challenge the teacher candidates in the induction program?

Hypothesis

To determine the special factors of an induction program that teacher candidates and mentors perceive to be beneficial in the first two years, the following hypotheses were tested:

Hypothesis 1: School District A's Induction Program has a positive impact on teacher candidates in relation to (a) the level of helpfulness of a mentor, (b) its degree of impact upon their effectiveness as a teacher, and (c) ongoing professional learning.

Hypothesis 2: School District A's Induction Program has a positive impact on the mentor in relation (a) to the level of helpfulness of the Induction Program, (b) its degree of impact upon their effectiveness as a mentor, and (c) ongoing professional coaching.

Theoretical Framework

The theoretical framework for this case study was inspired by the work of Lev Vygotsky (1978). Vygotsky's theory of knowledge acquisition built on the idea that the learner interacts with new information to construct meaning (Ryan & Cooper, 1972). Individuals learn from text, educational resources and interaction with others by acquiring and constructing their knowledge. As beginning teachers complete their university program, they bring knowledge that was

acquired in pre-service university courses and student teaching experiences. In an induction program, it is essential for educators to build upon the prior knowledge to benefit from the ongoing support (Breaux & Wong, 2003). Beginning teachers can gather ideas in an induction program and are capable of enhancing their prior knowledge, which helps to develop and improve their skills through the assistance of their mentor (Harris, 2015; Kardos and Johnson, 2010).

Vygotsky's Zone of Proximal Development (Figure 1) allows individuals to reach a higher level of competence by moving from skills that they do not presently have mastery on (Ryan & Cooper, 1972; Vygotsky, 1978). The zone begins with items that a learner (teacher candidate) cannot do on their own, occurring during the first two years of teaching. The zone then continues with items that the learner can do with help. This includes being paired with an experienced mentor to support the teacher's development as they become proficient in the classroom (Lozinak, 2016).

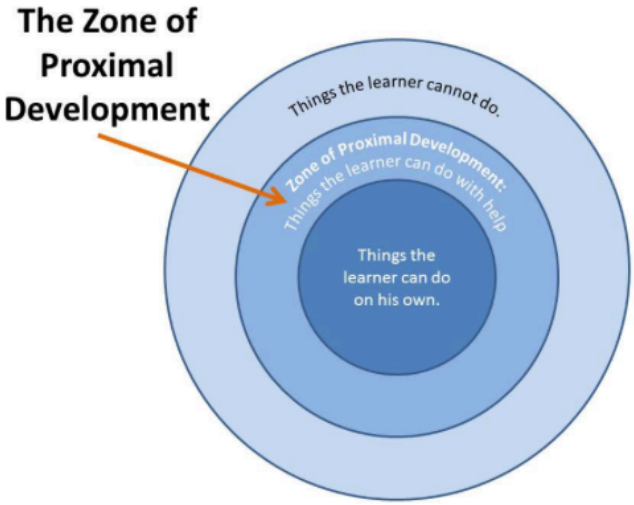

Figure 1. Vygotsky's Theory of the Zone of Proximal Development. Adapted from Ryan & Cooper, 1972.

When beginning teachers are provided with a well-trained support mentor, the learner moves from the skills that might have been too difficult to master the skills alone. The pairing of experienced mentors and teacher candidates allow individuals to reach a higher level of ability and assertion of accomplishing tasks on their own. Self-mastery is an important pillar in the induction program. Mentors can guide beginning teachers to support their development in mastering skills and growing as professionals (Breaux & Wong, 2003). For this reason, it is important that the mentor and beginning teacher are carefully matched during the induction process (Kardos and Johnson, 2010; Shillingstad, McGlamery, Davis, & Gilles, 2014; St. George & Robinson, 2011).

Adult Learning Theory

Knowles' (1980) theory of adult learning involves facilitating adults to draw on their previous experiences to build new learning. Knowles' adult learning theory is a current stage that a learner has developed toward higher levels of learning and where they can focus on learning how to learn (Gilstrap, 2013; Knowles, 1980). Six characteristics that influence how adult learners approach learning include: (1) the need to know, (2) self-directed, (3) an abundance of prior life and experience, (4) adults learn why they are ready and when they have a need to learn, (5) adults are life-centered in their orientation to learning, and (6) adults can respond to the external motivators (Cox 2015; Knowles, Holton, & Swanson, 1998). Knowles focuses on experience and maturity skills among adult learners, which helps guide self-directed learning (Gilstrap, 2013; Knowles et al., 2011). Through the six key assumptions, learners developed higher levels of knowledge and focused on learning how to learn through their educational practices in a school setting (Knowles, 1980). Adult learners need to be aware of why they are learning to fully commit to learning. This allows teachers to know what they want

to know and how it will benefit their learning and students they serve.

Professional development opportunities occur throughout ones career, fostering adult learning (Gilstrap, 2013; Merriam, 2008). The early teaching experiences serve as the building blocks of transferring teaching professional experiences to their teaching practices (Gilstrap, 2013). New teachers are responsible for the learning experiences that transcend into their classroom (Trotter, 2006). Teacher candidates become successful in their classrooms by reflecting, growing, and adapting throughout their teaching careers (Callahan, 2016; Merriam, 2008; Trotter, 2006).

The Significance of the Study

California's Beginning Teacher Support and Assessment (BTSA) is a two-year induction program for teacher employees who are new to the profession (Breaux & Wong, 2003; Lovo et al., 2006; Marquez-Lopez & Oh, 2010). The induction program has three basic purposes: (1) to provide instruction in classroom management and effective teaching techniques, (2) to reduce the difficulty of the transition into teaching, and (3) to maximize the retention rate of highly qualified teachers (Breaux & Wong, 2003; Marquez-Lopez & Oh, 2010). During this time, certificated teachers are placed with a support provider, an experienced mentor teacher, who guides with them in the classroom for two years.

Upon placement, educators are enrolled in an induction program and receive continuous support throughout the first two years (California Commission on Teacher Credential, 1997). The BTSA induction program revolves around critical topics that help strengthen the elements and standards that the administrations are looking for (Callahan, 2016; Marquez-Lopez et al., 2010). A key to strengthening the elements and standards include new ways of providing feedback and collaboration amongst team members, allowing the educators to make reflections

of the process and adjustments to deepen their learning (Fullan & Quinn, 2016). The significance of this study is to provide solid research to assist in closing the gaps in induction research.

Gaps in the Research

While there is solid research on the importance of BTSA reported in the literature, the research on mentoring, coaching, induction programs and job-embedded professional development remains limited to previous induction standards (CCTC, 2016). The program standards continue to be updated and refined. School districts have attempted various approaches to implement the new 2016 program standards to their current Induction Programs.

In addressing the new program standards, the purpose of this study is to explore the aspects of induction program as a component of mentoring and professional development that supports teacher candidates in implementing strategies at a time when all candidates and mentors are immersed in learning new program standards. California Commission on Teaching Credential (2016) states, "each Induction program must be designed to provide a two-year, individualized, job-embedded system of mentoring, support and professional learning that begins in the teacher's first year of teaching." (p. 1). A key change from past standards is the focus on individualized discovering that professional learning the teacher needs and supporting them to develop in that area. The body of the research on general professional development for educators is extensive, much of the research focuses on professional development models in which teacher candidates receive face-to-face training, and then go back to their classrooms with their mentor teacher to implement strategies into their classrooms (Harris, 2015; Kardos and Johnson, 2010).

There is a small amount of research that focuses on the effectiveness of an induction

program with the new 2016 induction programs standards put in place. Less is known about the specific strategies induction programs use to help teacher candidates be successful in the education field. According to the CCTC (2016), the induction program's mentoring design is based on a rationale informed by theory and research is still developing. In a summary of the research of induction, Breaux and Wong (2013) and Marquez-Lopez and Oh (2010) report that there are hundreds of publications relevant to induction programs, but most of it consists of only past induction standards and that nothing currently represents the new 2016 induction program standards. Not only does this research study show promise of filling a gap in the literature, but the topic is timely as well.

Studying a California Induction Program will allow educational leaders to see the amount of money, time and effort invested in new teacher programs to have a positive influence in the quality of teaching in beginning teachers and support providers (Callahan, 2016; Shillingstad et al., 2014; St. George & Robinson, 2011). It is important to invest time in supporting the teacher candidates entering the profession and the challenges they face in teaching.

Definition of Terms

The following terms denote the concepts used in this study:

Beginning Teacher Support and Assessment (BTSA). This program is mentorship support via trained support providers (mentors) and job-embedded professional learning. School districts refer to these programs as Induction since the term BTSA was eliminated from the California Statute (Marquez-Lopez & Oh, 2010).

California Commission on Teaching Credentialing (CCTC). The state agency in charge of licensing and policy development for educators (California Commission on Teacher Credential, 2016).

California Standards for the Teaching Profession (CSTP). Six standards originally adopted in 1997 to develop and defined teacher development in California used by teachers to reflect about student learning and teaching practice. These standards have been updated twice since inception (California Commission on Teacher Credential, 2016).

Coaching. The form of professional development that brings out the best in people, uncovers strengths and skills, builds effective teams, cultivates compassion, and builds emotionally resilient educators (Aguilar, 2013).

Early Completion Option (ECO). Teachers with three or more years of successful classroom teaching experience, demonstration of integrating levels for California Standards and submission of a School District A complete application can complete the induction program within one year (CCTC, 2016).

First-Year Teacher. A certificated teacher (also referred as credentialed teacher) that is in the first year of teaching with a preliminary teaching credential (Wood, 2005).

Formative Assessment and Support System for Teachers (CFASST). Locally designed, state-approved, standards-based formative assessment system in which teachers learn how to self-assess teaching practices (Wood, 2005).

Full-Time Mentors. Serves as a mentor for less than 16 participating teachers by holding weekly meetings (Breaux & Wong, 2003).

Individual Learning Plan. Designed and implemented solely for the professional growth and development of the participating teacher and not for evaluation for employment purposes (CCTC, 2016).

Just in Time Support. Mentor supports teacher candidate in any way during the weekly meetings. Mentors are not forced to only speak about professional development but any general

concern about aspect of teaching (CCTC, 2016).

Learning to Teach Continuum. Developed by the California Credential Department and California Department of Education, a range of support concepts that serve new teachers at all stages of the teaching preparations (CCTC, 2016).

Mentoring. A trusting, supportive relationship between a more-experienced member and a less-experienced member of an organization (Breaux & Wong, 2003).

Mentors. Experienced teachers who have a part of their professional assignment the mentoring of pre-service or teacher candidates as they are learning to teach. School districts referred to them as support providers or coaches (Odell & Huling, 2000).

Part-Time Mentor. Serves as a mentor for two to three induction participating teachers (Breaux & Wong, 2003).

Peer Assistance and Review (PAR). Program to improve a teacher's capacity that has been observed as unsatisfactory by receiving support for his classroom including guidance, modeling, and overall professional competence (Townley & Schmieder-Ramirez, 2014).

Professional Development. Ongoing process that focuses on improving the learning of all students that deepens the understanding of what is taught and of the powerful ways of teaching it (Webb & Norton, 2013).

Professional Development Provider. Individuals utilized by induction programs to provide training of support providers and novice teachers (Webb & Norton, 2013).

Student Teacher. Participating candidates that are provided with opportunities to develop and demonstrate competence in the professional roles for which they are preparing. A minimum of four weeks of solo and/or co-teaching field-based experience are provided to the participating candidate under the supervision of a fully credentialed teacher while completing pedagogical

preparation for the preliminary teaching credential (CCTC, 2016).

Teacher Candidate. New or beginning teacher in the induction programs that hold a preliminary credential and are eligible to participate in the induction program. School districts referred to them as beginning teachers (Wood, 2005).

Teacher Performance Assessment (TPA). Four assessments under the direction of SB 2042 to evaluate teacher performance in K-12th grade classrooms that is completed in a university credential program (California Commission on Teacher Credential, 2008).

Teacher Performance Expectations (TPE). Nine standards under the directions of SB 2042 to evaluate teacher performance in K-12th grade classrooms (California Commission on Teacher Credential, 2008).

Limitations

There are a few limitations to this study. This study includes one school district, which is not a representative of the other school districts in the state of California. Individuals completing the survey had various experiences and knowledge. Induction K-12 teachers receive guidance and skills from various pathways. The induction program was one of the pathways affecting the profession.

Delimitations

This study was not intended to represent all possible new teacher areas but rather focused on one specific program. The study was restricted to first-, second- and Early Completion Option (ECO)-teachers from kindergarten through grade 12 who participated in the induction program within the School District A. One school district provided the interview population for the focus group. The research was limited by how effective the mentor teacher was in developing the necessary coaching skills to support and guide the teacher candidates.

Summary

School districts have created induction programs to guide and assist teacher candidates with their transition into the profession (Breaux & Wong, 2003; Lovo, et al., 2006; Smith & Ingersoll, 2004; Strong, 2005). Many states and independent organizations have developed and published standards to guide schools in the induction process (Harris, 2015). In California, induction programs provide beginning teachers with opportunities to develop strategies that transcend into the classrooms and student achievement (Callahan, 2016; Marquez-Lopez & Oh, 2010). It was the researcher's goal to outline the significance and the necessity for research that prioritizes adult learning as a medium in the stages for beginning teachers (Knowles, Holton, & Sawnson, 2011; Cox 2015). The focus of this study was aligned with the research questions that provided the direction on the fundamental reasons why beginning teacher support is vital.

Organization of the Study

This case study was organized into five chapters. The first chapter established the background of the study. This included the purpose and significance of the study, problem statement, and the theoretical framework. The two research questions and hypotheses were also presented in chapter one, with a final discussion on limitations and delimitations.

Chapter Two provides a review of the literature on mentoring, the research of induction programs, 2016 California induction standards and professional development. Chapter Three provides information relating to the instrument, methods of data collection and data analysis used in this case study. Chapter Four is the analysis and interpretation of findings. Finally, Chapter Five provides a summary of the findings, the conclusion of the study, and a recommendation for future studies.

CHAPTER 2: REVIEW OF LITERATURE

Introduction

This chapter provides an overview of the body literature on induction programs. Initially the reader will experience a journey through mentoring in education which tends to be more global, followed by background of induction programs within the United States and in California, and will finish with the 2016 California induction program standards implementation. The purpose of the literature findings is to present continuous support for beginning teachers and their professional growth. Beginning teachers want to feel connected to their school environment; students, parents, coworkers, and administration (Breaux & Wong, 2003). They experience a paradigm shift from students in a credential program, to newly certified teachers (Strong, 2009). Each new teacher wants to influence the programs that contribute to their success, but this can be difficult when they are overwhelmed with daily challenges faced in the classroom. Induction programs provide a smooth transition to first and second-year teachers by expanding and deepening their teaching knowledge and skills (Breaux & Wong, 2003; Lovo et al., 2006; Townley & Schmieder-Ramirez, 2014). Each teacher candidate is required to participate in their district's induction program to help the process of preparing and supporting each teacher (Olebe, 2005; Strong, 2009).

The review begins with an overview of mentors in education, guiding this study to the needs of mentors. The key terms used in searching for the section included history of mentoring, mentors, support providers, BTSA coaches, novice, and veteran coaches. The second section focuses on the history and importance of induction programs. The key terms and phrases used in the section included induction programs, BTSA, Beginning Teacher Support, teacher programs, support programs, professional development, professional learning, staff development, new

teachers, technology, teacher portfolios, and teacher training. The last section focuses on the new 2016 California induction program standards. The key terms and phrases used in this section included: 2016 program standards and California Commission on Teacher Credentialing (CCTC, 2016).

Mentoring

The term "mentor" came into wide use soon after the Homeric legend of the Trojan War (Barondess, 1995; Strong, 2009). When Odysseus, King of Ithaca, left for war on the Trojans, he left his infant son Telemachus and wife Penelope in the hands of Mentor. Mentor was responsible for the boy's education, shaping his character, wisdom of his decisions, and the clarity of his purpose throughout the twenty years Odysseus was gone (Abu Zaineh & Karge, 2019; Barondess, 1995). As Telemachus grew during his adolescent years, he undertook a search for his father along with Mentor. The supreme goddess of the Greeks, Athena, purported that mentoring was a rewarding relationship as Mentor guided Telemachus during the journey from childhood to manhood (Barondess, 1995).

There have been efforts made by researchers to gain a better understanding of what it means to be a mentor. Levinson (1978) reported a study of 40 men whose biographies were similar in a manner that allowed an amount of reconstruction of their lives. The mentoring relationship emerged as one of the most important circumstances in early adulthood. The mentor, several years older, serves as a teacher, sponsor, advisor, and model to enhance younger individuals' skills and academic development. The main component that school districts use to support the success and development of a teacher candidate is assigning a mentor (Harris, 2015; Odell & Ferraro, 1992; Reitman & Karge, 2020; Strong, 2005).

Becoming a mentor teacher to a new teacher, in California termed preliminary credential

teacher, provides an opportunity for professional development and commitments and sharing of experiences from the experienced teacher. It is important to make creative use of another's range of expertise so everyone can learn and be willing to change. Through constant practice, teachers benefit from working with others to build a successful commitment to new teachers. These collaborations begin with observations of beginning teachers from veterans and administrations (Shillingstad, McGlamery, Davis & Gilles, 2014; Strong, 2009; Vierstraete 2005).

A key component of new teacher development professionally is to provide the new teacher with a mentor. Smith (2011) examined a mentor's role in supporting seven first-year English teachers from local middle and high schools. The mentoring interactions included three main components during the 2008-2009 school year: electronic correspondence, whole-group meetings with new teachers, and one-on-one meetings. Using mixed methods of grounded theory introduced by Glaser and Strauss (2011), the researcher linked educational problems around negotiating the identity of a mentor and a new teacher. Observations were conducted with each of the seven teachers throughout the school year. Results indicated strong support in evaluative practices, collegial practices, and boundary work with all seven English teachers from the participating middle and high schools.

Similarly, St. George and Robinson (2011) discussed the importance of high-quality mentoring for novice teachers. A mentoring relationship better serves educators when the mentor teacher and new teachers share subjects taught, have planning time and have classrooms in close proximity. George and Robinson (2011) discuss the importance of mentorship with the access to online content materials, lesson plans, and instructional ideas to use in supporting the novice teachers, allowing educators to have an open platform at their convenience. With a commitment to confidentiality, it is important for mentor teachers to continue improvement in

the usage of research-based strategies and data to help better strengthen coaches, consultants, and collaborators, allowing educators to better serve their students.

Mentoring is an effective strategy to help new teachers succeed in the profession of education. Vierstraete (2005) measured the success of a mentorship program. Participating in a mentorship allows teachers to make an impact on the future in education and future educators. Results for initiating a mentorship program must consist of defining the needs of beginning teachers, selecting mentors, defining mentors roles, providing training for mentors, staying involved with mentors and new teachers, and evaluating the program as a whole. Without the involvement of successful mentors, an induction program cannot have success (Lovo, Cavazos & Simmons, 2006).

Shillingstad, McGlamery, Davis, and Gilles (2014) selected fourteen teacher mentors from three distinct universities that offered a comprehensive induction program to first-year teachers. The qualitative case study was conducted from members of the Comprehensive Teacher Induction Consortium (CTIC) that have successfully utilized a successful induction model through two rounds of interviews. Five components were compared from all three induction programs: (1) a full year of mentored supports, (2) ongoing support for mentors, (3) coursework within fifteen months, (4) cohort group of beginning teachers and (5) job-embedded professional development. All fourteen mentors from the CTIC were interviewed on teacher induction and the development of teacher leadership. In the second round of interviews, three mentors were interviewed individually to help further analyze the roles, dynamics and responsibilities of the mentoring roles. Results from all three participants shared their importance of leadership roles while serving as mentors. Each mentor from the study fulfilled multiple roles while being an induction mentor including instructional specialists, resources

providers, classroom supporters, school leaders, data coaches, and learning facilitators. Researchers categorized the mentors as innovative, knowledgeable, skillful and courageous. These findings of both Vierstracte (2005) and Shillingstad et al. (2014) align with other researchers (Abu Zaineh & Karge, 2019; Reitman & Karge, 2020).

Lozinak (2016) conducted a quantitative and qualitative study to further investigate the mentor-pairing procedure in a suburban Connecticut school district. The district provided a file review to the researcher including new teachers and mentors to help estimate the samples and population. The sampling method utilized thirty-three new hires that were assigned to eight different schools but only 17 completed a placement-information sheet to assist with the pairing of the district mentors. The matches were proposed, and the results of pairing were sent to the district facilitator to ensure the monitoring system. All participants were recruited via email and volunteered to be interviewed, complete online surveys and observations. Five themes that emerged from the analysis of the surveys and observations were (1) the pairing process, (2) need same school, (3) need the similar grade, (4) need a team approach, and (5) need to restructure induction. The results of the study reported a change in the mentoring process improves mentoring relationships, leading to better teaching practices and an increase in student learning.

Kardos and Johnson (2010) researched teacher mentoring and their mentoring match. Researchers used a sample of 374 randomly selected beginning teachers from three states to examine their experiences of mentoring during their first year. Findings showed that the quality of mentoring was not consistent among all teachers. Less than half of the participants had a difficult time matching a mentor and teacher participant because of areas in math and science. The results hindered the perceptions of novice teachers regarding their mentoring relationship. The Lozinak (2016) and Kardos and Johnson (2010) studies added to the mentoring research, as

instead of just being an empirical study. With program evaluation, Fletcher, Strong, and Villar (2004) and Wilson, Darling-Hammond, and Berry (2001) provided the field with suggestions for how to enhance and improve mentor programs.

A mentor is more than a buddy; mentorship allows master teachers to demonstrate their ability to work well with others for a mentorship program to be successful (Shillingstad et al., 2014; St. George & Robinson, 2011; Vierstraete, 2005). Through the process of mentorship, it is imperative to support teachers through practical and meaningful work that will result in the new educator's success (Smith, 2011). Beginning teachers need mentors who understand their individual needs, and are equipped with resources, knowledge, and skills to help them through their early teaching career (Kardos & Johnson, 2010; Harris, 2015; Shillingstad et al., 2014; Reitman & Karge, 2020; Smith & Ingersoll, 2004). Administrators have a critical role in the development of a new teacher, similar to that of a mentor.

Administrators

Administrators have a critical role in first- and second- year educators at each school site. Administrators are responsible for providing "orientation, support, encouragement, and guidance for the new teachers, along with opportunities for ongoing assistance and staff development" (Breaux & Wong, 2003, p. 84). To help ensure the consistency between the induction training and the school's vision, administration receives training before the induction process begins (Breaux & Wong, 2003).

Tillman (2003) investigated a case study of a mentoring triad that included a first-year teacher, mentor, and the principal. Using journaling, reflection, and interviews as the main source of data collection, individuals had conversations within an extended period. Each participant had a process of communication by reflecting on principal practices, instructional

practices and the first-year teacher's decision to stay in their position. Themes included a teacher's professional competence and teacher as a member of the school community. From the administrator view, results indicated an increase in addressing challenges with first-year teachers and the ideas of developing a new teacher to succeed in their profession. Reflecting and journaling is a strategy for many first-year teachers working in an urban school that can decrease their chances of leaving the profession during their early years of teaching (Tillman, 2003). New teachers need to be able to maintain a collection of their everyday reflections in and out of the classrooms. This work aligns with Karge, Stephens, Widener, and Poda (2019), more recent work on administrative reflection.

Wood (2005) explored principals' roles in large induction programs including eight high schools, four middle schools, and 42 elementary schools. Using a qualitative approach, interviews and focus groups were used to evaluate the administrator role by incorporating walkthroughs throughout the school year. Findings show five leadership roles that were developed from the results of the study: (1) culture builder, (2) instructional leader, (3) coordinator/facilitator of mentors, (4) novice teacher recruiter and (5) novice teacher advocate/retainer. Each of these roles emerged from the administration during teacher walkthroughs and labeled as the five important keys for a successful teacher.

Iordanides and Vryoni (2013) invited school leaders to contribute to the induction of newly qualified teachers. A qualitative interview was employed to explore the subjective perceptions and the experiences of school leaders. Coding and emerging themes distinguished interview questions and data. Each of the themes was categorized and ranked according to experiences of each school leader. Results indicate administrators recognize the important influence of school climate during new educators' first professional stages. The main

characteristics include collaboration, teamwork, friendly relations and direction in human relations, and creating a family atmosphere.

Administrators uphold great responsibilities including a strong culture within the school environment (Iordanides & Vryoni, 2013; Wood, 2005). Administrators assist new teachers in building a strong culture that will transfer into their classrooms and future practices by becoming the moderators of school culture. Leaders give valuable information about the school's culture and policies including duties, professional support, and guidance (Iordanides & Vryoni, 2013). The support that administrators provide to beginning teachers is critical to the teacher's success (Harris, 2015; Ingersoll and Smith, 2004; Tillman, 2003). Educators cannot be successful in building a culture without adequate training in the induction program. Teachers must feel supported by their administrators (Karge & Lasky, 2009). Karge, Lasky, McCabe, and Robb (1995) reported lack of support is a primary reason teachers leave the profession. The studies in this section on administration verify the research behind beginning teacher/administrator support.

Training

Effective mentors require training and ongoing support to develop specific skills in assisting new teachers (Fisher-Ari, Eaton, & Dantzler, 2019; Grossman & Davis, 2012). These include working relationships with adults, helping teachers set goals, and providing constructive feedback on instruction and coaching. Colvin, Flannery, Sugai, and Monegan (2009) faced continuous pressure to help improve student outcomes. Through classroom observations and performance feedback, researchers completed a study with one science teacher and twenty-five students from a suburban high school. Using a qualitative approach, ten classroom observations were conducted for nine weeks. Researchers were looking for three variables that included classroom instructional settings, instructional practice, and classroom student behavior. In each

of the three observations, themes were coded according to the representation that fell under each category, which includes setting, teacher action, and classroom engagement. The classroom observations were conducted throughout nine weeks but were limited to twenty-five students, some of who were absent at times. Researchers concluded that teacher observations are encouraging and give teachers information about instructional practices. It is essential to have a holistic inquiry in student performance with teacher feedback. This allows an improvement in alignment within an organizational system by designing, implementing, and evaluating teachers. Teacher feedback in any educational organization is highly recommended and should be used for all teachers in all settings and at all times. Fisher-Ari et al. (2019) also provided insights from the field supporting new teacher/mentor relationships to ultimately help k-12 student learns.

Callahan (2016) researched several characteristics of effective teacher-mentoring programs through training. Teacher mentoring programs must provide clear and concise goals for mentors. Through training the trainer, it allows mentors to impart information and feedback to the new teachers. All mentors need to be provided with professional development in the areas of educational leadership, coaching, observations, interpersonal skills, instructional effectiveness, content and grade-level experience and appropriate work experience. An effective teacher-mentoring program should provide much-needed support from the mentor to all beginning teachers and prevent educators from giving up after a couple of years of teaching.

Israel, Kamman, McCray, and Sindelar (2014) examined professional and emotional mentoring supports at an urban school district in the Midwestern United States. Data included evaluation reports from the 2009-2010 academic year, mentor time allocation charts and new teacher interviews. Using the Danielson framework, research-based set of components of instruction, four domains were established: planning and preparation for student learning,

creating an environment for learning, teaching and learning and professionalism. Results indicated (1) positive evaluation feedback provided by the mentors, (2) types of emotional supports and (3) types of professional supports. This section on training clearly provides evidence for ongoing professional development of mentors. Mentors must develop specific skills to help new teachers excel.

Coaching

Mentors need high-quality professional development on coaching to build the capacity of beginning teachers and facilitate their learning (Aguilar, 2013). The art of coaching is doing, thinking, and being that results in leading to change (Aguilar, 2013). Onchwari and Keengwe (2008) examined the impact of the mentor-coach model at a Head Start Program. The mentor-coach initiative approach implemented the model to assist mentors in providing support to teachers. The participants for the study were 44 Head Start teachers across two mid-western states. The case study methodology included one-on-one interviews and classroom observations. Participants provided positive views about the initiative and identified particular literacy practices based on the representation.

Stowers and Barker (2010) explored the use of coaching and mentoring in an educational setting. In the context of coaching, Stowers et al. (2010) stated, “coaching is a collaborative relationship in which the person being coached is coached by an experienced person who is an active inquirer and instrument for change” (p. 365). The veteran teacher coaches the less experienced teacher by identifying the needs of the educator. After specific coaching needs are determined, the coach identifies a process to meet the requirements through a short-term or long-term implementation. The coach acts as the facilitator who provides the necessary opportunities and tools to enable the less experienced educator to reach their performance objectives. The

researchers identified a four-step process to develop the less experienced personal and professional capabilities: (1) observation and preparation, (2) discussion, (3) active coaching, and (4) follow-up. Each step individually is effective to achieve the coaching experience.

Professional development for coaches must focus on refining coaching skills (Aguilar, 2013). Deepening a content coach's knowledge of specific instructional practices is important, but learning occurs through coaching skills. Aguilar (2003) provides a helpful description of the importance of coaching.

> Ideally, coaches could work together in teams under the guidance of a master coach. However, if these conditions don't exist, coaches can partner with and support each other. Coaches can establish structures such as peer coaching to learn from and support each other (p. 269).

One coaching model is facilitative coaching. Facilitative coaching supports educators to learn new ways of thinking and being through reflection, analysis, observations, and experimentation (Aguilar, 2013). The coach does not share the knowledge, but they work to build on the less experienced educator's existing skills and knowledge while constructing new skills. An essential tool for facilitative coaching is the zone of proximal development (ZPD) by Lev Vygotsky. The zone of proximal development is the difference between what a less experienced educator can do without the support and what they can do with support, allowing for a range of abilities that can be performed with assistance. As the learner gets to the ZPD, they are supported with a gradual release of responsibility (Ryan & Cooper, 1972; Vygotsky, 1978).

Carr, Holmes, and Flynn (2017) suggest that coaching assumes an inquiry-based model as coaches assist beginning teachers in uncovering their needs and concerns to take full authority in the classroom. In a coaching cycle, a feedback protocol is reviewed to concentrate on the

beginning teacher's strengths and areas needing improvement. Feedback allows coaches to monitor teaching practices in a nonjudgmental systematic approach. Through conversation, the coach asks purposeful questions to encourage the teacher to review their methods and design a plan to improve. The coaching process provides the beginning teacher more control throughout their growth as they acknowledge more responsibility throughout the process.

Similarly, Gulamhussein (2013) asserts that the coaching cycle begins with a meeting to discuss concerns or needs before and after a lesson. Prior to teaching a lesson, a coach and beginning teacher review a lesson in the teacher's classroom using new methods learned in the early stage. Once the lesson preparation is complete, the coach observes the beginning teacher implementing the new methods that have been learned. The completed lesson leads to debrief to discuss ways to improve teaching skills for future lessons. The cycle of coaching continues several times to meet the beginning teacher's needs, in some cases taking up to twenty rounds of coaching.

Stoltzfus (2008) describes the use of a coaching funnel for beginning teachers. The funnel begins with goal setting that establishes the rationale for improvement. During this phase, beginning teachers and the coach work collaboratively to set up personal objectives. The next phase is exploring options that can fulfill the personal objectives. Lastly, the funnel strategy ends with beginning teachers taking action based on what was established with the coach. The coach performs as the facilitator to help ease the beginning teacher to independence.

In the coaching cycle, Knight and Cornett (2009) expressed the importance of a coach modeling a lesson for teachers. Modeling lessons begin with pre-established observations to guide the beginning teachers. The pre-observation with coaches and teachers guides the conversations to discuss before the coach visits the classroom. Following the lesson, debriefing

of the lesson takes place to learn and adapt for the future lesson by establishing goals connected to the growth and development of the teacher.

Malete and Feltz (2000) investigated the successful completion of a coaching education program on coaching efficacy by comparing to a non-education control group. The study followed a quasi-experimental design through a 12-hour program. Researchers developed the Coaching Efficacy Scale (CES) to measure the multidimensional aspects of coaching efficacy. The CES questionnaire is comprised of four strands: game strategy, motivation, technique, and character building efficacy. Each strand was used with a one-way ANOVA to determine the success of each. The participants included sixty participants, 36 from the experimental group and 24 from the control group that completed a CES questionnaire pretest and posttest. Results revealed a considerable effect for a coaching education program on the perceived efficacy levels of trained coaches compared to the control coaches.

Santos, Mesquita, and Rosado (2010) examined the coaches' perceptions and acknowledgment of training needs related to professional competences. The participants included 343 coaches from higher education. Using a mixed methods design, the researchers applied a One-way ANOVA to compare the coaches' perceptions in the function of coaching experiences and coaches' academic background. The survey included a questionnaire on scale-focused perceptions of competence and training needs that consisted of two parts: the first was based on the coach's demographic characteristics and second was 23 items focusing on self-perception and training needs. Results indicated coaches' perceptions were influenced by their experience and the majority perceived to be component. The area of growth was indicated by the training needs in annual planning, personal and coaching education competencies.

Similarly to Santos et al. (2010), Shernoff, Lekwa, Reddy, and Coccaro (2017) studied teachers' attitudes and experiences with coaching. The researchers used a coaching intervention to better understand their model with teachers' needs and goals. The participants included 34 elementary teachers, six special education and two support staff members from two high-poverty elementary schools. To further investigate their qualitative study, researchers conducted two focus groups. Each focus group was audio recorded and transcribed through coach-based open-ended questions. Themes from the qualitative data were coded using one transcript and analyzed by two codes: advantages and concerns of working with a coach. The main advantages of working with a coach included that it provided a new perspective way of looking at the classroom and interactions with the students. The coaches found challenges in new teachers that included the availability of seeing everything in the classroom while delivering instruction and having a positive effect on student behavior. Furthermore, teachers expressed another advantage in focus groups about working with a coach was the acquisition of new tools and strategies to increase the use of praise throughout beginning stages for teachers.

Coaching uses a range of practice-based contexts to show the powerful means of developing teaching capabilities and practice. Averill, Drake, Anderson, and Anthony (2016) examined how coaching using questioning assists veteran teachers in promoting mathematical thinking and discussions with student teachers. A design study was chosen to support the grounded theory that involves the study of instructional strategies and tools from student teachers. Participants were 180 student teachers from three programs over the four years of the study. Data included videos of rehearsals, reflective debriefs, and student teacher surveys over four years. Coaching questions exposed effective practice, helping student teachers to reflect, discuss, make decisions, and incorporate trial teaching strategies. The use of the questions in

coaching empowers the veteran teachers. Averill et al. (2016) asserted that administrators and mentors need to understand the stages of growth beginning teachers go through and be prepared to assist teachers with the professional growth process (Harris, 2015). Collectively, the studies renewed in this coaching section verify the critical importance of mentor coaching. Furthermore they document the need for mentors to receive support, training, and evaluation in all areas of coaching.

Teacher Growth

Beginning educators move through several distinct phases during their first year of teaching (Averill et al., 2016; Fuller, 1969; Harris, 2015; Moir, 1999; Reitman & Karge, 2020). Based on Fuller's (1969) work, Moir (1999) studied the phases to help support providers, mentors, and administrators gain an understanding of the common phases. The anticipation phase is characterized by the excitement of beginning teachers upon being hired for a teaching position. The survival phase is focused on managing the day-to-day routines and challenges of teaching including managing classrooms, developing curriculum, building relationships, and integrating administrative duties. During the disillusionment stage, beginning teachers experience self-doubt about whether they made the right decision to enter the teaching profession. The rejuvenation phase is the gradual positive shift in the beginning teacher's attitude toward the profession. Lastly, beginning teachers end with self-reflection, challenges, and highlights of the school year.

Cavanagh and Prescott (2010) studied three beginning math teachers and the development of their reflective practice during a one-year teacher education program and the first year of teaching experience. The three beginning teachers were provided with a 50-day practicum throughout the school year and interviewed four times: three times during the program

and once their first year of teaching. Results showed an improvement in the teachers' ability to reflect on their teaching practice during the practicum but a higher capacity of reflection in the first year of teaching. Reflective practice for beginning teachers is greater when classroom experience is put in place since they shape their own professional identities more freely.

Cornish and Jenkins (2012) implemented a structured approach to facilitate self-motivated professional growth for university students. Researchers included the development of different types of practical and applied tasks through habits of critical reflection. Specific related assessments tasks provide evidence that students are being challenged to think. Results included that incorporating an assessment tasks through different types of opportunities for critical reflection on practice has guided pre-service teachers in journeys toward experiencing expert reflections.

Stages of teacher's career vary throughout the years. Burke (1985) examined the patterns of teachers' attitudes at various stages of their careers through the use of the Attitude Toward Personal Teaching Behaviors Instruments (ATPTB). The ATPTB was designed with a seven-point Likert-scale, varying from 1=Never to 7=Always. By the use of the ATPTB, 11 categories were clustered through a factor analysis of responses to the instrument. The groups were then put into two themes: personal environment and organizational environment. Results led to designing professional development programs that fit the teacher needs.

Similarly to Burke (1985), Asaf, Shachar, Tohar, and Kainan (2008) studied the course of teacher educators careers. Through a narrative study, eleven teachers were interviewed and analyzed using a multidimensional method. Each teacher educator was asked to tell three narratives: story from the beginning career, middle career and last phase of the teaching careers. Findings revealed that educators change their perception of their role, learner, and educational

activity. Researchers noted that changes and success was lead by the work environment that included teachers' traits and biographies. The stages were categorized into seven phases (1) Survival, (2) Stabilization, (3) Experimentation, (4) Taking stock, (5) Serenity, (6) Conservatism, (7) Disengagement. Providing teachers time to develop and move through the various phases of being a new teacher is something all mentor programs need to consider. The studies in the teacher growth section gave the reader ideas for how to implement best practices in this area.

Effective induction requires high-quality mentoring and a supportive school environment tailored to fit new teachers' individual needs (Grossman & Davis, 2012). Through ongoing support and dialogue between the mentor and mentee, teachers are likely to see the need to change in their instructional practices (Onchwari & Keengwe, 2008). Features of active mentoring include: high-quality mentors, a focus on content, and continuous support time (Callahan, 2016; Israel et al., 2014; Stowers & Barker, 2010). Beginning teachers were favorable toward the mentor teachers, particularly the ongoing support and guidance that help them through the first years of teaching (Bianchini & Brenner, 2009; Harris, 2015). The coaching process provides more control throughout growth for beginning teachers (Carr et al., 2017). Coaching allows beginning teachers to value trust and communicate more effectively (Gulamhussein, 2013; Knight et al., 2009; Shernoff et al., 2017; Stoltzfus, 2008). At the school site, the role of the administrator in the induction process is essential. Consistency needs to be upheld between what is promoted during the induction training and what will be promoted in the schools to help in the stages of professional growth and development to beginning teachers (Breaux & Wong, 2003: Harris, 2015; Moir, 1999; Reitman & Karge, 2020).

Induction Programs

Induction programs have been explored outside of California for the past twenty years.

In other countries, school boards are following the American institutions in establishing partnerships to help prepare the beginning teachers for the profession (Breaux & Wong, 2003; Cherubini, 2007). Recently, conducted studies in other countries have resulted in positive feedback (Breaux & Wong, 2003; Cherubini, 2007; Davis & Waite, 2006; Jones, Dana, LaFramenta, Adams, & Arnold, 2016). Five types of research discussed in this section include (1) Pre-Induction, (2) Background of Induction Programs, (3) The 2016 Induction Program Standards (4) Induction Programs Outside of California, and (5) Induction Programs in California.

Pre-Induction

Universities implemented teacher education programs as standards began to develop in the nation, leading to student teaching as an important piece of teacher education (Strong, 2009). Student teachers in all university pre-teacher programs must go through Teacher Performance Expectations (TPEs), a set of requirements developed by the California Commission on Teaching Credential that aligned to the California standards for the teaching profession. The TPEs cover six categories of skills and knowledge for the beginning teachers that include: (a) making subject matter comprehensible to students, (b) assessing student learning, (c) engaging and supporting students in learning, (d) planning instruction and designing learning experiences for students, (e) creating and maintaining effective environments for student earning, and (f) developing as a professional educator (California Commission on Teacher Credentialing, 2008). The TPEs are research-based that demonstrate the knowledge, skills, and abilities to provide safe, healthy, and supportive learning environments to meet the needs of every student. Furthermore, the TPEs require beginning teachers to know and apply pedagogical theories, principles, and instructional practices for instruction of English learners (CCTC, 2008).

The CCTC additionally brought about increased rigor in credential requirements with the addition of the California Teaching Performance Assessment (CalTPA). The CalTPA consist of two instructional cycles: (1) learning about students and planning instruction and (2) assessment-driven instruction. During the stages of the credential program, the teacher candidates must complete the two cycles assessments as part of their course work prior to being recommended for a preliminary teaching credential in California.

During the process of student teaching, the teacher candidate spends weeks of observing and collaborating with the master teacher before slowly taking over the courses, allowing student teachers to be familiar with the students, staff, and classroom environment (CCTC, 2016). Student teachers complete both cycles of the CalTPAs during the student teaching phase. University service training results in a Preliminary Credential, giving educators the opportunity to teach multiple subjects, single subjects or special education in grades pre-kindergarten through twelfth grade. Upon being hired, a preliminary credentialed teacher must complete further training by participating in an induction program within the first five years of employment; this must be done before applying for a Professional Clear Credential (Bianchini & Brenner, 2009; Olebe, 2005; Strong, 2009).

Background of Induction Programs

Beginning teacher programs were developed by local school districts, university education departments, and state agencies as a result of the school reform movement in the 1980s (Breaux & Wong; CCTC, 1997; Strong, 2009). Induction programs were designed for educators who have already completed basic training and bridge the gap from student teaching to teacher of students. The induction programs were created to "have mentor teachers assist and support novice teachers in their professional development" (Strong, 2009, p. 6). Key elements of the

program included retaining new teachers in the profession and helping beginning teachers through the developmental stages of competent, proficient, and expert. An average of 40 and 50 percent of new teachers will leave during the first seven years of their careers (Breaux & Wong, 2003; Ingersoll & Smith, 2003; Townley & Schmieder-Ramirez, 2014). Once a teacher is hired, many new teachers are left to fend for themselves and receive little or no support upon their completion of college preparation and student teaching. Breaux and Wong (2003) identified the several reasons for exiting from teaching. For example, lack of support, disenchanted with teaching assignments, difficultly balancing personal and professional demands, excessive paperwork, inadequate classroom management, inadequate discipline, and high stress.

In response to the low retention rate of new educators, the California New Teacher Project (CNTP) was established in 1988 at the University of California, Santa Cruz and the Santa Cruz County of Education (Breux & Wong, 2003; Moir, 2003). The project began with 42 elementary teachers from local school districts throughout the county. The CNTP was a research pilot study that was launched from 1988 to 1992, sponsored by the California Commission on Teacher Credentialing (CCTC) and the California Department of Education (CDE). The intent of the program was to train new teachers in an effective transition from pre-service to the first two years of the profession and it strived to improve the performance of all California teachers. The CNTP laid the foundation for aligning beginning teacher success and effectiveness with the state policy.

Findings of the CNTP included more than 3,000 beginning teachers to help pass the Senate Bill 1422 in 1992, authorizing the Beginning Teacher Support and Assessment (BTSA) grant program, and the creation of a board to review the teacher credentialing in California (Lovo, Cavazos & Simmons, 2006). Beginning teacher programs were instigated at the local and

state level including school districts, county offices of education, state departments of education, and institutions of higher education (Odell & Huling, 2000; Moir, 2003). All induction programs strived to improve the educational performance of all California teachers and students (Bianchini & Brenner, 2009; Breaux & Wong, 2003).

BTSA created training and fostered the support of novice teachers in their transition from university pre-service level work through the first two years of their teaching careers (CCTC, 2002). As part of the Senate Bill 1422 in 1992, a vision and goals were created for BTSA. The BTSA vision included a structure and flexible support for all first and second year teachers, a coherent system for assessing participant teachers, and teacher support that emerges from formative assessment (Breaux & Wong, 2003). Furthermore, the goals included improving participating teacher performance, improving the teaching of students from diverse backgrounds, increasing new teacher satisfaction, and retaining capable teachers (Townley & Schmieder-Ramirez, 2014).

The passage of the California Senate Bill 2042 in response to the Senate Bill 1422 was the first major credential reform in 35 years (Breaux & Wong, 2003; CCTC, 2008). Four key changes were necessary to move the Statewide BTSA System to Professional Teacher Induction: (1) linking funding to the development of a CTC-approved program of Professional Teacher Induction, (2) replacing the formal and peer review process in collaboration with local programs, (3) adding induction as the third professional phase of the Learning-to-Teacher Continuum (LTTC), subject matter preparation and professional teacher program, and (4) collaboration between the professional teacher preparation programs and K-12 BTSA programs (Lovo et al., 2006).

With the implementation of Senate Bill 2042, the funding to California universities and

colleges changed for their teacher credentialing programs and the recommendation for a Professional Clear Credential (CCTC, 2008). With California's Education Code, public school districts or county offices were allowed to apply for teachers' Professional Clear Credentials. Under the Local Education Agencies (LEA) and the County Office of Education (COE), they could (at the time) apply to receive state funding to support induction programs through the BTSA System (Breaux & Wong, 2003). The funding of each school district varied widely, with some districts opting for full-time support providers and others for part-time mentors (CCTC, 2002).

The BTSA Induction is a complex program comprised of various critical components (Bianchini & Brenner, 2009; Harris, 2015; Townley & Schmieder-Ramirez, 2014). The induction program is a job-embedded professional growth for teachers to use towards their teaching skills as they clear their preliminary credentials. The five basic characteristics of induction consist of (1) application of prior learning, (2) formative assessment and support, (3) advanced curriculum demonstration, (4) frequent reflection on practice, and (5) an individual induction plan. BTSA programs play a vital role with assisting beginning teachers with revisiting and apply what they have learned in teacher education to their present teaching framework (Bianchini & Brenner, 2009; Townley & Schmieder-Ramirez, 2014).

The California Standards for the Teaching Profession (CSTP) were adopted to focus on the needs and skills necessary to develop as a successful educator (CCTC, 2008). The CSTP is intended to provide a universal language, vision, and intricacy of the profession to assist teachers in the developmental of their teaching practice (CCTC, 2008). Each school district's program uses the learning to teach continuum (Figure 2) as the centerpiece of the induction program to guide teachers as they develop, refine and extend their teaching practices.

The CSTP support the creation of classroom communities and curriculum for all students with "varying backgrounds, learning styles, strengths, interests, needs and abilities are engaged and challenged as learners" (CTSP, 2008, p. 3). The CSTP are organized around six interdependent domains of teaching practice. The six standards represent a developmental and holistic view of teaching that are deliberate to meet the needs of distinct teachers and students in the induction programs (Table 1).

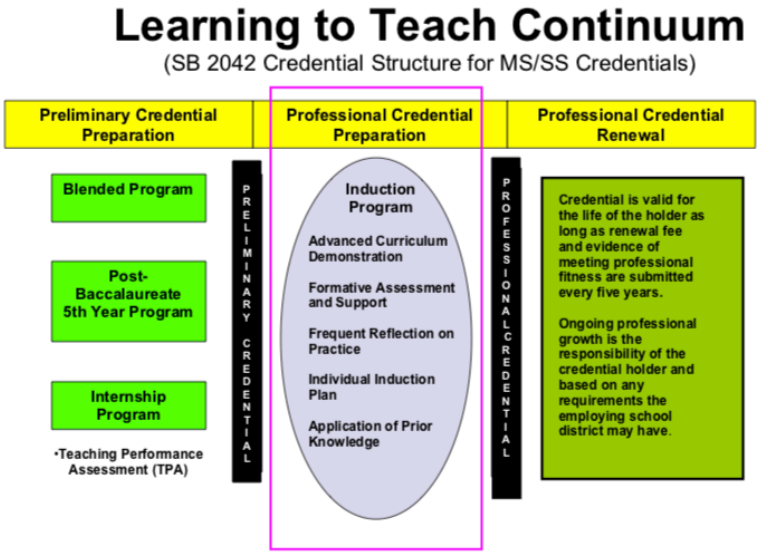

Figure 2. Learning to Teach Continuum. Adapted from California Credentialing.

Table 1

CSTP Standards

Standards	Description
1	Engaging and Supporting All Students in Learning
2	Creating and Maintaining Effective Environments for Student Learning
3	Understanding and Organizing Subject Matter for Student Learning
4	Planning Instruction and Designing Learning Experience for All Students
5	Assessing Students for Learning
6	Developing as Professional Educator

The CSTP provide guideposts for teachers across the professional continuum to examined practices, seek support and resources for improvement in rewarding the skilled roles and responsibilities from pre-induction to experienced teachers. The CTSP refer to three levels of standards: narrative, elements, and reflective questions to facilitate conversations about teacher practice, setting goals for ongoing professional development, and guiding the collection of evidence over time. Furthermore, TPEs and CalTPAs both aligned with CSTP to promote reflection, formulate professional goals, guide, monitor, and assess the progress of teacher's practice.

Induction Programs Outside of California

Many school districts in the United States are developing programs to attempt to support and retain new teachers (Breaux & Wong, 2003). Induction programs for beginning teachers operate in different educational environments throughout the world through its nature and intensity of the program (Strong, 2009). Arnold-Rogers, Arnett, and Harris (2008) evaluated a new teacher induction program to help mentor new faculty to the system to allow and facilitate the development and support of new teachers. The Lenoir City School District partnered with Tennessee University in 2006-2007 to evaluate two induction teacher programs: Lenoir City Elementary School and Lenior City Middle School, for all newly transferred teachers. Using both qualitative and quantitative methods, researchers use two categories to collect data from 20 participants: mentors and novice teachers. All novice teachers had three or fewer years of teaching experience in Lenior City Elementary or Lenior City Middle School. Results from the 20 participants included an allocation of more one-on-one time with mentors and participating teachers. Other areas of improvement included provided structural professional development for mentors and novice teachers.

Cherubini (2007) conducted a study on a professional induction program in Canada. Participants included 173 beginning teachers who were selected from exemplary induction programs. Using a qualitative approach, researchers gather information in two years, from the beginning of their induction program to the end of it. Triangulation was used to interpret differences from the different types of data including learning logs. Through the data, researchers found that the induction program from Ontario, Canada, maintained high expectations concerning the transition of new teachers. Also, participants reported a good experience with their mentor teachers. This critical element of feeling nurtured and creating bonds enabled many teachers to stay in the programs regardless of any school, family, or social barriers.

Jones, Dana, LaFramenta, Adams, and Arnold (2016) discuss the evolution, operations, and concerns of an online pilot induction program. Florida Science Technology Engineer and Mathematics (STEM) Induction and Professional Support Initiative started as support to incoming new teachers in middle and high school who were teaching STEM subjects. The online program operates in two methods: hybrid and fully online. Each of the online methods offered flexible scheduling to help participants learn. Using a quantitative and qualitative approach, researchers gathered data on performance using surveys, interviews, and observations. Researchers suggest that more online induction programs should be spread throughout the nation aiming for other subjects, not only STEM. According to the researchers, online induction programs are growing.

Davis and Waite (2006) examined the effects of an induction program with graduates in a 10-year follow up study. Over 215 participants partook in the Teacher Fellows Program (TFP) when it began, but researchers were only able to locate 202 participants through email, current

addresses, and employment statutes. Two categories were used to help gather data: employed in education and not employed in education. Using both quantitative and qualitative approaches, the researchers used questionnaires and interviews with the available participants. The outcome revealed that a high number of educators are still in the education profession and reported positive perceptions of their experiences in the TFP. Stronger data was generated through the ten-year follow up between the participants and the TFP, allowing the graduates to express their experiences of both the TFP and their current profession.

Algozzine, Gretes, Queen, and Cowan-Hathcock (2007) examined all third-year teachers in fourteen school systems of Southwest Education Alliance of North Carolina through an induction program. Using a qualitative approach, 1318 teachers were surveyed with open-ended questions regarding the effectiveness of the induction program including (1) induction program activities, (2) assistance received in teaching and nonteaching areas and (3) support received from mentor, administration, and other colleagues. The outcome revealed that the induction program has a positive impact on all first, second, and third-year teachers. The group indicated that the induction programs were sufficient for them to succeed during the first years of teaching.

Green (2015) focused on twelve career-changed teachers from an industry background during their first three years as technology and vocational educators in New South Wales, Australia. Through a qualitative method, interviews, school site visits; phone calls, and emails were conducted to investigate the experiences and perceptions of the career teachers in their new professional lives. Using a cross-case analysis, themes were created from the data for the twelve particular teachers. The most common theme shared by all twelve participants included the work team, allowing each of the teachers to identify as a team leader in their classroom. This allowed each teacher to support and scaffold learners by treating their classroom as work sites.

Luft, Gillian and Patterson (2002) investigated the barriers and pathways that were experienced from secondary science teachers in a three-year induction program at the University of Arizona. The Alternative Support for Induction Science Teachers (ASIST) was developed to mentor any first, second, or third-year secondary teachers from school districts in Tucson and rural school districts within 75 miles from Tucson. Through a qualitative approach, all thirteen teachers were part of Saturday meetings, classroom visits, a trip to the state science conference and electronic communication. An effects matrix was used to explore, describe and explain interest to help understand the barriers and pathways of the science educators. The barriers of this study included: identifying key administrators, recruiting participants, inconsistent ideologies, and university support with time constraints. Each of the barriers leads to educators have a set back upon completing the ASIST Program. The pathways of the study included: program participants, supportive administrators, mentor teachers, communication and evaluation.

Heintz (1997) investigated the success of the Flowing Wells Teacher Induction Program for Success (TIPS) in Tucson, Arizona. The major goals of TIPS are to build on a sense of culture that articulates to the district's mission and philosophy. Through a two-year cycle, teachers partaking as members of TIPS go through a series of four days at the beginning of the first school year. On the first day, induction personnel, superintendent, and members of the supervisory staff, create the sense of collegial support to beginning teachers through cooperative groups, introduction of lesson planning, teaching objectives and engaging students. Day two consists of instructional practices and writing sample lessons. During day three, beginning teachers learn about benefits, the culture of Flowing Wells School District, and the needs of the student population. On the last day, new teachers learn about the instruction shifts of the

classroom including routines, procedures, and structured bell work. The success of TIPS is evident through training, supporting and retaining beginning teachers.

Similarly to TIPS, Wong and Wong (2001) investigated the success of the Professional Educator Induction Program in Prince George's County Public Schools, Washington D.C. The success of the induction program comes from facilitating teachers' professional development during the two-year induction program. In 2001, all one thousand participating teachers began four days highly structured training. During the first day, teachers were welcome with tote bags, breakfast, lunch, booths, lunch, and general sessions. For the next two days, all participating teachers are assigned to demonstration classrooms specific to their grade levels and content areas. On the last day, teachers evaluate the program to receive further training from mentor teachers and instructional specialists before attending their school site. During the school year, all teachers have a fifth-day follow-up session, where further training and support is provided.

The success of the induction process is supported by the higher retention rate of new teachers by its support of administrators, mentor teachers, and the community. Induction programs across the United States have seen significant growth success.

Induction Programs in California

Initially Teacher Induction Programs in California are split into six clusters: (1) Northern/North-Central Counties, (2) Bay Areas/Central Coast, (3) Central Valley, (4) Los Angeles County, (5) Orange/San Diego/Imperial Counties and (6) Inland Empire (Figure 3).

Figure 3. BTSA Clusters. Adapted from CCTC.

Marquez-Lopez and Oh (2010) analyzed the Riverside, Inyo, Mono, and San Bernardino (RIMS-BTSA) BTSA project. The RIMS-BTSA received state funding from the CCTC and CDE to help establish the English Language Learners (ELL) Pilot Project to develop the professional development for the four regions. The BTSA ELL Pilot Project included four focus group sessions with K-12 bilingual and ELD educators and EL program directors from Riverside and San Bernardino counties. The first part of this pilot project was to collect data from the practitioners from the field. After analyzing the data, the Design Team prepared professional

development materials that were submitted to the Rims-BTSA Government Team and CCTC. The professional development focused on assisting teachers in developing student learning by assessing students' prior knowledge, experiences, and cultural resources. The data from the BTSA Pilot Program demonstrated a positive experience in the publication of professional development that incorporated EL's linguistics, cultural, family, and community resources.

Gee and Gonsier-Gerdin (2018) examined the experiences of ten first-year teachers who held a special education credential at a university in California. Using a collective case study design, all ten participants were selected as graduates who had current positions in school districts as special education teachers or transitional programs aged kindergarten through 21 years. Three types of data were collected between August and the end of May including: (1) informational data about each teacher's students and programs, (2) monthly small group conversations, and (3) focus groups. Results indicated accomplishments, joys of their work with children and families and their growth in confidence levels. Frustrations from the teachers over the first year included the lack of shared vision between teachers and school administrators. According to teachers, an implication of the study included additional practices to deal with students with severe disabilities and the induction of special education teachers. Rietman (2018) found similar results in the study of over 60 new California teachers.

Bianchini and Brenner (2009) explored the support of a California induction program with first-year science and mathematics teachers, focusing on teaching and learning instructional practices. Four beginning teachers were selected from the same county induction program from the following criteria: study diversity, the proximity of their school to the university and willingness to participate. By the second year of the study, two participants were no longer in the classroom, focusing on one middle and high school teacher. Multiple interviews were

conducted with the other two beginning teachers, their experienced mentors, BTSA director, and 21 induction seminars. Data collected were coded for two components of the theoretical framework: equitable instruction and teacher learning. Results indicated the struggles to promote equitable in science and mathematics instruction. The two beginning teachers did not have good experiences and pointed the little to teach toward equity.

All induction programs uphold several elements that make the framework effective. The CSTP builds on the Pre-Induction service and sets forth a description of teaching through self-reflection, goal setting and inquiry into practice (CCTC, 2008; Gee & Gonsier-Gerdin, 2018). The purpose of a multiyear induction program is to help new teachers to be successful, effective, and professional educators who will stay in the profession (Breaux & Wong, 2003; Luft et al., 2002; Wong & Wong, 2001). Beginning teachers who participate in a comprehensive induction program experience greater success in terms of job satisfaction and student achievement (Bartlett, Johnson, Lopez, Sugarman & Wilson 2005; Harris, 2015; Ingersoll & Strong, 2011). These elements include assigning mentors, providing administrative support and prioritization of professional growth (Moir, 2009; Smith & Ingersoll, 2004; Strong; 2005). California has created a comprehensive system for induction.

The 2016 California Induction Program Standards

With the 2016 adoption of the new Teacher Induction Program Preconditions and Programs Standards, came a need for change in approaching how to support teachers in completing the first years of teaching. The Induction Program Standards have increased the expectations of today's educators (CCTC, 2016). For example, the six BTSA clusters are no longer the primary measurement of accountability for teacher candidates. The new standards under the CCTC include the induction program design for mentoring clear teaching credential

candidates (Table 2). Induction Programs must be able to transmit teacher growth and development through the use of mentoring. Induction Programs cannot continue to deliver the same outcomes as they did in the past under the new 2016 California induction program standards and expect teacher candidates to be successful.

Table 2

Descriptions of New Induction Standards

Standard	Characteristics
1. Program Purpose	Induction programs support the teacher candidate development and growth through California Standards for the Teaching Profession (CCTC, 2016).
2. Components of the Mentoring Design	The induction programs must be based on a rationale form by theory and research (CCTC, 2016).
3. Designing and Implementing Individual Learning Plans within the Mentoring System	The Individualized Learning Plan (ILP) must address the California Standards for the Teaching Profession (CTC, 2016).
4. Qualifications, Selection and Training of Mentors	Qualified mentors that provide guidance and clear expectations.
5. Determining Candidate Competence for the Clear Credential Recommendation	Completed all program activities and requirements to verify the recommendation for a clear credential.
6. Program Responsibilities for Assuring Quality of Program Services	Quality services provided by mentors to candidates.

Program Purpose. The California Induction program strives to achieve support teacher candidate development and growth in the profession through a two-year, individualized, job-embedded system of mentoring, support and professional learning. Teachers move from preliminary preparation program into classrooms, they bring with them the knowledge, skills, and attitudes needed to move forward. This allows potential teachers to move from pre-

professional to preliminary to clear credentialed to an experienced educator (Lovo, et al., 2006).

Components of the Mentoring Design. The induction programs' mentoring design must be based on the rationale informed by theory and research. The mentoring approach implemented by the program must include the development of an Individualized Learning Plan (ILP). The induction program must identify and assign a mentor to each teacher candidate within the first 30 days of the participant's enrollment in the program. The mentor serves as a support for teacher candidates to include the just in time support to the beginning teacher in and out of the classroom. The mentor provides direct support to the teacher candidate in and out of the school by building relationships. The program design features to serves as a catalysis to strengthen the teacher candidate's professional practice (CCTC, 2016).

Designing and Implementing Individual Learning Plans within the Mentoring System. The Individualized Learning Plan (ILP) must collaborative developed at the beginning of induction by the candidate and the mentor. The ILP and the roadmap for teacher candidates the encompass of candidate interactions, observations of colleagues, the practice of reflection on instruction, analysis of student data and the use of data to plan instruction (CCTC, 2016).

Qualifications, Selection and Training of Mentors. A specific criterion is used in the mentor-selection process for programs (Harris, 2015; Odell & Huling, 2000). Programs such as of Lafourche Parish's Framework for Inducting, Retaining, and Supporting Teachers (FIRST), do not "replace the administrators, curriculum specialist, or other support personnel involved in the induction process" (Breaux & Wong, 2003, p. 66). The personality traits of mentors are important responsibilities to craft new teacher supports. Mentors should have a positive demeanor, an optimistic view of teaching professions, strong listening skills, the ability to model professionalism, flexibility, and openness to new ideas, reliability and a nonjudgmental attitude

in interactions with coworkers (Harris, 2015).

The mentor selection is given consideration before hiring mentors for the induction program for each school district. Mentors are the most effective when they develop social and emotional intelligence. Goleman, Boyatzis, and McKee (2004) outlines the five characteristics: (1) self-awareness of understanding the strengths and weakness, (2) social skills to build rapport, (3) self-regulation to think through hard situations, (4) motivation to thrive in and out of the classroom and (5) empathy to understand individuals' points of view. The ongoing new teacher support between their mentors is most valuable when a mentor is close matched up with grade level, subject matter and geographical location (Breaux & Wong, 2003).

Support providers uphold certain roles in an induction program that are critical in the developmental process of a participating teacher (Strong, 2009). The Induction Program focuses on a mentoring partnership as a key component (Bianchini & Brenner, 2009). The role of the support provider is to provide standards-based participating teacher support and assessment that will empower a new teacher (Moir, 2003). The support provider will assist new teachers with working with all students in their ongoing education by committing to a yearlong process. Mentors provide ongoing support to the participating teachers every week, observing participating teachers at their school site, attend support provider district training and participate in the evaluation of the success of the district's induction program.

Determining Candidate Competence for the Clear Recommendation. Induction program must verify the program requirements for teacher candidates before the recommendation of a clear credential (CCTC, 2016). In California, a newly credentialed teacher requires two years of an induction program to apply for a clear credential. Documentation is required to reflect the learning and professional growth of the teacher candidate through the

collaboration of the induction coordinator and mentor.

Program Responsibilities for Assuring Quality of Program Services. Induction programs must assess the quality of services through candidate feedback and formative feedback to mentors (CCTC, 2016). A coherent system must be put in place through collaboration, communication, and coordination between teacher candidates, mentors, school, administrators and the members of the induction system.

Each induction program must make available and advise participants of an Early Completion Option (ECO). The ECO gives the teacher candidates a faster pace than the full two years generally required. Teacher candidates interested in applying for the ECO must (1) have successfully taught for three or more years in the classroom (excluding internships, student teaching or substitute teaching), (2) demonstrated integrating and innovating development levels for California Standards for the Teaching Profession (CSTP), (3) submit a letter of recommendation from a current site administrator attesting the experience and exceptional teaching ability, and (4) submit an application to the induction office by October. Once the application has been submitted, the Induction Coordinator observes the teacher candidate unannounced. The approved candidates are responsible for completing all program requirements within 12 months.

The goals of a successful induction program include: (1) support teacher candidates through initial stages of the first years in the classroom, (2) improve teacher performance, (3) provide mentorship support, and (4) develop professional habit to transcend into the classroom. With the new program 2016 standards put in place, mentor teachers work collaboratively with the district curriculum coordinators and site-based instructional facilitators in conducting informal observations of the newly hired teachers (Lovo et al., 2006). These observations are not

used for evaluation; the intent is to provide new teachers with specific, immediate, non-threatening feedback on their teaching performance (Bianchini & Brenner, 2009; Breaux & Wong, 2003; Wong and Wong, 2001).

Professional Development and Learning

In-service professional development in the field of the induction program is guided by the individual culture and specific needs of its school district (Breaux & Wong, 2003). Implementing new strategies or tools require change. Croft et al. (2010) assert that there must be a "willingness to change as the evidence base of effective teaching grows, as curricula change, and as the needs of learners evolve" (p. 13). With traditional professional development models, an educator's will to change in the absence of any follow-up support may not occur. When expectations for implementation of learning does not exist, then the strategies learned in training are unlikely to impact student learning (Knight et al., 2009). The purpose of this section of the literature review is to provide an overview of the professional development that is currently provided to induction teachers from the past two decades: (1) Professional Development in the Induction Programs, (2) Collaboration, (3) Portfolio, and (4) Technology.

Professional Development in the Induction Programs

Participating in an Induction Program is mandatory for beginning teachers seeking to clear their California credential. The professional development model requires new teachers to participate in induction activities by moving away from "one size fits all" by offering distinct professional development at the district level (Moir, 2003). Each program was required to include the Cross-Cultural Language and Academic Development (CLAD) certification. The CLAD certification authorizes the teachers to instruct English learners and students with diverse backgrounds. Typical topics for induction include the following: Classroom Management,

Lesson Planning, Instructional Strategies, Discipline, Time Management, Working With Parents, and Accommodating Individual Differences (Breaux & Wong, 2003).

The BTSA Induction Program professional development was originally designed around the last six standards (15-20) to address the teaching curriculum to all students in California Schools as seen in Table 3.

Table 3

Induction Standards 15-20

Standard	Description
15	K-12 Core Academic Content and Subject Specific Pedagogy
16	Using Technology to Support Student Learning
17	Supporting Equity, Diversity and Access to the Core Curriculum
18	Creating a Supportive and Healthy Environment for Student Learning
19	Teaching English Learners
20	Teaching Special Populations

The professional development was in the form of afterschool workshops and required all new teachers and mentors to attend (Breaux & Wong, 2003). All content instruction consisted with the adopted curriculum materials and academic learning needs of students. Teachers new to a school or system need additional support to develop their teaching strategies by enhancing the quality of teaching through professional development (Arnold-Rogers, Arnett, & Harris, 2008). Staff development for educators has consisted of teachers receiving information and applying it to their classrooms without reflections. Professional development needs to support teachers' adaptation to the major changes that have taken place in recent years (Pyoral, 2014). A shift began to take place in all induction programs in three clusters: collaboration, portfolios, and technology (Wood, 2005).

Bybee (2001) covered four areas of professional development: (1) learning about

technology, (2) learning to teach technology, (3) self-assessment and continuous improvement of technology teachers, and (4) comprehensive, sustained professional development programs. Bybee suggested that standards serve as a catalyst for change in technology education through the use of five strategies in professional development: (a) immersion, (b) curriculum, (c) examining practice, (d) collaborative work, and (e) vehicles and mechanism. Any professional learning program requires a selection of strategies that are most appropriate to the situation to help meet the specific goals.

Powell and Bodur (2018) identify the importance of quality teaching in online teacher professional development (OTPD) in the context of high school social studies. Through a qualitative multi-case study, participants were selected from a medium-size, public school district located in the southeast United States. The school district has utilized PD 360, an online video library of over 2000 classroom application videos dealing with education-related topics. Each of the six participating teachers was assigned a pseudonym during the face-to-face interviews to identify their perceptions of the OTPD. Results of the participating teachers were categorized into six major themes: relevancy, authenticity, usefulness, interaction/collaboration, reflection, and context. According to the teachers, the value of OTPD experience had a greater validation of their practices than learning something new. Each teacher was able to build upon their current practice and implement new skills in their classrooms.

Not all professional development opportunities are equally effective. Teachers face challenges regarding access to quality professional development (Powell & Bodur, 2018). Traditionally, teacher professional development has been dominated by isolated training sessions. Simply offering an hour or daylong professional development session to teachers, or even requiring it, is not sufficient (Knight et al., 2009). The challenge of effective professional

learning is to use the best combination of learning activities to meet specific goals, context, and issues that are identified in the designed proves (Bybee, 2001). True effects of professional development can only be realized once it reaches the students, and teachers deserve support in doing this.

Collaboration

Teachers need the opportunity to work and learn with other educators. In a collaborated learning environment, teachers are encouraged to bounce ideas off each other and develop new practices with others. Brownell, Adams, Sindelar, Waldron, and Vanhover (2006) examined how a teacher who adapts strategies acquired in collaboration differed form those who do not. In three years, researchers investigated the use of Teacher Learning Cohorts (TLC) at two urban elementary schools using formal and informal classroom observations, interviews, and field notes. Findings revealed differences in knowledge of curriculum, student management, pedagogy, and student-centered instruction.

Similarly to Brownell et al. (2006), Islip School District used a three-year tenure track program to strengthen the collaboration of beginning teachers (Breaux & Wong, 2003). The three-year comprehensive program implemented a cohort system to build relationships and support groups. In year one, beginning teachers met monthly to focus on effective teachers strategies including a conferencing, open house, and organizational. During year two, monthly meetings were focused on classroom management techniques, interventions for appropriate behaviors, and team-building activities. Year three focused on cooperative discipline, cooperative learning strategies, stress management, time management, and self-esteem. Through the collaboration of beginning teachers, eligible teachers are celebrated as tenured teachers. Researchers indicated strong support of collaboration and investment through New York's Islip

Public Schools Induction Program.

Memory, Yoder, and Williams (2003) focused on the skills and knowledge important for collaboration with other teachers and school professionals through a general methods course. By using counseling skills for teachers, researchers lead sessions that address common challenges in working with students through collaboration and the usage of The Interstate New Teacher Assessment and Support Consortiums Standards for beginning teachers. A section of general method course, early teacher methods of instruction, was created with fewer than thirty students; teachers stimulated collaborative problem-solving activities in middle and high schools. Findings indicated students (1) do better work on problem-solving activities, (2) make effective presentations, and (3) apply the skills and knowledge learned in future teaching positions.

Gorozidis and Papaioannou (2011) explored new teachers' motivation and intentions regarding participating in training and teaching an innovative academic subject. Using a mixed method design, researchers explore 218 teachers through email questionnaires and two surveys. The Self-Determination Theory (SDT) was used to determine if the individual's behavior can be intrinsically motivated, extrinsically motivated, or unmotivated depending on the reasons for the involvement of a given task. The instrument consisted of five subscales with three items per scale. The findings indicate the encouragement of policymakers to help foster teacher motivating for promoting a successful implementation of educational innovations.

Collaboration is necessary for a complex society and global society. Morel (2014) identifies the essential twenty-first-century skills for collaboration through professional growth.

> Collaboration thrives in an environment in which the school leader has developed a climate conducive to collaboration. Three essential elements are necessary for that climate involvement in significant work, trust, and consistent process (p. 38).

Collaboration builds interpersonal skills and requires the skills needed to help collaborate with other educators at school sites. The collaboration can be implemented into the day such as coaching, peer observation, modeling, and professional learning community work.

Collaboration encourages beginning and new teachers to be risk takers outside of the classrooms. Veteran teachers can collaborate in planning and assessment. Shernoff, Marinez-Lora, Frazier, Jakobsons, and Atking (2011) connected new teachers with a larger network of colleagues. Through a mixed method development framework, the model links novices with lead teachers to provide support in classroom management and engaging learners. Group seminars were designed to occur twice per month, and PLC meeting was scheduled monthly for all members. Teaching should not be an isolated experience. Collaboration with colleagues extendeds knowledge.

Portfolio

Portfolios offer the opportunity to collect a range of assessment tools and work with educators to facilitate ongoing professional development and continuous learning. Castle, Fox, and Souder (2006) study the impact on professional development schools (PDS) by comparing with PDS teacher candidates with non-PDS teacher candidates. George Mason University created a partnership with seven PDS schools and five non-PDS schools in four school districts. Candidates in the PDS are full-time students with daytime courses and yearlong internship while non-PDS participants are part-time while enrolled in evening courses. There were a total of 91 participants: 60 PDS and 31 non-PDS. Using a qualitative analysis of portfolio presentations and student evaluations, participants showed greater ownership of their school and classrooms while applying and integrating New Teacher Standards.

Boulton (2014) focused on the efficacy of using e-Portfolios for newly qualified teachers

at Nottingham Trent University. Through the use of piloting e-Porfolios, the researcher wanted to identify if the tool could be used to support professional development and the transition from university into employment. A total of 17 pre-service teachers enrolled at the Graduate Teacher Programme were evaluated using two digital platforms: closed platform and open-source software. At the end of the third year, a full evaluation of the e-Porfolio took place using focus groups and questionnaires. The findings indicated an increase in the strength of the teacher ownership of their work as part of the transition and empowerment into becoming a teacher and an acceptance among head teachers regarding the usefulness of the e-Porfolio.

Domac, Anderson, and Smith (2016) explored the use of portfolios to encourage social work students from the University of Leicester to reflect on their interprofessional learning (IPL) that includes knowledge, skills, attitudes, and behavior. Using a qualitative design, forty students shared their portfolios and were interviewed. The reflective learning portfolios were used to access the students' interprofessional curriculum learning trajectory by keeping a record of their continuing professional development. The findings indicated that students were capable of reflecting on their development after attending specific IPL events.

Pyoral (2014) required a role-based portfolio for teachers' professional development. The portfolio was developed between 2009 and 2012 at the University of Helsinki with teachers who were involved in faculty development. The portfolio was designed as a self-assessment tool to support teachers' development through nine face-to-face sessions, small and individual group learning activities, and assessment. The portfolio consisted of six main duties: informational provider, role model, facilitator, assessor, planner and resource developer. Using a qualitative designed, each member was given a questionnaire to validate each role in the teaching program using a five-point scale. Results indicated that teachers were committed to the role of a practical

teacher and being a teaching role model.

Similarly, Sidhu (2015) required a teaching portfolio as a professional development tool for clinician educators. The teaching portfolio (TP) contained factual descriptions of teacher's teaching strengths and accomplishments. Results indicated a positive strength in providing a structure for self-reflection, aiding professional development in education. Also, the researcher revealed that electronics portfolios are more portable and flexible compared to paper portfolios.

The use of portfolios can be used as assessment tools to evaluate educators' progress and the effectiveness of the learning experiences. Portfolios can include evidence of achievement of learning outcomes. The next subsection will give the reader an overview of the types of technology used throughout school districts for professional development.

Technology

Carpenter (2015) facilitated learning for pre-service K-12 educators by using the microblogging service of Twitter as professional development. Using a qualitative approach, the researcher wanted to find out the teachers' perceptions of the use of Twitter for professional purposes. A total of twenty participants completed the professional development of Twitter at a private university in the southeastern United States. All participants participated in student teaching the following semester in secondary English, history, mathematics, music, physical education, and health at the K-12 level. At the end of the student teaching, a survey was conducted to include the experiences of Twitter in the classroom. Seven of the twenty pre-service teachers maintained their professional usage of Twitter during student teaching with the most popular activity being reading tweets from users they followed. The majority of the pre-service teachers noted the benefits of Twitter usage including resource sharing, communication, and connection with other educators. Fifty percent of the participants mentioned the lack of time

as an obstacle to using Twitter during student teaching. Participants suggested that they could benefit from an access of online community practice.

Leffingwell, Thomas, and Elliott (2007) use Microsoft Product for the teaching of psychology via both traditional and online formats with teachers. Three application models were used in this case study at a Northeastern University in the United States: audio archives of traditional classroom lectures, video archives of major presentations in a graduate course and use of on-demand lectures with a hybrid course. Results indicate users were having difficulty with the template-driven layouts of the applications. Also, users of the online format had frustrations from the warnings they received through some features. Some warnings included pop up advertisements from other websites. Overall, Microsoft Producer was found to be a user-friendly and powerful product for producing professional educational content.

Hao and Lee (2017) investigated the pre-service teachers' (PST) concerns about the integrating Web 2.0 in their instruction at a university. All 200 participants were invited to complete online surveys within two weeks. During this time, the participants were encouraged to integrate Web 2.0 tools into instruction. Findings of the study provided valuable insights for teacher education through levels of concern and self-efficacy. Each of the Web 2.0 tools were free of charge to the educators but were allowed to minimal access to each.

Sato, Haegele, and Foot (2017) studied online in-service physical education course through teachers' experiences within a two-year cycle. Using a qualitative methodology, all nine participants took part in a journal reflection and face-to-face interviews. Three themes emerged from the participants' narratives and were classified as instructor communication, bulletin board discussion experiences and assessment experiences. The results demonstrated a positive learning experience when teaching students with disabilities. The online instructor provided direction,

feedback, and alternative assessment via email or phone conversations.

Quinney, Smith, and Galbraith (2010) developed and implemented a self-directed technological training program that rewarded educators for exploring technology between June 2007 and January 2008. Using adult learning theories of andragogy and self-directed learning, the researchers took a quantitative approach through an analysis of results of pre- and post-surveys given to the participants. From the 175 participants, 96 participated in the pre-survey at Brigham Young University-Utah, designed to explore the generational difference in media and technology use. Results from the pre-survey indicated that educators were most uncomfortable with blogs, wikis, image editors, and music players. The researchers created the Technology Challenge, requiring the participants to explore new technology on their own for at least fifteen minutes through a series of training and mini-challenges. These features of the challenges encouraged more self-directed learning in areas of participant interest. Results of the post-survey indicated that a self-directed approach fosters technology skills that educators need to best serve students. Furthermore, it promotes lifelong learning habits to keep abreast of emerging technologies.

To support technologies in classroom practices, Meredith (2016) incorporated Game-Based Learning (GBL) technologies in K-12 educational settings through research. The researcher accessed digital holdings from the University of Wyoming to find recent scholarly literature via the educational technology database. After analyzing main topics of 18 topics, three themes were developed: (1) the use of GBL in professional development toward the classroom, (2) persuading teachers of the value of GBL through demonstration and training, and (3) design and evaluation of GBL professional development. Based on the results of the published studies, incorporating GBL into professional development improves teachers'

perceptions of games. The areas of growth included the amount of time invested in becoming proficient in technological support requirements.

Clausen (2007) examined the issues of new teacher development and the role of context on new teachers' instructional technology use. The study employed a case study methodology to understand two first-year teachers' development experiences through their technology use with students from a rural Midwestern district. Data sources included interviews, direct observations, field notes, and technology artifacts, allowing for triangulation. Results indicate the importance of the institutional context in valuing beginning teachers' instructional decisions about technology use with students. Both participants shared planning time and other opportunities to work with teachers within the district to build relationships and understand that technology integration was part of the curriculum. Teachers supported the freedom to integrate technology into their instructional practice was frequently as possible.

Technology does the change how teachers learn but enhances their ability to growth as an educator. The studies provided in the section resulted in positive feedback towards teachers. Teachers are able to use various platforms to facilitate all content areas and provide valuable insights.

Beginning teachers are learning through professional development of technology, portfolio and ways to incorporate into their classrooms (Clausen, 2007; Powell and Bodur, 2018; Quinney et al., 2010; Sato et al., 2017). Further professional development offered in the Induction Programs must be job-embedded, meaningful, and relevant to educators (Breux & Wong, 2003). Beginning teachers need to develop both technological skills and collaboration habits to be successful in the classrooms (Meredith, 2016; Quinney et al., 2010). Furthermore, beginning teachers considered instructional technology use as an additional element to their

regular instructional practice with their students (Clausen, 2007).

Summary

Induction programs are not additional training but are designed for the beginning teacher who has already completed training, serving as a bridge from student teaching to a teacher of students (Ingersoll & Smith, 2004). This chapter provided a review of both quantitative and qualitative studies to determine depth-breathe of induction programs. Quantitative research conducted so far is favorable towards induction programs, but the programs continue to evolve, as they are experienced in different districts. Qualitative data continues to compliment these quantitative studies so that educators can better understand why first-year teachers are satisfied with their program and are becoming strong educators (Gee & Gonsier-Gerdin, 2018; Luft et al., 2002; Moir, 2009; Smith & Ingersoll, 2004; Wong & Wong, 2001). Some research has been conducted in California's school districts, but research has not yet documented the impact of an Induction Program with new changes of professional development and technology (Sato et al., 2017). It is important to gain insight into the beginning teachers' experience in an induction program because educators need to know more about how to improve their teaching and mentoring practices. As a result, there is much research to be done for educators to fully understand the impact of induction programs. The methodology for conducting this study is discussed in the next chapter.

CHAPTER 3: METHODOLOGY

Introduction

This chapter describes the methods used to analyze teachers' experiences in an induction program. This study utilized a qualitative and quantitative methodology of data collection and analysis with an emphasis on qualitative methods. The qualitative research methodology is emphasized as the best approach for this case study because it allowed teacher candidates' and mentors' experiences of the induction program to be documented. The research questions identified what teacher candidates and mentors perceive to be the strengths and areas of improvement in the induction program at School District A.

Teacher candidates and mentors' perception of the induction program was investigated via surveys and focus group interviews on answering the research questions:

1) How have the teacher candidates' experiences in the induction program within School District A impacted their professional growth as an educator?
    a. What do teacher candidates perceive to be strengths for the induction program?
    b. What do teacher candidates perceive to be areas of growth for the induction program?
2) How have mentors' experiences in the induction program within School District A impacted their mentorship to new teachers?
    a. How do mentors provide support to benefit the teachers in the induction program?
    b. How do mentors challenge the teachers in the induction program?

To address the research questions, the following hypotheses were developed with consideration for the evidence presented in the literature review.

1) Hypothesis 1: School District A's Induction Program has a positive impact on the teacher candidates in relation to (a) the level of helpfulness of mentor, (b) its degree of impact upon

their effectiveness as a teacher, and (c) ongoing professional learning.

2) Hypothesis 2: School District A's Induction Program has a positive impact on the mentor in relation to (a) the level of helpfulness of Induction Program, (b) its degree of impact upon their effectiveness as a mentor and (c) ongoing professional coaching.

Research Design

To address the research questions and hypotheses, a case study was conducted at School District A, where the induction program was in effect throughout the 2018-2019 school year. In case studies, researchers identify a social unit, such as a person, group, a place or activity, some combination of those units. That unit becomes a case of something, of some phenomenon (Dyson & Genishi, 2005). A case study was most suitable for the research questions because it explores a real-life setting, contemporary bounded system over time, explores in-depth perspectives from a group of individuals and reports case themes (Creswell & Poth, 2018).

The case study research begins with the identification of a specific case that will be described and analyzed (induction program). The case described in this study was a bounded system, delimited by the time, one school year and by place (School District A). The intent was to report an intrinsic case study. The focus was on evaluating a program because the case presents a unique situation describing experiences from teacher candidates and mentors. Qualitative research questions were used to narrow the purpose of the study to several questions that were addressed in the case study to draw on more extensive, multiple sources of information. The research questions allowed for an open-ended, evolving, and non-directional stance of responses (Creswell & Poth, 2018). Multiple forms of data were collected, including mentoring observations, interviews, and surveys. In this qualitative case study, the focus group is a better approach for interviewing since the research questions focus on induction participants'

views (Creswell & Poth, 2018). Participants were allowed to give their opinions of the induction program to build their responses by listening to ideas offered by their colleagues in a focus group. A complete findings section of a case study involves a description of the case and themes that the researcher has uncovered. Lastly, the case study ends with conclusions formed by the researcher about the overall meaning of statements.

Setting and Participants

To answer the research questions and hypotheses, this case study was conducted at a school district where the induction program has deemed "effective" since 2003. School District A is located in southern California and is home to approximately thirty-five thousand students, predominately Hispanic/Latino. School District A has 29 elementary schools, seven middle schools, five comprehensive high schools, and two continuation high schools.

According to the Induction Coordinator, School District A's induction program has contributed positively to the retention of educators (I. Coordinator, personal communication, August 23, 2019). School District A offers a choice of professional developments for all educators who are part of the induction program (Appendix A). Educators benefit from the acquired skills learned in the induction program and apply to their classroom practices. Upon completion of the School District A's induction program, candidates submit the required paperwork to human resources and State Department of Education to apply for a professional clear credential. With the change of district personnel, School District A's Induction Program is scheduled for the accreditation visit in the spring of 2020. Changes are being made, focusing on a revamping the Individualized Learning Plan.

This study was conducted with teacher candidates and mentors that were employed within School District A and enrolled in the Induction Program during the 2018-2019 academic

school year. School District A is located in the San Bernardino County and has managed to maintain high academic scores in all their schools as evident of the prestigious awards. Awards include Gold Ribbon Schools in 2018, Title 1 Academic Achievement Award, Advancement Via Individual Determination (AVID) Schools of Distinction in 2019, Best Schools by United States News in 2018, California Positive Behavioral Intervention Support (PBIS) Coalition in 2018, National Forum Schools to Watch and Microsoft Showcase Schools in 2018. School District A is home to approximately 35,000 students and 45 schools, serving students from pre-school through adult education. During the academic year 2018-2019, the student breakdown was 87% Hispanic/Latino, 6% African-American, 4% White, 1% Filipino, and 1% Asian. Student enrollment included 83% socioeconomically disadvantaged and 32% English language learners.

During the 2003-2004 school year, School District A was selected to become involved in the Beginning Teacher Support Assessment Program (BTSA). The BTSA grant money allowed School District A to provide service to new teachers that participated voluntarily. The state contributed $700-$800 per beginning teacher and districts added $1,000-$3,000 (Strong, 2009). In recent years, financial support and mentor funds were shifted and coordinated by the school district funding sources (CCTC, 2016).

School District A's Induction Program

School District A's Induction Program is housed under the Professional Development Department within the district. The operation of the program is the responsibility of the Coordinator of Induction and six full-time release mentors.

Mentors received communication through monthly mentor meetings (Appendix B) in which they collaborated with other mentors, learned about program expectations, reviewed adult learning theory, received "just in time" supports, and received mentoring/coaching tools. During

the just in time support, mentors support teacher candidates in any way needed at the time of weekly meetings. They are not forced to only speak about professional development but any general concern about any aspect of teaching. Mentors can dedicate the time to working on the topic of concern with the teacher candidate.

Each full time mentor was assigned a cohort of part-time mentors whom the regularly communicate. All part-time mentors were invited at the beginning of the school year to attend a full day of training. During that time they were mentored in coaching, listen, scenarios, ILP and just in time support (I. Coordinator, personal communication, August 23, 2019).

Each year during the New Candidate Orientation, all new hires received timely information regarding district initiative, the Human Resources Department, Attendance Procedures and the Teacher Union Association (Appendix C). During the afternoon breakout sessions, the new hires chose from topics of avoiding teacher burnout, special education, growth mindset, and setting the stage for a great year. In addition, induction eligible candidates attend an Induction Kickoff Orientation Meeting where they received an Induction Handbook, learn about the purpose of Induction, professional development opportunities, the program processes, completion activities and sign a Memorandum of Understanding (MOU).

Teacher Candidates were assigned a mentor within 30 days of being hired. Mentors met with candidates to help them understand the context in which were teaching, set goals that build on the knowledge from their preliminary program and self-assessment of the CSTPs. The Individualized Learning Plan included opportunities for professional development sessions, observations of veteran teachers and professional readings. The process was individualized for each teacher candidates, with updates and revisions made to the goals as needed. Throughout the work, candidates reflected on their performance using the Continuum of Teaching Practice by

revisiting their focus.

Mentors observed each candidate a minimum of twice per year to gather evidence of teaching practices. Candidates' ILPs were assessed three times a year during mentor meeting portfolio reviews for the purpose of determining program progress and learning and professional growth goals.

The program was designed to improve candidate practice as measured by the California Standards for the Teaching Profession (CSTP) and student achievement through goal-setting, professional learning, data analysis, lesson planning, self-assessment and reflection. Mentors met with their candidate for a minimum of one hour a week to work through the Plan Teach Reflect Apply (PTRA) inquiry cycle. The PTRA cycle included analyzing observation data, observing veteran candidates, applying research-based principles from professional development, lesson planning, and self-assessment of their practice using the Continuum of Teaching Practice (CTP). The teacher candidate documented reflections and new learning during the weekly meeting meetings on their Individual Learning Plan (ILP), serving as a road map for their growth and development. Mentors use a variety of mentoring tools to guide their conversations and record them for future use. All evidence and the ILP were housed in an electronic portfolio folder in Office 365 One Drive and are reviewed three times a year in each mentor cohort at monthly mentor meetings (I. Coordinator, personal communication, August 23, 2019).

The amount of first teacher candidates in the induction program is approximately equal to the number of second-year teacher candidates in the program (Figure 4). Out of the 127 teacher candidates, 47% are first-year candidates, 50% second-year candidates, and 3% are Early Completion Option candidates. Early Completion Option (ECO) includes teachers with three or more years of successful classroom teaching experience, demonstration of integrating levels for

California Standards and submission of a School District A complete application.

Access to participants was gained via convenience sampling by inviting all teacher candidates enrolled in the School District A's Induction Program to fill out the survey. The survey was distributed via email invitation using the online email services Google Forms. The researcher gained access to the participant personal emails based on the list provided by the School District A's Induction Program Coordinator. A total of 127 email invites were sent and all opened their emails. From there, a total of 100 accessed the survey, and 56 completed the survey (Figure 5). The final sample size was 56 participants.

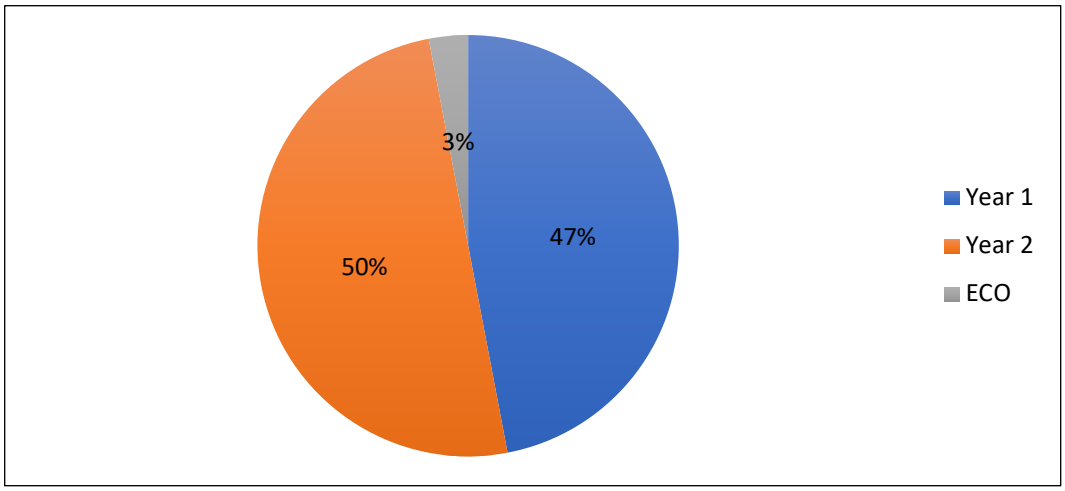

Figure 4. Pie graph of teacher candidates from School District A induction program (*N=127*).

School District A had 27 mentors to support the induction program. Six of these mentors were involved with induction on a full-time basis. They were contracted as a full-time mentor to serve as a full-time induction mentor from 7:30-4:00 pm. The remaining 21 mentors were hired on a part-time basis and given a stipend of $2,000 for each teacher candidate involved in the induction program during the academic year. The mentors were experienced teachers who had a fully cleared credentials (certification) within the school district. Each year, the Induction Coordinator made every effort to appropriately match mentors with teacher candidates (total of

two per each part-time mentor). For example, if a new teacher candidate was assigned to teach 7th Grade Mild Moderate Science, the mentor would have a strong background in Special Education to assist with the Special Education course load. The mentor and teacher candidate are required to have matching credentials unless there is a compelling reason to assign a mentor who does not have a matching credential. This must be substantiated in the teacher candidate's file (CCTC, 2016). In addition to the induction mentors, the Coordinator of Induction Program oversaw the assignments, training and assessments for all teachers and mentors.

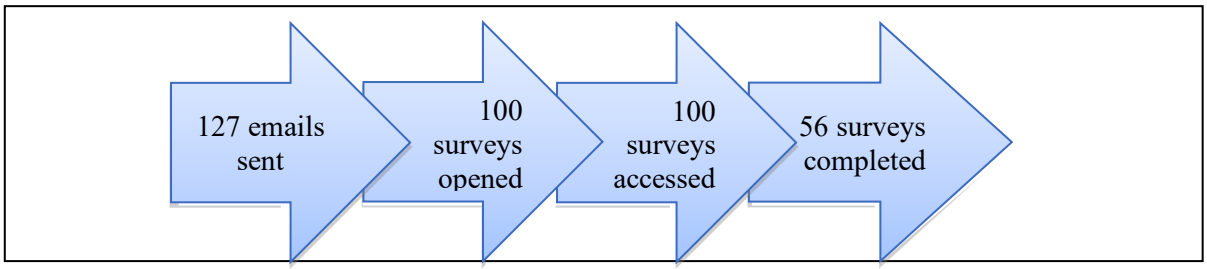

Figure 5. Induction Teacher Candidate selection. This figure shows the development of the final sample size of teacher candidate survey.

Access to mentors was gained via convenience sampling by inviting all mentors enrolled in the School District A's Induction Program. The survey was distributed via email invitation using the online email services Google Forms. The researcher gained access to the mentors' emails based on the list provided by the School District A's Induction Program Coordinator. A total of 27 email invites were sent to personal emails and all opened their emails. Mentors were sent three email remainders to complete survey. From there, a total of 27 mentors accessed the survey and 24 completed the survey (Figure 6). The final sample size was 24 participants.

The final survey question for both teacher candidate and mentor asked, "Are you interested in participating in this study further via a 20 to 30-minute focus group interview about your induction experience?" Interested individuals were asked to provide their name, email, and school site if they were willing to participate. Of the 27 mentors, eight responded.

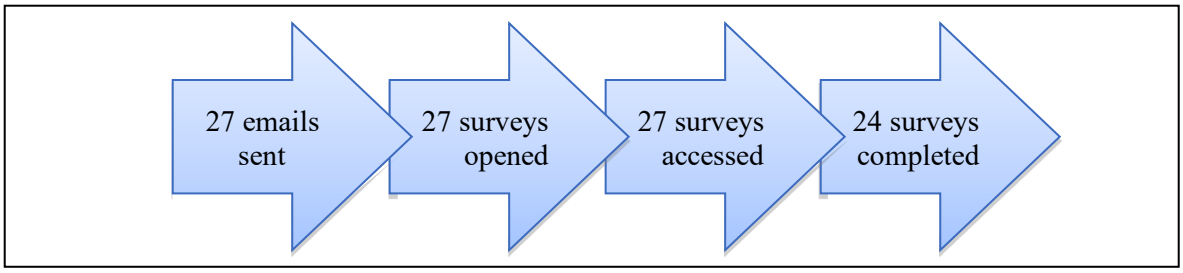

Figure 6. Induction Mentor Selection. This figure shows the development of the final sample size of mentor survey.

Sampling Procedures

Purposeful sampling was used for the selection of the participants (Creswell & Poth, 2018). According to Creswell and Poth (2018), the "purposeful sample will intentionally sample a group of people that can best inform the researcher about the research problem" (p.148). A sample of 127 teacher candidates with a preliminary multiple-subject, single-subject, or special education preliminary credential and 27 induction mentors were selected to participate in the study. The researcher set a criterion of a response rate of at least 25% of the 127 teacher candidates and induction mentors to increase the validation of the study. The criteria for the selection included the following:

1. The male and female teacher candidates and induction mentors were enrolled in the induction program at School District A during the 2018-2019 academic year.
2. All participants attending the induction professional development sessions in the spring 2019 were asked to participate in completing the online survey in June 2019 (Appendix D).
3. All surveys completed by the participants were used in the study.
4. All participants were invited to a focus group interview.

The rationale for the selection of the participants was to give a diverse sample of teacher candidates and induction mentors from the Induction Program. Inviting all participants from the

induction program allowed a diverse sampling of gender, age, and race. Participation in the study was voluntary and all participants agreed to informed consent before completing the survey, giving the participants the opportunity to stop at any point.

Instrumentation

The methodology of the study utilized survey responses, focus group interviews, observations, field notes and participant induction work that did not restrict the views of the participants (Creswell & Poth, 2018). This case study at School District A was unique according to place, time, and participant characteristics. These data sources were most suitable for this case study because they allowed for in-depth participant responses.

The focus group interviews permitted induction members to respond to questions about their views of the induction program. Teacher observations assisted the researcher to gather information witnessed in the program including the classroom. The purpose of triangulation in the case study was to capture different dimensions of the same phenomenon, School District A's Induction Program, to ensure validity and reliability from the qualitative data. In this study, triangulation facilitated validation of data through multiple data sources and allowed consistency of findings obtained through various mediums. The triangulation process corroborated information from different individual types of data, methods of data collection and ensured the case study to be accurate (Creswell & Poth 2018).

Survey Questions

Because this case study is based on an induction program, it is important to learn about the experiences with the program's framework and see how it has impacted participants' teaching learning and practices. At the end of the academic year 2018-2019, a Likert scale survey allowed the researcher to determine the feelings, uses, and engagement of the induction

program. The questions were worded so that they focused on the experience of the induction program.

Teacher Candidate Survey. The teacher candidate survey (Appendix E) was sent out to all first-, second- and ECO teachers. The thirteen questions consisted of a Likert Scale: Completely Agree, Agree, Neural, Disagree, Completely Disagree, and open-ended.

The question "My participation in the Induction program helped me to increase my competence as a teacher" was focused on the effectiveness of the induction program. Two additional questions were added to the second part of the survey, focusing on the mentors using a five-point scale with "1" being not satisfied and "5" being extremely satisfied. The open-ended questions were included to allow participants to focus on their overall satisfaction of the induction program. Responses to the open-ended questions were used in the qualitative analysis of the study. The last four questions were included towards the end of the survey to obtain demographic information based on years of teaching, age, credential(s) being cleared and grade level currently teaching.

Mentor Survey. The mentor survey (Appendix F) was sent out to all mentors in the School District's A Induction Program. The twelve questions consist of a Likert Scale: Completely Agree, Agree, Neutral, Disagree, Completely Disagree, and open-ended.

The question "As a mentor, I had the opportunities to network with mentoring peers by reflecting on ways to improve my abilities to support teacher candidates during the monthly mentor meetings" was focused on the effectiveness of the induction program. Three additional questions were added to the second part of the survey revolving around coaching. Two of the questions were added to focus on the mentors on a five-point scale with "1" being not satisfied and "5" being extremely satisfied. The open-ended questions were included to allow

participants to focus on their overall satisfaction of the induction program. Responses to the open-ended questions were used in the qualitative analysis of the study. The last four questions were included at the end of the survey to obtain demographic information based on years of teaching, age, credential(s) being cleared and grade level currently teaching.

Focus Group and Questions

In addition to the open-ended survey response, another instrument used to collect qualitative data were two district focus groups: teacher candidates and mentors. The focus interview questions were open-ended and encouraged the participants to express their perceptions and relay their induction program experiences (Appendix G). The questions were created with the guidance of the research presented in the literature review.

At the conclusion of the survey, teacher candidates and mentors were asked if they were interested in participating further in the study via a 20-30 minute focus group about their induction program experiences. Of the 56 teacher candidates who completed the survey, six expressed their interest and of the 24 mentors who completed the survey, eight expressed interest. The researcher contacted all interested participants via email to schedule a time to conduct the focus interview. There were a total of six individuals in the teacher candidate focus group and eight individuals in the mentor focus group. All focus group interviews took place in the school district's professional development conference room and were audio-recorded. In each focus group interview, a small number of general questions about the induction program and its effectiveness were asked (Creswell & Poth, 2018).

The focus group interview contained six open-ended questions that encouraged the participants to express their experiences with the induction program. Five focus groups were held with: (2) Teacher Candidates and (3) Mentors. The questions were addressed for the

teacher candidates (Table 4) and mentors (Table 5) were provided a copy of the questions a week ahead of time electronically and via hard copy. All six were contacted and responded via email to schedule a time to conduct the teacher candidate focus group interviews and all eight mentors were contacted and responded via email to select a time for the mentor focus group.

Table 4

Teacher Candidate Interview Questions

Interview Questions
1) How has participating in the Induction Program encouraged you to develop and enhance your skills and abilities as a teacher?
2) What are some of the benefits that you have encountered in working with your Mentor?
3) What are some of the challenges that you have encountered in working with your Mentor?
4) How has your work in the Induction Program helped in understanding the California Standards for the Teaching Profession?
5) When I ran the focus groups with mentors, the top two priority things that they came up with were "just in time" support and reflection. Can you give me an example of a time your mentor provided you with just in time support? Can you give me an example of a time your mentor provided you with reflection?
6) If you were to design an Induction Program, what modification(s) would you make? What would you have done differently?
7) Is there anything you would like to share regarding your induction experience?

The Mentor Focus Group. The mentor focus group interview contained five open-ended questions that encouraged the participants to express their experiences with the induction program. Eight mentors were contacted via email to schedule a time to conduct the focus group

interviews. All eight mentors responded to the email requested and picked one of the possible days.

Table 5

Mentor Interview Questions

Interview Questions
1) What support have you provided to your teacher candidate(s) this school year?
2) Which aspects of coaching did you find to be the most beneficial to you in trying to support your teacher candidate?
3) Describe one of your most successful mentor experiences. What made it so successful? (Scenario that you felt really made a difference).
4) Have you ever experienced a situation with one of your teacher candidates that did not go well? What were the challenges?
5) As a mentor, are there any modifications to the District's Induction Program you would change?

Both focus group interviews were conducted at a school district's professional development conference room. All participants were provided with the interview questions a week before and assigned pseudonyms to ensure confidentiality. Each participant was able to respond at their pace and contributed to each other's responses during the interview. During each focus group interview, questions were asked one at a time before moving on to the next one. All questions were open-ended, designed to elicit participants' perceptions. Both the Teacher candidate focus group interview and mentor focus group approximately 25 minutes each and audio recorded. The researcher used rev.com to transcribe the focus groups.

Reliability

The first method for securing consistency finding was conducted by checking reliability to prior surveys. Reliability allowed the researcher to have a greater "stability of responses to multiple coders of data sets" when dealing with consistency, dependability, and replicability (Creswell & Poth, 2018, p. 264). Internal reliability dealt with the consistency of collecting, analyzing and interpreting the data with multiple researchers and participants. The data of the academic year 2018-2019 for questions one through four were compared with the two previous induction program's academic years, 2017-2018 and 2016-2017, for consistency. Additionally, a group of research experts checked survey/instrument for consistency.

Validity

The case study of the induction program at School District A included three types of validity: credibility, transferability, and confirmability. According to Creswell and Poth (2018), the longer the intervention of a study is, the greater the effects of the study will be. Using a yearlong program, the data added credibility to the case study by including observations, teacher candidate/mentor interviews, field notes, and induction teacher surveys. Transferability of this study included the provided information: the setting of the program, induction participants, the yearlong program and the research methods used.

The study revolved around confirmability. The case study was discussed with colleagues and peers who were not part of the study by providing alternative interpretations in this study that included altercations to the survey and focus group questions. This allowed the researcher to reduce biases. The content of the validity of the survey and interview questions were inspected and assessed by experts including a professor of quantitative studies at Concordia University, Irvine, two colleagues in the researcher's doctoral cohort, and three mentors from School District

A. The researcher used other Concordia University researchers for the results and conclusions of the case study to enhance internal reliability.

Triangulation was also used to ensure validity. Content validity was evaluated by several experts consisting of a professor of quantitative studies at Concordia University, three colleagues in the researcher's doctoral cohort, and three mentors from a school district in California. This included verifying evidence from various sources that were presented in the literature review for the themes that were coded. One additional researcher reviewed the quantitative data collection's methods and results (Creswell & Poth, 2018). The researcher's feedback was used to ensure the validity of the findings. Another researcher reviewed the qualitative data collection methods and results (Creswell & Poth, 2018). The qualitative data researched included member checking in reviewing the themes that were coded and included their recommendations into the research findings.

Confidentiality

School District approval was obtained from the Department of Accountability (Appendix H). No school or teacher personal data was used. All participants enrolled in the induction program were asked to participate in the study. Participants were given a consent section at the beginning of the surveys (Appendix E and Appendix F). There was neither reward nor penalty for participating teachers who chose or chose not to participate in the case study. Also, any participants could drop out of the study at any time without any penalties. Pseudonyms were used in the write-up of the study to protect the identity of all participants. At the end of the study, all files were destroyed.

For the survey phase of data collection, responses were anonymous; as the instrument did not require participants to list identifying data such as name, phone number, email address or

position. Data acquired through the interview phases were kept confidential in the researcher's password protected laptop. Any written material was kept within a locking filing cabinet that only the researcher had access to. All recorded interviews did not include the participant's name. To further protect the confidentiality of participants during qualitative data collection, dates, times, and locations were not incorporated.

During data collection, as well as data analysis, only the researcher had access to the data. Completed surveys were sent directly to the researcher's personal email from the survey tool used. By consistently keeping these important elements at the forefront, the researcher strived to maintain confidentiality within his entire study, protect the study's overall integrity, and avoid unethical research practices. At the end of the study, all files were destroyed as indicated in the IRB approval.

Data Collection

In early July 2019, the researcher distributed an informational email to all 127 teacher candidates and 27 mentors in the School District's Induction Program (Appendix D). The letter described the nature and purpose of the study, confidentiality and data collection procedures. The researcher contacted the coordinator of the induction program to find acceptable dates to conduct the focus groups and survey.

The survey was distributed via email invitation using the online email services Google Forms. The researcher gained access to the participant personal emails based on the list provided by the School District A's Induction Program Coordinator. The questionnaire provided the researcher with background data for each participant and questions regarding credentialing requirements. All participants were invited for a focus group interview. Those who were interested were able to submit their names and provide contact information at the end of the

survey. All respondents were asked to complete the survey within 10 days. To increase participation, at the end of the ten days, a reminder was sent out via email.

The surveys also included informed consent, an introductory statement explaining the study, and an option to provide contact information to indicate interest in participating in further focus groups interviews. Participants were asked to complete the survey within seven days. A reminder was sent out on day five. In an effort to increase participation, at the end of the seven days, a second email went out to all participants and a seven-day time frame was provided.

Five focus groups were used to provide insight into the induction program. In each of the five focus group interviews, the researcher asked a small number of general questions and obtained responses from the individuals in the group (Creswell & Poth, 2018). Member checking was also used during the focus group interviews as a method to validate accuracy by sharing the interview transcriptions with the interviewees (Creswell & Poth, 2018). All focus group participants were satisfied with the focus group interview transcriptions. Upon analyzing the focus group interview data, the researcher shared the initial analysis with focus group participants to ensure the proposed significance was captured.

Data Analysis

A mixed methods research design (Figure 7) was used in this case study; beginning with a quantitative approach followed by qualitative methods. The quantitative component of the study was based on data collected from the participating teachers and mentor survey. The qualitative piece of the study allowed for a deeper analysis of the quantitative results of induction experiences through open-ended questions, focus groups, and case study artifacts.

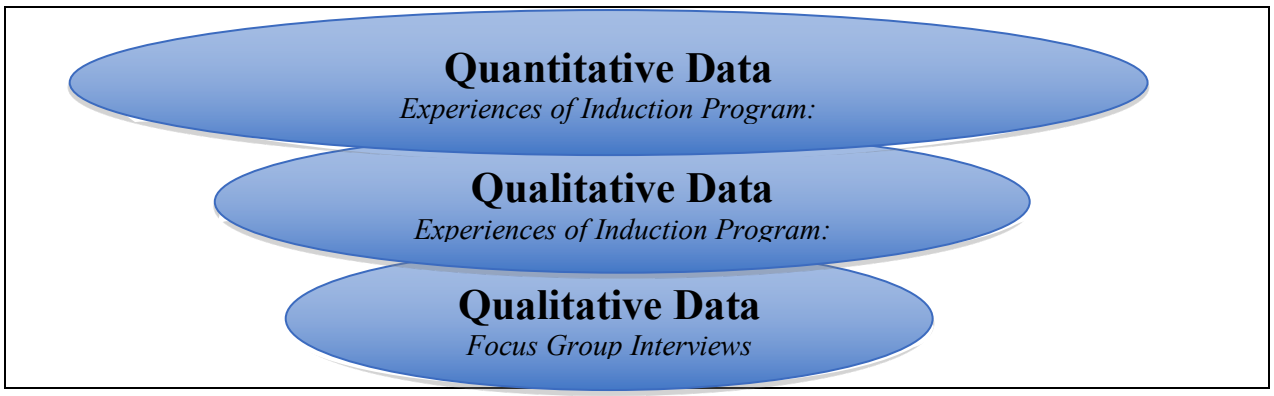

Figure 7. Mixed-Methods research design. This figure displays the qualitative and quantitative data used in this mixed-methods study.

Table six represents an analysis of how the survey and interview questions answered the research questions. The researcher followed this format in the presentation of data.

Table 6

Research Questions Data Based on Survey and Interview Questions

Research question	Survey questions	Focus group interview questions
1. How have the teacher candidates' experiences in the induction program within School District A impacted their professional growth as an educator?	TC 1, TC 2, TC 3, TC 4, TC 5, TC 6,	TC 1, TC 5
a. What do teacher candidates perceive to be the strengths in the induction program?	TC 7, TC 8, TC 9	
b. What do teacher candidates perceive to be areas of growth in the induction program?	TC 13	TC 6
2. How have mentors' experiences in the induction program within School District A impacted their mentorship to new teachers?	M 1, M 4, M 6, M 7, M 8	M 5
a. How do mentors support benefit the teachers in the induction program?	TC 11, M 2, M 3	TC 2, M 1, M 3
b. How do mentors challenge the teachers in the induction program?		M 4

Data collection for the study was collected via an online survey using Google Forms; the data was downloaded in an Excel sheet where it was reviewed for qualitative and quantitative data analysis. Quantitative data analysis consisted of using StatFI AnalystSoft analysis program.

A one-way between groups analysis of variance (ANOVA) was conducted to compare perceptions of mentoring satisfaction according to the year they are enrolled. Descriptive statistics were used to describe the characteristics of the sample in a year of Induction, level of credential to be cleared, grade level taught, and years of teaching experience.

To address the hypothesis regarding teachers' perception, the principles of Lev Vygotsky of Proximal Development and Knowles' Adult Learning Theory were measured as teacher effectiveness and the impact of the induction program (Ryan & Cooper, 1972; Vygotsky, 1978). The hypotheses questions were analyzed with a mean and standard deviation by classifying the response options on a five-point scale. Descriptive analyses were conducted to analyze participating teachers and support providers' perceptions and satisfaction with adult learning theory according to Knowles (1980).

Table 7

Hypotheses Data Based on Survey and Interview Questions

Hypotheses	Survey questions	Focus group interview questions
Schools District A's Induction Program has a positive impact on the participating teachers in relation to:		
a. level of helpfulness of support provider	TC 10	
b. its degree of impact upon their effectiveness as a teacher	TC 12	
c. ongoing professional learning		
Schools District A's Induction Program has a positive impact on the mentors in relation to:		

a. level of helpfulness of Induction Program	M 9	
b. its degree of impact upon their effectiveness as a mentor	M 11	
c. on going professional coaching	M 7	M 2

Qualitative analyses were used to analyze the open-ended survey questions and focus groups. All datasets were analyzed separately. For each data set, emerging themes were identified (Creswell & Poth, 2018). Interview transcriptions were analyzed first by developing tentative codes. The codes were then reduced into common themes and were assigned by the terminology used by the participants. The open-ended survey responses were read and coded based on the themes from the interviews. For example, if the participants mentioned that their mentor provided with emotional support during their weekly meeting then that was coded under "just in time." Some open-ended responses required multiple codes. If teacher candidates mentioned that professional development assisted them in lesson planning, then that was coded under "professional development" and "lesson planning."

Ethical Issues

District approval was obtained from the School District's Accountability Department (Appendix H). No school district or teacher identifying information was used. All participants in the induction program were asked to participate in the study. There was neither a reward nor a penalty for participants who chose or chose not to participate in the study. Also, any participant could drop out of the study at any time without any penalties. All participants were invited to be part of the focus groups if they wished to take part in a more in-depth, qualitative study to be completed in the fall of 2019. An application for an expedited study was submitted to Concordia University's Institutional Review Board (IRB). Pseudonyms were used to protect the identity of all participants. At the end of the study, all files were destroyed.

The researcher was employed in School District A but does not oversee the Induction Program. In relation to potential conflicts of interest, the researcher supported two teacher candidates but the nature of the work did not put the researcher in a supervisory role.

Summary

The quantitative and qualitative case study was conducted in School District A where the Induction Program has been in place since 2003. This study examined teacher perceptions of their induction experience to answer the research questions:

1) How have the teacher candidates' experiences in the induction program within School District A impacted their professional growth as an educator?
2) How have mentors' experiences in the induction program within School District A impacted their mentorship to new teachers?

A qualitative case study approach was emphasized for this study because it helped gather open-ended responses from the individuals. The study included 123 teacher candidates and 27 mentors from the School District's A Induction Program. Chapter Four analyzes the results.

CHAPTER 4: RESULTS

Introduction

The intent of this study was to examine a district induction program by exploring ways the induction program provides long lasting support for the new teachers and describing the formulas and protocols that have provided the program success. The researcher sought to determine, within School District A, how teacher candidates' experiences impacted their professional growth as educators and how mentors' experiences impacted their mentorship to new teachers.

The induction survey was deployed to all teacher candidates and mentors at School District A's Induction Program, fulfilling the quantitative data. The researcher acquired the qualitative data through two focus groups, interviewing induction participants and observing during mentor meetings throughout the 2018-2019 school year. Given the amount of data the study produced, the researcher used a consistent sequence to help guide readers. Results from the data collection presented in this chapter are based on emerging themes according to each research question.

Participant Demographics

Teacher Candidates

Teacher candidates at School District's A Induction Program completed 56 surveys. Out of the 56 respondents, 43 identified as Year 2 candidates, 12 identified as Year 1 candidates, and one identified as an Early Completion Option (ECO) candidate. The credentialed breakdown included: 63% (*n = 35*) single subject, 25% (*n = 14*) multiple subject, and 13% (*n = 7*) special education (Figure 8). It should be noted that seven respondents selected "special education" as their teaching credential. The researcher included this option to be inclusive of the preliminary credential that the teacher candidates hold including Mild Moderate (M/M), Moderate Severe

(M/S), and Deaf and Hard of Hearing (D/H). All 56 teacher candidates in the study represented elementary, middle, high school, and continuation grade levels.

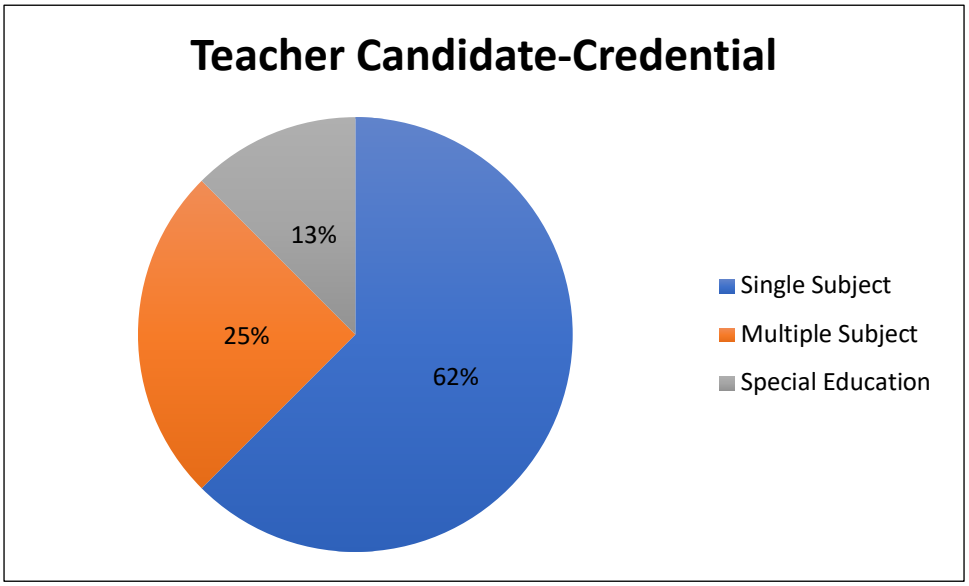

Figure 8. Type of Credential for Teacher Candidates. This figure displays the three types of teaching credential from the teacher candidate sample.

The age breakdown of the survey respondents and year were included in Table 8. The age range of the participants ranged from 24 to 49 and was categorized by intervals of 10.

Table 8

Participant Age and Year of Candidate

Age Range	Year 1	Year 2	ECO
20-29	7	25	1
30-39	2	10	0
40-49	3	8	0

All teacher participants were employed in School District A and possessed the requisite background to be a teacher candidate. Approximately 57% of the teacher candidates were aged between 20 and 29.

Mentor

Mentors at School District's A Induction Program completed 24 surveys. Out of the 24 respondents, 71% (*n = 17*) hold a multiple subject credential, 17% (*n = 4*) hold a single subject credential, and 12% (*n = 3)* hold a special education credential (Figure 9).

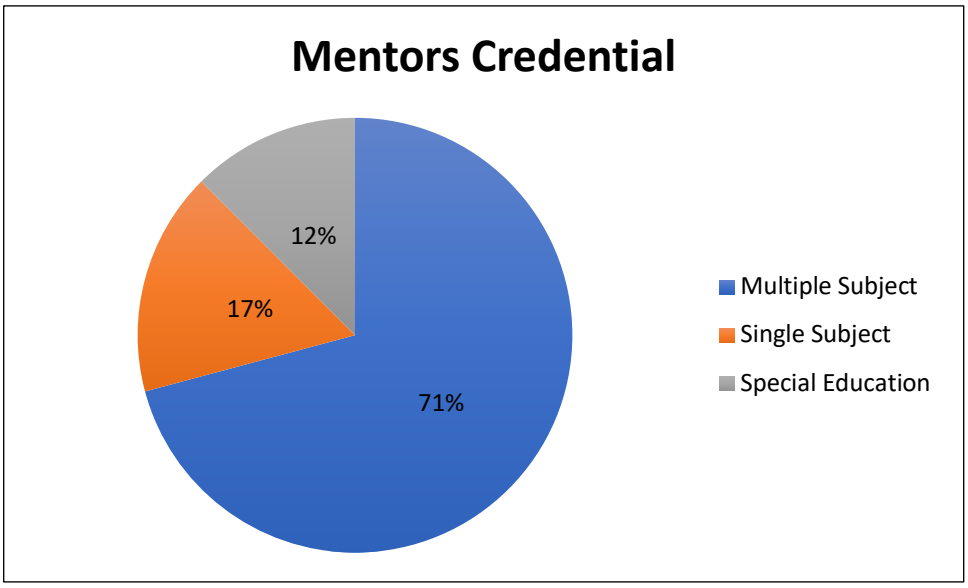

Figure 9. Type of Credential for Mentors. This figure displays the types of teaching credential from the mentor sample.

Mentors were diverse in years of teaching experience. Years of teaching experience ranged from six years to thirty-five years. The number of teaching years breakdown of the mentors were categorized into increments of five years as described in Table 9.

It was noted that no mentors had less than five years of teaching experience. Three-fourths of the mentors had 6-20 years of teaching experience. All mentors have been employed in School District A and possessed the requisite background to be a mentor. Mentors were teacher leaders in their own school sites and committed to the success of the induction program and teacher candidates. The next few sections will divide data responses to research questions.

Table 9

Number of Teaching Years Breakdown by Mentors

Years of Teaching Range	*N* = 24
6 – 10 years	7
11 – 15 years	5
16 – 20 years	6
21 – 25 years	2
26 – 30 years	1
31 – 35 years	3

Research Question One

"How have the teacher candidates' experiences in the induction program within School District A impacted their professional growth as an educator?"

Research question one investigated the experiences of the teacher candidates in the induction program through the lens of first and second-year teachers. The survey included seven selected response options organized on a five-point scale, completely disagree, disagree, neutral, agree and completely agree. Three questions asked participants to rank one star to five stars (one being not satisfied at all and five being extremely satisfied) " The final three questions were open-ended and asked teacher candidates what services and support have you received from your mentor, how has the Induction Program impacted your effectiveness as a classroom, and what additional changes could the Induction Program make to strengthen the program for teacher candidates?".

To assess the overall levels of effectiveness as a teacher candidate, the first three survey items were analyzed together on a five-point scale. Descriptive statistics were used to compare the mean scores for the three survey items pertaining to effectiveness (induction program, mentoring design, and professional development) as well as the mean percentage of teacher candidates who "agreed" or "completely agreed" to each question. Total scores were obtained by calculating the sum of all answers. A higher score indicated a higher level of teacher candidate's effectiveness. The results are presented in Table 10.

Table 10

Effectiveness of Teacher Candidate

Survey Item	Mean	Standard Deviation	Percentage agree or completely agree
My participation in the Induction program helped me to increase my competence as a teacher.	4.09	1.07	75%
This years Induction Program's mentoring design provided me with multiple opportunities to demonstrate growth in the California Standards for Teaching Profession	4.17	0.89	80.3%
The professional development offered through the Induction Program has helped me to strengthen my professional practice.	4.04	1.06	82.1%

The fourth and fifth questions were grouped together pertaining to mentor matching and teacher reflection. The series of questions asked each teacher candidate if they were effectively mentor matched and if they were provided with teacher reflection from their mentor. Descriptive statistics were used to compare the mean scores for two survey items. One of the main factors

that influence successful induction programs was the expertise of mentors. According to teacher candidates *(M = 3.95, SD = 1.29)* reported to be effectively matched to a mentor that was aligned with their grade level and subject matter. The results are displayed in Table 11.

Table 11

Teacher Candidate's Satisfaction

Survey Item	Mean	Standard Deviation
I was effectively matched with a mentor that was closely aligned with my grade level and subject matter knowledge.	3.95	1.29
My mentor has encouraged me and assisted me in reflection of my practice and the impact of my instruction on student achievement.	4.63	0.65

A one-way analysis of variance (ANOVA) was conducted to compare the mean scores of total perception of teacher candidates' year of induction. Teacher candidates were divided into three groups according to their year in the Induction Program (Group 1: Year 1; Group 2; Year 2; Group 3; ECO). There was a slightly statistically significant difference at the $p < .05$ level in perception scores with Year 1 and Year 2 teacher candidates F (2, 53). Year 2 candidates had a slightly increased of their level of induction perception. Early Completion Option candidate had the highest level of induction perception. These results are displayed in Table 12.

Table 12

Level of Induction Perception

Year of Induction	*N = 56*	*M = 4.61*	*SD = .62*
Year 1	12	4.36	0.92
Year 2	43	4.46	0.95
ECO	1	5	0

The first open-ended question asked, "What services and support have you received from your mentor?". All fifty-six participants provided a response. Responses were kept in possession of the researcher and compiled into a separate document for coding. The keywords that occurred multiple times included various forms of: *just in time, lesson design/planning, feedback, observations, reflection, collaborate, individualized education program (IEP), relationships, active listening,* and *technology support*. The frequencies of each are displayed in the following Table 13.

Table 13

Frequency Count of Keywords for First Open-Ended

Keyword	Frequency
Just in Time	12
Lesson Design/Planning	12
Feedback	11
Observations	7
Reflection	7
Collaborate	5

Individualized Education Program (IEPs)	2
Relationships	2
Active Listening	2
Technology Support	1

For each keyword in Table 13 there were a few responses with multiple codes. For example, if a teacher candidate included that they really enjoyed the relationships provided by the induction and the help from lesson planning, two codes were marked: *relationships* and *lesson design/planning*.

The top two frequency responses with a total of 12 frequencies were "just in time" and "lesson design/planning." Teacher Candidate 5 described the just in time support by her mentor to be about emotional support.

> My mentor listened to my worries and advised as needed, which helped me feel supported as a teacher rather than alone and helpless. She highlighted positive teacher moves when I told her about my classroom experience. With her encouragement and perspective, I was able to realize that I was indeed doing the right things and therefore gained confidence in myself as a teacher. When I shared insecurities and doubts, she provided me with ideas that she felt fit my teaching style. Her ideas were easy to apply to my lessons and were usually quite effective.

Teacher Candidate 5's expressed positive comments on the just in time support provided her mentor. Furthermore, all 56 teacher candidates in the study had positive perceptions about the level of mentor support during their experience in the Induction Program. The ability to provide the necessary just in time support with teacher candidates was an essential factor that influenced

a successful induction program. The building and nurturing of mentor relationships created a positive environment where teacher candidates felt supported and guided by someone who cared about their continuous growth. Teacher candidates assured how each mentor spent the first couple of weeks of the school year learning about them and being available to them on a weekly basis.

Similarly, lesson planning was valuable for teacher candidates. Induction mentors provided the foundation of lesson design/planning to teacher candidates. Teacher Candidate (TC) 45 felt a strong aspect on the value her mentor provided to them about lesson planning.

> I received a large amount of support in designing interactive lessons and developing a strong foundation for classroom management. I was provided with tools, multiple templates, articles, and advice to better assist me for the start of my teaching career.

The final question on the teacher candidate survey was an open-ended question, asking "What additional changes could the Induction Program make to strengthen the program for participating teachers?" All teacher candidates provided a response. Teacher Candidate survey open responses were maintained in the possession of the researcher. Each response was compiled into a separate document and coded for themes. Table 14 captures some statements that were shared in regards to areas of improvements of the induction program.

Table 14

Participant Teachers on Changes to the Induction Program

Teacher Code	Areas of Improvement
TC 9	Continue to instill confidence in the teachers and provide them with multiple resources that can be easily accessed in the classroom.
TC 10	More interactions with the inductees
TC 13	More opportunities to observe other educators

TC 14	I feel that it could do better at providing professional developments for Mod/Sev teachers
TC 16	Modeling lessons by the mentor teachers
TC 22	Better matching of mentors and mentees
TC 55	Given the opportunity to visit and observe more experienced teachers.

The researcher began to group all 56 responses into axial coding to help narrow themes (Creswell & Poth, 2018). Some responses were grouped with multiple key words. For example, Teacher Candidate (TC) 26 shared their improvements on the induction program.

> Create professional development (PDs) strains that address the emotions of new teachers in response to the institutionalized racism encountered at school sites. Modify PDs to include information/examples for world language teachers. Create PDs that provide lesson plans/resources and tools that specifically address underrepresented ethnic and cultural groups to ensure students are receiving a globalized education.

The response from TC 26 resulted in two codes: professional development and lesson plans. The researcher compiled the results based on the frequencies into Table 15.

Even though the goal of the induction program was to provide choice for teacher candidates regarding professional development, it was noted to be most common area of improvement. School District A reduced the number of required professional development for teacher candidates. Program modifications over the last two years included eight hours of professional development sessions of the teacher candidate's choice that aligned to the candidate's ILP goal (I. Coordinator, personal communication, August 23, 2019). Teacher candidates also believed making the professional development opportunities more grade-level appropriate and subject matter specific.

Table 15

Frequency Count of Keywords from Open-ended Survey Item

Keyword	Frequency
Professional Development	15
More Observation Time	10
Avoid Extra Paperwork `	4
Lessons	3
Mentor Demo Lesson	2
Subject Specific Resources	2
Same Mentor Content	1
Internships	1

"Hypothesis 1A: Schools District A's Induction Program has a positive impact on the teacher candidates in relation to (a) level of helpfulness of mentor (b) its degree of impact upon their effectiveness as a teacher, and (c) ongoing professional learning."

To address the hypothesis in terms of teacher candidate perception, additional data analysis was conducted on the questions that pertain to the necessary resources to accomplish the goal in their Individual Learning Plan (ILP) including substitute release time, observations, and professional development (Table 16). Seventy-four percent agreed or completely agreed that substitute release was provided to them. In terms of setting up observations, 79.7% agreed or completely agreed that their mentors offered to set up observations with experienced teachers. Finally, 80.4% of teacher candidates agreed or completely agreed that they were provided with additional professional development sessions.

Table 16

Teacher Candidate ILP Effectiveness Frequency

Question	*Completely Disagree*	*Disagree*	*Neutral*	*Agree*	*Completely Agree*
Substitute Release Time	Count- 3 5.4%	Count- 1 1.8%	Count- 10 17.9%	Count- 8 14.3%	Count-34 60.1%
Offers to set up observations	Count- 2 3.6%	Count- 3 5.4%	Count- 6 10.7%	Count-11 19.6%	Count- 34 60.1%
Additional professional development sessions	Count- 5 8.9%	Count- 1 1.8%	Count- 5 8.9%	Count- 16 28.6%	Count- 29 51.8%

One survey question asked the induction participants to rank the level of positive impact on the teacher candidate in relation to their degree of effectiveness as a teacher on scale of 1 (Unsatisfied) to 5 (Extremely Satisfied). A one-way between groups of analysis of variance (ANOVA) was used to explore the impact of teacher effectiveness in School District A's Induction Program. Participants were divided into three groups: 2016-2017, 2017-2018 and 2018-2019. Reliability from this study allowed a comparison for consistency from the past three academic years. Figure 10 compares consistency during the past three academic years. All previous data was provided by School District A's Induction Program Coordinator.

Throughout the three academic years, an increase in the level of effectiveness of the teacher increases. There is a difference of (+.24) increase within three academic years. When an induction program is effective, teacher candidates may be more likely to view it as a positive trend over the two-year enrollment.

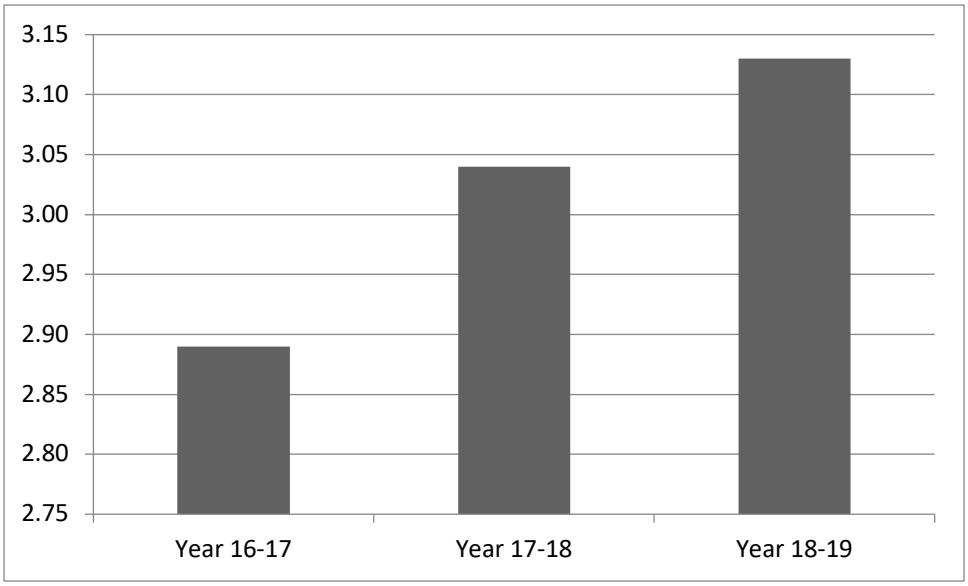

Figure 10. Teacher Level of Effectiveness from Three Academic Years. This figure describes the teacher effectiveness from the past three academic school years.

Research Question Two

"How have mentors' experiences in the induction program within School District A impacted their mentorship to new teachers?"

Research question two investigated the factors that influenced the effectiveness of Induction through the lens of a mentor. Mentors played a significant role in the support of teacher candidates as evidenced by the comments from the teacher candidates who completed the survey. The survey included ten selected response options organized on a five-point scale completely disagree, disagree, neutral, agree and completely agree. Two questions asked participants to rank one star to five stars (one being not satisfied at all and five being extremely satisfied), "The degree to which the work with the teacher candidate has positively impacted on their mentoring practice and rate the level of helpfulness provided by the induction program?" The final questions were open-ended and asked participants, "What services and support have you received from the Induction Program, how has the Induction Program impacted your

effectiveness as a mentor and what additional changes could the Induction Program make to strengthen the program for mentors?"

To assess the overall levels of effectiveness as a mentor, the first three survey items were analyzed together on a five-point scale. Descriptive statistics were used to compare the mean score for the three survey questions pertaining to mentoring (monthly mentor meetings, just in time support, and providing long-term analysis of teaching practice) as well as the mean percentage of mentors who agreed or completely agreed to each question. In terms of the monthly mentor meetings, 87.5% of mentors agreed or completely agreed that the monthly mentor meetings provide mentors with opportunities to help their teacher candidates *(M = 4.17, SD = 1.17)*. When it came to just in time support, 95.9% of the mentors agreed or completely agreed that they provided their teacher candidate with just in time support *(M = 4.88, SD = .45)*. Finally, 87.5% of the mentors agreed or completely agreed that they provided long-term analysis of teaching practice to assist their teacher candidate develop enduring professional skills *(M = 4.38, SD = .71)*. These results are presented in Table 17.

Table 17

Effectiveness of Mentoring

Survey Item	Mean	Standard Deviation	Percentage agree or completely agree
I had the opportunities to network with mentoring peers by reflecting on way to improve my abilities to support teacher candidate(s) during the monthly mentor meetings.	4.17	1.17	87.5%
I provided my teacher candidate(s) with "just in time" support.	4.88	0.45	95.9%
I provided long-term analysis of teaching practice to help my teacher candidate (s) develop enduring professional skills.	4.38	0.71	87.5%

The fourth question, "I was effectively matched with a teacher candidate that was closely aligned with my graded level and subject matter knowledge" was analyzed in isolation. An average response of *(M = 4, SD = 1.18)* on a five-point scale was reported and 66.7 % of the mentors agreed or completely agreed.

All mentor statements from the second open-ended question, "How has the Induction Program impacted your effectiveness as a mentor?" were compiled and coded for themes using axial coding. All mentor responses were kept in the possession of the researcher. Frequencies were used to analyze each mentor statement. Some mentor statements had multiple frequencies. For example, Mentor 5 response has three frequencies.

> I was new this year and I was learning along with my new teachers how to manipulate the computer program, some things seem redundant, the district staff always there to help. I learned a lot about coaching it has helped me in other district duties. The new teachers have taught me awesome things that I have used in my classroom. I feel our monthly

> meetings are well planned I always learn things from the meeting to use with my new teachers.

As a result of axial coding, four themes were developed from the mentor responses that include: reflection, relationships, coaching, and mentor meetings. Some of the responses from mentors are included on Table 18.

A common theme that emerged from the open-ended responses was the notion of reflection. Mentor 4 expressed their experience of guiding teacher candidates through reflection.

> The induction program has allowed me to develop my teaching and personality. I have learned the value of mentoring. Mentoring is a privilege that has allowed me to self reflect and improve my own teaching. Mentoring has allowed me to grow as a human. I enjoy working with teachers that I also have a lot to learn from.

Reflection was a top theme for mentors as they were trained during their monthly mentor meeting. As mentors received training throughout the school year, they carried on their coaching practices onto their teacher candidates, allowing each mentor to grow as an educator and self-reflecting on their own practices.

Table 18

Mentor Statements for First Open-Ended

Mentor Code	Impacting the effectiveness as a mentor
M6	It's given me support and resources to help my mentees get through the program and become strong teachers
M10	The greatest benefit from the Induction Program is the networking and support I receive from colleagues with my same position and title.
M14	Our monthly meetings have given me the chance to network with other mentors and solve problems collaboratively

M16	It has strengthened it greatly. I've had to use my knowledge and experience to help others. I've become a stronger teacher and someone who helps other become more reflective and thoughtful about their own teaching.
M22	I have been growing in my confidence to provide coaching and support to new teachers.
M23	Taught me to be a better listener and how to guide teachers to reflect and find solutions rather than me telling them the solutions.
M24	The Induction Program has allowed me to provide my teacher candidates with the best support within the two years. A strong connection grows after the induction program ends because I am able to support my teachers beyond that.

The final open-ended question on the survey asked, "What additional changes could the Induction Program make to strengthen the program for mentors?" All survey participants' responses were logged and kept in the possession of the researcher. Table 19 captures some of the statements that were shared.

Responses were compiled into a separate document and each response was read and coded for themes. Only words that occurred more than twice were included in Table 20. Some words that had frequency of one were omitted from Table 20, such as "portfolio" and "paperwork." This resulted in a data set with emerging themes. The words that occurred at least two or more times included forms of program expectations, coaching, administration, mentor matching, and networking. Table 20 illustrates the frequencies of each.

Table 19

Areas of Improvements

Mentor Code	Idea Shared
M2	"Matched with PTs that have the same school schedule."
M8	"It would be beneficial to provide some professional development on current research based practices on effectiveness of mentors using the "just in time" support versus the past practices."
M11	"Networking with other Induction programs more for continued development."

M16	"Provide more time to work on building a relationship with new teachers without the amount Induction workload that looms during meetings."
M19	"Have a clearly laid-out schedule for when paperwork is due (from mileage reimbursement to ILP and reflections). We received this incrementally but if there was some sort of checklist for the whole year that would be great."
M24	"The portfolio (ILP) was a little confusing at first but the more we discussed it throughout the year it became clearer, therefore, for new mentors I would have those discussions earlier so they feel comfortable going through the portfolio and completing the ILP with their mentee."

Mentor' perceptions about the changes to the induction program differed from the teacher candidates. Mentor 21 believed that "a consistency of information given out across the board for all mentors" should be a key in improving the program. Mentors sometimes have mixed messages about information including ILP, deadlines, and documents. This corroborates with Mentor 5 response about program expectations.

> Because I was new I felt the paperwork was confusing. I sometimes didn't understand the expectation of the ILP. I understood it was new to a lot of people. I felt examples of a program completed hard copy would have been helpful, to have in my notebook I could refer to. Like a fictitious teacher completed ILP example of other documents. Other mentors showed me things at our meetings and we sent some emails back and forth but a completed portfolio of a pretend teacher given at the beginning of the year would have answered some confusion.

Table 20

Frequency Count of Keywords for Mentor Improvements

Keyword	Frequency
Program Expectations	7
Coaching	5
Administration	3
Mentor Matching	3
Networking	2

"Hypothesis 2: School District A's Induction Program has a positive impact on the mentor in relation to (a) the level of helpfulness of Induction Program, (b) its degree of impact upon their effectiveness as a mentor and (c) ongoing professional coaching."

To address the hypothesis, additional data analysis was conducted on the questions that pertain to the effectiveness as a mentor including level of helpfulness from program, impact upon their effectiveness as a mentor, and ongoing professional coaching. Sixty-seven percent agreed or completely agreed that the induction program provided best practices in adult learning to mentors. In terms of using appropriate mentoring instruments and coaching, 75% agreed or completely agreed that the induction office provided the adequate mentoring and coaching tools throughout the year. Finally, 70.9% of the mentors agreed or completely agreed that they were provided with goal setting. Results are displayed in Table 21.

Table 21

Mentor Effectiveness Frequency

Question	*Completely Disagree*	*Disagree*	*Neutral*	*Agree*	*Completely Agree*
Best practices in adult learning	Count- 0 0%	Count- 5 20.8%	Count- 3 12.5%	Count- 9 37.5%	Count- 7 29.2%
Use appropriate mentoring instruments (i.e. CTP/ILP)]	Count- 0 0%	Count- 5 20.8%	Count- 1 4.2%	Count-8 33.3%	Count- 10 41.7%
Goal Setting	Count- 1 4.2%	Count- 3 12.5%	Count- 3 12.5%	Count- 10 41.7%	Count- 7 29.2%
Coaching	Count- 0 0%	Count-5 20.8%	Count- 1 4.2 %	Count- 8 33.3%	Count- 10 41.7%

Focus Group Interviews

Teacher Candidate Focus Groups

Six teacher candidates participated in one of the two focus groups. In analyzing their responses, they were referred to as Teacher Candidate A, Teacher Candidate B, Teacher Candidate C, Teacher Candidate D, Teacher Candidate E and Teacher Candidate F for purposes of anonymity. The focus group interviews were hand-coded by the researcher. The interview questions were given to the teacher candidate ahead of time and they could all weigh in.

Each teacher candidate was asked "How has participating in the Induction Program encouraged you to develop and enhance your skills and abilities as a teacher?" Two dominant themes emerged from the teacher candidates' responses to this question. The first theme included teacher reflection that included daily reflection, student achievement reflection and

observation reflection. The second was catered on the lesson planning/design. Figure 11 captures the exact words expressed by each teacher candidate for the two themes.

Teacher Candidate A	Teacher Candidate B	Teacher Candidate C	Teacher Candidate D	Teacher Candidate E	Teacher Candidate F
Assess students on a daily basis	Going out to see the other teachers	Start lesson planning better	Seeing how other teachers would cover the same topics	Reflecting on my teaching on a day to day basis	Reflect on my students and know what they need

Figure 11. Describing teacher reflection. This figure captures teacher candidates' descriptions of reflection.

The second focus group question asked the participants to "Describe the benefits that you have encountered while working with your mentor." In addition to describing the benefits of a mentor, a new theme emerged to include teacher-mentor relationships that had an open communication policy. This theme is displayed in Figure 12.

Teacher Candidate A	Teacher Candidate B	Teacher Candidate C	Teacher Candidate D	Teacher Candidate E	Teacher Candidate F
I don't fear I may lose my job by hearing what my mentor has critiqued on my lesson	Fencing out like so then emotional like balance	Give me tips and kind of ease or relax me through my observations	Kind of reflecting over my lessons	It's truly wonderful to have someone that supports you 110% especially the first year	He had great advice for me

Figure 12. Describing the benefits of a mentor. This figure captures teacher candidates' descriptions of working with a mentor.

The third focus group question asked the participants to "Describe some of the challenges that you have encountered while working with your mentor." Teacher candidates continue to mention the theme of teacher candidate-mentor relationships of mentors from Question 2. Due to the nature of the question, only two teacher candidates provided responses. Figure 13 displays the teacher candidates' challenges of working with their mentor.

Teacher Candidate A	Teacher Candidate B	Teacher Candidate C	Teacher Candidate D	Teacher Candidate E	Teacher Candidate F
Disagreement between us and we couldn't work together	None	None	Unavoidable, but just the timing, just after school I just like everything, my body's shutting down, my mind's shutting down	I didn't have any	I have no issues

Figure 13. Describing the challenges of a mentor. This figure captures teacher candidates' descriptions of challenges when with a mentor.

Next, teacher candidates were asked to "Describe how your work in the Induction Program helped you understand the California Standards for the Teaching Profession". One new

theme emerged: Teacher growth (see Figure 14). Teacher candidates also alluded to idea of mentoring as they demonstrated the teaching standards throughout the school year.

Teacher Candidate A	Teacher Candidate B	Teacher Candidate C	Teacher Candidate D	Teacher Candidate E	Teacher Candidate F
We went through the standards and they became clear like I was like, what can we expect from here	Assessment	So we saw that growth, I guess, where at the beginning we would, we went through and then just kind of analyze where I was at and then through the middle we went through it again	It's very helpful because she went through it with me,	A lot of the PD has been focused on that, they'll focus on a specific standard.	So I'm being observed and the standards are so similar

Figure 14. CSTP Responses. This figure captures teacher candidates' descriptions of working to understand the CSTP.

The fifth focus group question asked the participants to "Give an example of a time when your mentor provided you with just in time support and an example of a time when your mentor provided you with reflection." Each teacher candidate shared a unique example captured in Figure 15. Teacher candidates B, D, and E reflected on a just in time example and teacher candidates A, C, and F provided an example for reflection.

Teacher	Response Shared
Teacher Candidate A	"For me was before an observation. We would sit down, go over my lesson and then try to figure out what I needed to improve on."
Teacher Candidate B	"I was kind of already burning out because I, I didn't know how to write, I just didn't have support from a PLC that I was in. So my mentor actually provided that support by saying okay, let's look at some assessments as good as some, some questioning strategies."
Teacher Candidate C	"I wasn't including a constant check for understanding or some form of check for understanding. So when I started including them, he had me reflect, okay now is your CSU actually checking the learning targets that you're trying to meet for the day or for the lesson, the goal for the lesson."

Teacher Candidate D	"So that reflection, thinking back at it and I was like, okay, I can handle this a lot better and then I would change it because I wouldn't meet with my mentor second prep. So for third period I'm like, all right, it's adjusted now. Now it's aligned."
Teacher Candidate E	"Well I think that was pretty much every time we met. We just... He would take time to say, "What happened this weekend? Anything that stands out? Anything... Any issues that arose that you were like, "how do I handle it?"
Teacher Candidate F	With my mentor when I talked to him about, when my admin was going to come and observe me and then we talked about the standards that we had chosen and then he'd be like, "What do you plan to do?"

Figure 15. Describing just in time and reflection. This figure captures teacher candidates' descriptions of an example of when just in time and reflection was provided to them.

The sixth focus group question asked the participants, "If you were to design an Induction Program, what modification(s) would you make? What would you have done differently?" One dominant theme from all six teacher candidates was grouped as professional development. The theme of professional development included classroom management, teacher engagement, lesson design, break out sessions, and teacher growth. Figure 16 captures the exact words expressed by each teacher candidate about professional development as the modification for an induction program.

Teacher Candidate A	Teacher Candidate B	Teacher Candidate C	Teacher Candidate D	Teacher Candidate E	Teacher Candidate F
I was required to go to a few PDs on Thursdays and I felt like a lot of them were a waste of my time. A lot of them were the guest speakers were not engaging	For my first year, my focus was lesson planning and we did not actually get to participate in coming up with an opener or a closer of a lesson at least as a mock up	When I went to the PDs we had everybody get into the same group. So that at that point was kind of hard to listen or to participate because it was all of us	And then they do have those little breakout sessions that we get to choose from. But then it's like we really don't have a choice	They instill in their teachers to continue to grow, continue to have an open mindset. A successful induction program does the same	I wanted more Classroom Management cause I feel that I'm weak in that area

Figure 16. Describing Modifications. This figure captures teacher candidates' descriptions of modifications of designing an Induction program.

The last focus group question asked the teacher candidates to "Share anything from their induction experience." Five out the six teacher candidates responded positively. Teacher Candidate A had a great experience with their mentor. Teacher Candidate B was really happy with their mentor experience and thanked the mentor for the support throughout the two years. Teacher Candidate C expressed gratitude toward the induction coordinator for the involvement. Teacher Candidate D expressed frustration with juggling her personal problems and receiving the adequate mentor support. Teacher Candidate E had a wonderful experience and they really enjoyed the journey. Finally, Teacher Candidate F shared that the second year of induction was awesome.

Mentor Focus Groups

Eight mentors participated in one of the three focus groups. In analyzing their responses, they are referred to as Mentor A, Mentor B, Mentor C, Mentor D, Mentor E, Mentor F, Mentor G, and Mentor H for purposes of anonymity. The focus group interviews were hand-coded by the researcher. The interview questions were given to the mentors ahead of time and they could all weigh in.

Each mentor was asked "What support have you provided to your teacher candidate(s) this school year?" Two dominant themes emerged from the mentors' responses to this question. The first theme included just in time support and the second was centered on lesson design/planning. Figure 17 captures the exact words expressed by each mentor for each of the two themes.

Mentor A	Mentor B	Mentor C	Mentor D	Mentor E	Mentor F	Mentor G	Mentor H
That was just in time. So I let her talk about it and let her vent and then we figured out some solutions on what we needed to do.	Lesson design, adapting the curriculum to be able to be used with multiple types of learners, your special populations, but also just kids that learn a little differently	Just in time support was huge for me. My teacher candidate last year was a late hire, so she missed a lot of the new teacher orientation	I've helped her with planning, and using just getting her to use a planning book, but like being able to go over her lesson plans, and like helping her to get used to the textbooks and things	I listened to a lot of student issues, suggestions for class projects and different things. They were both fourth grade teachers.	Think we begin with Just-in-Time support. So what's on their radar? Whether it's student discipline, parent conferences, cue, wonders, whatever is on their mind. Immediate needs	Also, bad evaluation, kind of talking them down, talking about how to write a reflection for their admin, for their emails, like what's their statement, what the evidence they brought from their email, weekly meetings, a lot of questioning, forcing them to reflect instead of this negative spiral	So like right now I'm helping out with the IEPs. It's a big deal. Doing the Woodcock-Johnson

Figure 17. Types of Support from Mentors. This figure captures mentors' descriptions of the types of support given to teacher candidates.

Mentors were then asked to describe, "Which aspects of coaching did you find to be the most beneficial to you in trying to support your teacher candidate?" Due to the nature of the question, responses were grouped into the common theme of coaching cycle of reflection, active listening, consulting, observing, role play, active listening and paraphrasing. Figure 18 displays the specific ideas mentors expressed on the aspects of coaching in School District A's Induction Program.

Mentor A	Mentor B	Mentor C	Mentor D	Mentor E	Mentor F	Mentor G	Mentor H
The most beneficial is to stop and listen	Listening, active listening	Building block pieces, basic portions of instruction, classroom management, planning, assessment schedules	Like it helps us be reflective of our own practices and teach you the candidates to be reflective	We did role play and I talked to the mentors, the senior mentors, the ones that had been for a while in the full-time mentors	I think it's being flexible because I can come in with an idea of the work that we might do but their needs	For me deeply, listening to the teacher's responses to questions and then kind of probing them	The observation and taking notes during the observation

Figure 18. Aspects of Coaching for Mentors. This figure captures mentors' aspects of coaching provided to them.

Mentors were then asked to "Describe one of your most successful mentor experiences. What made it so successful?" Mentors continued to mention the theme of lesson design from Question 1 such as Individualized Learning Plans (IEPs), literacy, and assessment. In addition the theme of coaching from Question 2 was mentioned such as conversations, relationships, and reflecting. The themes are displayed in Figure 19 according to the exact words expressed by each mentor.

Mentor A	Mentor B	Mentor C	Mentor D	Mentor E	Mentor F	Mentor G	Mentor H
He started wanting to have a focus on his IEP and procedures and policies.	Working with a really challenging student, and we brainstormed and collaborated some different ideas	One of the areas that we really worked on was literacy	Helping my candidate see like that she'll be more successful if she embraces her own like strengths.	We built a good relationship up. I think we have a good rapport going on	She went to go observe a teacher in high school that I connected her with for self assessment	Coaching a teacher through a rough administrator who was having them do too many things and kind of coaching the conversation	So then I had to have that hard conversation with her that maybe that's not where you're at

Figure 19. Successful Mentor Experiences. This figure captures mentors' successful experience they encountered with teacher candidates.

Mentors were asked to "Think of a situation with one of their teacher candidates that did not go well? What were the challenges?" In addition to describing lesson design/plan from Question 1 a new theme of personality emerged to include mentors who had challenges with teacher candidate's personalities. Figure 20 displays the mentors' responses about challenges.

Mentor A	Mentor B	Mentor C	Mentor D	Mentor E	Mentor F	Mentor G	Mentor H
She didn't get anyone to help her for the first two months, which isn't my fault	Teacher was going through some personal things that were really heavy, daunting, and not being able to get to work on time	She got picked up by kind of a toxic staff environment	My candidate had a situation last year kind of with other teachers. But you know, I just told her to kind of take a step back. She didn't do anything. They were just kind of upset at her schedule for her second year.	But to back up a little bit, prior to me going in there, I had just recently gotten some training from the TOA at my school about target lessons	Did not meet the teacher where their personality was open to.	Personal connections at the beginning of the school year.	Lesson planning afterschool was difficult.

Figure 20. Challenges from Mentors. This figure captures mentors' challenges they encountered with teacher candidates

For Question 5, mentors were asked to describe any modifications to the District's Induction Program they would make. Each mentor shared a unique type of modification captured in Figure 21. Mentor A offered the modification of a three-year program. Mentor B discussed the importance of having a connection between teacher candidate and administration. Mentor C expressed frustration with uniformed training with new employees. Mentors D and E talked about paperwork as a modification. Mentors F and G reflected on modifications on technology support. Finally, Mentor F did not disclose any modifications, as they are happy with how induction program currently stands.

Mentor Code	Belief Shared
Mentor A	Instead of having just their supervisor versus university, it would be nice because two years later now we get to help them and support them. And we have a lot of interns in our district, so would be really nice to have that. And also to have a year of reflection after the two years. They have to keep in contact even if it's every month that's talk about what's going on. Because some of them reach out to us still even after two years. “Okay. Mentor A, do you remember that template you sent me for the BIPD lesson plan? Can you send it again?” So it would be nice just to have that, Hey let's check in with for a couple of years. Even for one year extra like a three-year program.
Mentor B	Honestly, I wish there was more of a connection between human resources and the induction and principals and the induction. So I don't know how to word that besides saying like other district entities, knowing the work and having a little bit more of an involvement or support of. So like we were talking about the co-teachers, HR putting them in co-teaching positions. I think if they understood our work a little more than maybe they'd be less likely to do that unless they were in a situation where they had to. I know that's probably super optimistic, but that would be my hope is that more of the district bodies of themselves had more involvement and not necessarily like saying what we do, but understanding and learning about the ins and outs of our work just to help the program.
Mentor C	So yeah, I've been mentoring teachers for a while in different positions. And one of the things I see with our newer teachers is a, a, we need some uniform training when we onboard a new employee because I find that there are teachers who just don't know about certain programs, subscriptions to discovery streaming or what, I never was told about this or basic how to use the grade book that the district uses. I tend to fill in those gaps with my candidates. But as a district we need a system to make sure new teachers are trained on the things that everybody else has been using and is trying to get on. I think that would be very useful.
Mentor D	I think too, I think that they made the changes for this year. But for us like you know, last year was my first year and I, the first couple months I was kind of okay, what are things do like when do I turn on my mileage, when do I turn in my meeting log, when do I turn in this? Where is it? You know, I didn't know cause you know, we get a lot of emails, like, you know, it gets lost. So, but I feel like it was better. And I don't know if it's because I know now or if last year was a learning year for us too and all the changes. But just having clear like location where documents are and, and like deadlines of everything that we have to do.
Mentor E	If I could change the vagueness of the paperwork, because sometimes it's really not clear what the expectations are because last year the ILP drove me nuts because it was my first year. I did a long time ago when you had the little bucket you took around with you.
Mentor F	And it could be based on their needs because maybe some would need that weekly, someone there to help but some don't. And since we can virtually do things together on Microsoft 365 you don't need to be sitting next to each other to... We have a lot of other resources.
Mentor G	I think it would be nice if we could do like 50% of our mentor weekly meetings virtual like Skype or Video Chat because you don't always need to be in that classroom. Maybe teachers in the classroom and you're somewhere else, it would be okay.
Mentor H	I'm already happy with the change that we don't have to come to all the meetings. So I was already happy with that one because my first couple of years when we had meetings twice a month forever, I was like, oh this is a lot plus a weekly meeting. It was a lot. So this is much better.

Figure 21. Modifications to Induction Program. This figure displays the modifications provided by the mentors.

Summary

This chapter presented quantitative results from 56 teacher candidates and 24 mentors who completed the end of the year survey along with qualitative results from the open-ended survey questions and focus group interviews. Quantitative data found that a successful induction program for teacher candidates needs effective mentoring. In addition, teacher candidates indicated that effectiveness was based on mentoring, online collaboration, professional development, reflection, and lesson planning.

The data also suggests that overall mentors are satisfied with the monthly mentor meetings as it provides quality training and support. The research findings indicated that mentor effectiveness was based on coaching, just in time support, mentor matching, and changes.

Several forms of data analysis were conducted to compare the teacher candidate and mentors experiences of the School District A's Induction Program. In addition to quantitative data, data collected from the open-ended responses included just in time support by both mentors and teacher candidates. Teacher candidates shared stories of just in time support provided by their mentors.

The qualitative data gathered from the focus group interviews continued to support the positive experiences by both mentors and teacher candidates. Finally, the responses from the modifications of an induction program were professional development, mentor matching, and program expectations.

This chapter presented the quantitative results from the teacher candidate and mentor survey along with qualitative results from and open-ended survey questions, focus group interviews and observations of mentor meetings. The next chapter consists of a summary of the induction program study, a discussion of the findings, implications for practice, and future

recommendations.

CHAPTER 5: DISCUSSIONS, IMPLEMENTATIONS, AND RECOMMENDATIONS

Introduction

In the previous chapter, the presentation and analysis of data were reported. This chapter consists of a discussion of findings, implications for future research, future recommendations, and summary of the study. This research study examined School District's A induction program by exploring ways the induction program provided long-lasting support for teacher candidates, describing the formulas and protocols that have provided the program success. The researcher investigated the impact of providing teacher candidates with mentoring support using two research questions.

1) How have the teachers' experiences in the induction program within School District A impacted their professional growth as an educator?
    a. What do teacher candidates perceive to be strengths for the induction program?
    b. What do teacher candidates perceive to be areas of growth for the induction program?
2) How have mentors' experiences in the induction program within School District A impacted their mentorship to new teachers?
    a. How do mentors provide support to benefit the teacher candidates in the induction program?
    b. How do mentors challenge the teacher candidates in the induction program?

Participants were represented across sections of educators' part of the induction program. It was the researcher's belief that this sample was representative of the larger population of teacher candidates and mentors in School District A. Six full-time mentors, 21 part-time mentors, and 127 teacher candidates were invited to participate in the survey and from those who responded to the invitation, a total of 24 mentors and 56 teacher candidates were represented.

It was important to study an induction program at the district level and systematically learn about the experiences of a successful program to see what potential it might have with new educators. Furthermore there is not a lot of current research on California Induction Program using the 2016 State Standards. A qualitative approach was utilized in this mixed methods study to allow the thoughts and views of induction participants to be recorded. The educators in this program experienced the induction program as positive throughout their first two years of teaching. The following section will present the researcher's conclusions on the data presented in chapter four. The discussion of themes corresponds to each research question given in the previous chapter. To further validate the researcher's conclusions, it should be noted that member checking was employed from each of the focus group members.

Research Question One

Research question one asked: "How have the teachers' experiences in the induction program within School District A impacted their professional growth as an educator?" This question focused on the teacher candidates experience in the School District A's Induction Program. All 56 mentors shared their own experiences and beliefs about the effectiveness of School District's A Induction Program. Regardless of what professional development services teacher candidates received from their district, a vast range of what is perceived as effective mentoring was captured based on the wide experiences. The research findings indicated that effectiveness was based on (a) mentoring, (b) online collaboration, (c) professional development, (d) reflection, and (e) lesson planning.

Mentoring

The participants in this study resoundingly shared their satisfaction with the quality of mentors. Mentors provided a safe and nurturing environment for their teacher candidates to

develop their confidence throughout the two-year program. Teacher candidates confirmed how each mentor spent the first couple of weeks of the school year learning around them and being available to them. Each teacher candidate attended New Teacher Orientation Kick Off in August 2018 where program expectations were covered (I. Coordinator, personal communication, August 23, 2019). During this orientation, participants learned about district vision goals, overview of teaching and learning division, services and academic goals, certificated human resources, attendance, School District A Teacher's Association (Appendix C).

Although experiences of District's A Induction Program varied, overall, teacher participants were mostly satisfied and had a positive perception of their induction experiences in general. For example, teacher candidates agreed that "This year's Induction Program's mentoring design provided me with multiple opportunities to demonstrate growth in the California Standards for Teaching Profession" with an average response of 4.17 on a five-point scale and 80.3% agreed or completely agreed.

This finding is consistent with that have been reported in the research. A recurring trait of effective mentoring presented throughout literature includes an aspect of going teacher support in implementing new strategies in the classroom and teacher coaching has shown to be effective practice in supporting teachers (Breaux & Wong, 2003; Cherubini, 2007; Davis & Waite, 2006; Jones, Dana, LaFramenta, Adams, & Arnold, 2016; Karge & McCabe, 2014; Reitman & Karge, 2020). Likewise, on a scale of one to five, one being not satisfied at all with their mentor, and five being extremely satisfied with their mentor, the average response was 4.63.

One Teacher Candidate (TC), F, compared their first year in Induction in a different school district with their more recent experience in School District A. For TC F, everything from the previous school district was gloomy. It wasn't until receiving their mentor in District A

that there was a change in the view of induction. Teacher Candidate F's mentor encouraged and assisted in reflection of their practice and the impact of their instruction on student achievement. This allowed TC F to have meaningful weekly meetings with the mentor that empowered the teacher to grow as an educator throughout the second year of induction. The Induction Program provided a smooth transition to TC F as confirmed the researcher by Breaux and Wong (2003) and Cherubini (2007).

This program includes mentorship support via trained support provider and job-embedded professional learning. With inquiry as its focus, teacher candidates have the ability to become highly qualified and effective practitioner. One participant wrote about the value of mentoring:

> My mentor listened to my worries and advised as needed, which helped me feel supported as a teacher rather than alone and helpless. She highlighted positive teacher moves when I told her about my classroom experience. With her encouragement and perspective, I was able to realize that I was indeed doing the right things and therefore gained confidence in myself as a teacher. When I shared insecurities and doubts, she provided me with ideas that she felt fit my teaching style. Her ideas were easy to apply to my lessons and were usually quite effective.

The second focus group question was also addressed to describe benefits that teacher candidates have encountered with their mentor. Participants continued to mention having a mentor who helped them with just in time support (CCTC, 2016). Figure 12 presented in Chapter 4 emerged, which included mentors who listen, were flexible, and available. Just in time support was crucial for teacher candidates.

"I don't fear I may lose my job hearing what my mentor has critiqued on my lesson." (TC

A)

“Emotional support.” (TC B)

“Give me tips and kind of ease or relax me.” (TC C)

“Kind of reflecting over my lessons.” (TC D)

“It’s truly wonderful to have someone that supports you 110% especially the first-year.” (TC E)
“He had great advice for me.” (TC F)

Several more descriptive words were voiced when describing the just in time support in the open-ended survey response. These are captured in the word cloud Figure 22.

Figure 22. Just in Time Support. This word cloud displays the most frequently used words to describe the just in time support

When the researcher ran the mentor focus groups, the top thing that came up was just in time support. Question five of the teacher candidate focus group asked the participants to give an example of a time when their mentor provided them with just in time support. Each participant had a different situation to share yet common experiences emerged that was lesson

planning, guidance and reflecting.

> “For me was before an observation. We would sit down, go over my lesson and then try to figure out what I needed to improve on. ” (TC A)
>
> “I just didn't have support from a PLC that I was in. So my mentor actually provided that support by saying okay, let's look at some assessments as good as some, some questioning strategies.” (TC B)
>
> “I wasn't including a constant check for understanding or some form of check for understanding. So when I started including them, he had me reflect.” (TC C)
>
> “So that reflection, thinking back at it and I was like, okay, I can handle this a lot better and then I would change it.” (TC D)
>
> “He [Mentor] would take time to say, "What happened this weekend? Anything that stands out?” (TC E)
>
> “With my mentor when I talked to him about, when my admin was going to come and observe me and then we talked about the standards.” (TC F)

This study confirmed that a mentor is more than a buddy; mentors allowed teacher candidates to demonstrate their ability to work well with others in the induction program (Shillingstad et al., 2014; St. George & Robinson, 2011; Vierstraete, 2005). Through the process of mentoring, it is imperative to support teacher candidates through practical and meaningful work that will result in success (Smith, 2011).

Online Collaboration

School District A coordinated Microsoft 365, an online collaboration platform, with all induction participants. During the two-year program, all teacher candidates were provided a One Drive portfolio housed in the district’s Microsoft 365 account. One Drive allowed the teacher

candidates to collect and share lessons with others, create pages organized in folders within notebooks, and allowed teachers to organize lesson plans from their content areas and share with other colleagues within their school site and district.

With the assistance of the mentor, teacher candidates uploaded and shared documents on a weekly basis using One Drive. The online portfolio assisted teacher candidates to include student work and their Individualized Learning Plan (ILP). In the ILP, teacher candidates were able to add and adjust evidence based on their own individualized learning (Appendix J). According to the Induction Coordinator, the ILP was a living online document that teacher candidates reviewed throughout the year and modified according to their needs and reviewed with their mentors (I. Coordinator, personal communication, August 23, 2019).

Participants also commented on the collaboration of other teacher candidates at other school sites. The school district allowed all staff to use Business Skype to collaborate since district personnel are restricted from accessing Google. Teachers were able to log into their Business Skype accounts using their Microsoft username and password. Year One teacher was happy with the incorporation of One Drive.

> Overall this was a great learning experience. I grew as a teacher, and I am so thankful I had support and guidance from other colleagues in the district. My biggest support was One Drive because I didn't have the help from my grade level site, but I had other school sites to collaboration through this technology platform.

This study corroborated that online portfolios offered the opportunity to collect a range of assessment tools for teacher candidates (Castle, Fox & Souder, 2006). Results indicated a positive strength in providing a flexible structure for self-reflection, ongoing professional development and continuous learning (Karge et al., 2019; Sidhu, 2015). Teacher candidates

perceived that the online portfolios were accessible outside the school sites and contained factual descriptions of their teaching strengths, accomplishments, lessons, classroom pictures, observations and professional development notes. Nonetheless the overall survey results provided positive evidence on the usage of online portfolios as a tool to evaluate the teacher candidate's progress and effectiveness of learning experiences.

Professional Development

Program modifications over the last two years included the professional development for teacher candidates. Teacher candidates attended eight hours of professional development sessions of their choice and engaged an additional four hours of professional development of their choice that aligned to the candidate's ILP goal (I. Coordinator, personal communication, August 23, 2019). During the Induction Kick Off, all teacher candidates were given a menu of professional development sessions provided by the Professional Development and Induction Office (Appendix A) and Early Completion Options (Appendix K).

The researcher's findings indicated that 82.1% of School District A's participants completely agreed or agreed that the professional development offered through the induction program helped them strengthen their professional practice. A year two teacher candidate really focused on the strengths and areas of growth on professional development.

> More options on the professional development, perhaps going to conferences or workshops. The majority of the PD I attended this year, compared to last, was extremely helpful and in the scope of my interest. I am not a special education teacher, but I was able to attend a workshop aimed for special ed teachers which validated what I am currently doing in the classroom for my speds but I was also able to get a plethora of ideas and suggestions that I took back to my classroom. As a foreign language teacher, I

> felt there was also not many professional development that I found useful, not many of the things discussed applied to my content area.

Although their response was positively towards professional development, this respondent really emphasized their frustration through the tone of their voice towards the end for foreign language teacher candidates. This provides great insight into what the district leaders may otherwise be completely uninformed of, something of important deliberation for those in the professional development department. This is an area that School District A might want to explore additional options.

One respondent really focused on the types of professional development the induction office should offer.

> I feel like I benefited more from district-provided professional development rather than the Induction-specific PD, so I think I would change Induction PD to focus more on brain science, students' stress response systems, empathy development, building teacher-student relationships, and restorative practices. Or maybe those are just my particular interests that I believe have helped me the most, I don't know.

Participants also commented on alternate opportunities they received to assist with their ILP including books, articles, online platforms and additional professional development. This study verifies the value of the CCTC recommendations outlined in the induction program standards (CCTC, 2016) including a growth in the profession through a two-year, individualized, job-embedded system of mentoring, support and professional learning as oppose to one professional development fits all

Reflection

Teacher candidates found it helpful to be assisted in reflection of their practice and their impact of instruction on student achievement by their mentor *(M = 4.63, SD = .65)*. The element of feedback is prevalent in the literature on practices for teacher candidates. In fact, Tillman (2003) states "first-year teachers may need to develop the skills to think critically about their experiences as well as their professional and personal competence in the school community" (p. 228). The results on feedback are promising in that they assist beginning teachers as they develop and grow as an educator. Teacher Candidate B talked about how reflection was incorporated by her mentor.

> I needed a narrowed focus on lesson planning. I also didn't, and I didn't share it with question one earlier it was noticed that I wasn't including a constant check for understanding or some form of check for understanding. So when I started including them, he had me reflect, okay now is your CSU actually checking the learning targets that you're trying to meet for the day or for the lesson, the goal for the lesson? And then I realized, I was just thinking something from the book. I did not actually align it with what I was teaching. So that reflection, thinking back at it and I was like, okay, I can handle this a lot better and then I would change it because I wouldn't meet with my mentor second prep. So for third period I'm like, all right, it's adjusted now. Now it's aligned.

Through reflection, the mentor supported new ways of thinking by not sharing the knowledge, rather the mentor worked to build on less experienced teacher candidate's existing skills and knowledge while constructing new ones (Aguilar, 2013). Through Vygotsky's Zone of Proximal Development (ZPD), as the teacher candidate got to the ZPD they were supported with a gradual release of responsibility (Ryan & Cooper, 1972; Vygotsky, 1978). More insight

into reflection could be achieved further by adding the same reflection question from the teacher candidate focus group interview onto the teacher candidate survey.

Lesson Planning

To further investigate the first research question, "What do teacher candidates perceive to be strengths for the induction program?", the responses from the first open-ended question, "What services and support have you received from your mentor?", were compiled and coded for themes. A frequency of key words was conducted and the word "lesson design/planning" occurred the most frequently. The frequency key words that were shared are presented in Table 13 in Chapter 4. Some of the responses through the coding process included, Guidance in planning; friendly guidance on lessons; model lessons and observations; resources for planning; how to sequence and deliver my lessons effectively.

Similar to the results gained from the survey, teacher candidates expressed the value of lesson planning/design during the focus group interviews. Teacher Candidate B wrote how lesson planning was a key component during their induction experience.

> And then for me, my group or my credentialing program from the university, didn't show me how to lesson plan. So I actually didn't know how to narrow my focus or learn how to lesson plan and it was with a mentor that I had that he kind of helped me actually start lesson planning better. At least narrowing my focus. That way I'm not shooting a bunch of topics out at everybody.

Teacher Candidate E described the value of lesson planning and mentoring, as "it's truly wonderful to have someone that supports you 110% especially the first year. My mentor supported me in so many ways in my teaching grade book lesson plans." This is another area that is worth of further investigation that could be accomplished by gaining more data from

teacher candidates in School District A.

Teacher Candidates indicated positive induction program experiences through mentoring, online collaboration, professional development, reflection, and lesson planning. Just in time support was mirror through mentoring and implemented on a weekly basis. The choice of professional development assisted teacher candidates in supporting their ongoing ILP goals. The online collaboration and lesson planning with other teacher candidates provided support in content areas. Furthermore, teacher reflection impacted the professional growth as an educator.

Research Question Two

Research question two asked: "How have mentors' experiences in the induction program within School District A impacted their mentorship of new teachers?" This question focused on the mentoring experience in School District A's Induction Program. All 24 mentors shared their own experiences and beliefs about the effectiveness of School District's A Induction Program. The research findings indicated that effectiveness was based on (a) coaching, (b) just in time support, (c) mentor matching, and (d) changes.

Mentor Coaching

To help investigate the second research question, descriptive statistics were used to further compare the mean of total scores as well as the mean percentage of mentors who "agreed" or "completely agreed" for the question, "I provided long-term analysis of teaching practice to help my teacher candidate (s) develop enduring professional skills." The findings indicated that 87.5% of mentors believed their impact as a mentor strengthened their teacher candidate(s) professional skills *(M = 4.38, SD =.71).*

Effective mentors required training and ongoing support to develop their skills in assisting teacher candidates (Colvin et al., 2009; Grossman & Davis, 2012). Mentors within

School District A were provided with multiple monthly mentor meetings to help assist with relationships with adults, help teachers set goals, and provide constructive feedback on instruction and coaching (I. Coordinator, personal communication, August 23, 2019).

The research findings indicated the mentors in this study had opportunities to network with other mentors through their monthly mentor meetings (*M = 4.17*; *SD = 1.17*, 87.5%). During the monthly mentor meeting, each full-time mentor was assigned a cohort of part-time mentors, ranging from four to five each. In the first hour of mentor meetings, the full timers completed check-ins with the cohort for clarifications of documents, online portfolio, suggestions or any general questions part-time mentors might have (I. Coordinator, personal communication, August 23, 2019). The second part of the monthly mentor meetings included techniques on training. In this study, many mentors referred training as coaching. Mentor E commented on the effectiveness of coaching provided at the mentor meetings.

> And the end of that session where we talked about actual role, we did role play and I talked to the mentors, the senior mentors, the ones that had been for a while in the full time mentors. They gave us some scenarios that they've had over the years and that was very interesting and helpful. I thought that was the most helpful thing for the whole year.

In regards to the aspects of coaching, the second focus group question asked, “which aspects of coaching did you find to be the most beneficial to you in trying to support your teacher candidate?”, the information mentors showed several recurring themes presented in Figure 12 Chapter 4 that addressed the second research question: How have mentors’ experiences in the induction program within School District A impacted their mentorship to new teachers? “

One theme that emerged was active listening. Mentor B used the analogy of marriage to describe their experiences of active listening.

That was my big focus last year. It's also a focus in my marriage. Still working on that. But active listening is super important because it means that you're not thinking of a response while they're talking. And that is incredibly hard for me. My brain is very busy and so I really tried to do the pause probe. I didn't necessarily ever get around to the paraphrasing part very well. It felt too contrived and so I paraphrased without paraphrasing, but yeah, just doing that, pausing and probing and doing that was sort of my focus last year as far as a coaching method.

When describing the coaching experiences in the focus groups, a few descriptive words were voiced. These are captured in the word cloud Figure 23.

Figure 23. Coaching. This word cloud displays the most frequently used words to describe the mentor coaching.

The word cloud coding revealed the five main words as “Role Play”, “Consulting”, “Observing”, “Active Listening”, and “Paraphrasing.” The coaching practice is discussed across literature. Gulamhussein (2013) talked about the coaching cycle and teachers saw the benefits of coaching. Prior to teaching a lesson, a coach and teacher candidate reviewed a lesson

in the teacher's classroom using new methods learned in the early stage. Once the lesson preparation was completed, the coach observed the teacher candidate implementing the new methods that have been learned. The completed lesson leads to debriefing in order to discuss ways to improve teaching skills for future lessons. The cycle of coaching continues several times to meet the teacher candidate's needs. This is another area that is worthy of further investigation that could be accomplished by gaining more data from mentors in a future mentor survey.

Just in Time Support

The mentor serves as a support for teacher candidates to include the just in time support to the beginning teacher in and out of the classroom (CCTC, 2016). In this study, mentors were available whenever teacher candidates needed them. A major factor that influenced the success of School District A's Induction Program was mentors' availability of providing just in time support. The researcher's findings indicated that successful induction programs for teacher candidates were those that provided a high level of just in time support and guidance. Mentors indicated a high level of effort of providing just in time support ($M = 4.88$; $SD = .45$, 95.9%). By listening to their teacher candidates, mentors helped to reduce concerns, manage stress level and ease through the year. Mentor A expressed the value of just in time support.

> Sometimes during our meetings when I get there it's like, "Oh my goodness, I'm having an issue today." So we just talk about whatever the overarching issue is, whether it's, "Oh my gosh, I have to do my report cards. I don't know how to do it." So then let's get sit down and do it. "I'm having issues with a staff member, I don't know how to handle it." And that happened yesterday. One of my teachers says, "Oh my gosh, I was in the lounge and one teacher says to me, "Did you not teach your second graders last year?" And there

> was a third grade teacher and I just said, “Okay.” So I kind of, that was just in time. So I let her talk about it and let her vent and then we figured out some solutions on what we needed to do.

School District A’s Induction Program mentors were responsible for assisting teacher candidates in understanding their individuals needs and skills to help them through their early teaching career (Kardos & Johnson, 2010; Harris, 2015; Shillingstad et al., 2014; Smith & Ingersoll, 2004). Another mentor described the value of just in time support and usually gives “about 10 to 15 minutes every meeting like, ‘How's it going? What are you doing, what's going well, what is not going well?” In this study, that is the way that a majority of mentors start their meetings before getting into everything else.

School District A’s program should be a model for other induction programs to emulate. Theirs was one that could serve as a road map for districts and other institutions who are in the process of implementing and strengthening the just in time support. Implementing the just in time support can change the dynamic of the day as evident from Mentor B.

> And some weeks we have just-in-time support and some weeks we just sit and get right to work on whatever we had on our agenda. But she's right capping the amount of time we spend on it is really important because otherwise it can change the dynamic of how your day, your weekly sessions are run because then that starts to become a habit. Sometimes what I've had to do with just-in-time support is once they vent, we've noticed they don't always want solutions. It's kind of like the marriage. We've all been in relationships. I just want you to hear my complaints. I don't want you to give me a solution.

Reitman et al. (2019) discuss a 24-hour hotline for new teachers. The mentors in District A are available 24 hours a day.

Mentor Matching

School District A identifies and assigns a mentor to each teacher candidate within the first 30 days of the participant's enrollment in the program (CCTC, 2016). A mentoring relationship better serves educators when the mentor teacher and new teachers share subjects taught (Kardos & Johnson, 2010). Although levels of mentoring matching varied, mentors indicated a low level of effort in teacher candidate and mentor matching. The fourth mentor survey question, "I was effectively matched with a teacher candidate that was closely aligned with my graded level and subject matter knowledge", had an average response of *(M = 4, SD = 1.18)* and 66.7% agreed or completely agreed. This finding is consistent with what has been previously been reported in the research. Kardos and Johnson (2010) researched teacher mentoring and their mentoring match. Findings showed that the quality of mentoring was not consistent among all teachers. Less than half of the participants had a difficult time matching a mentor and teacher participant because of areas in math and science.

Mentor D was perfectly matched with their teacher candidate.

> Well, I feel lucky that I am placed with someone who teaches high school English, just like me, and even the same grade level. So, I've helped her with planning, and using just getting her to use a planning book, but like being able to go over her lesson plans, and like helping her to get used to the textbooks and things. Since I have that knowledge, I was able to support her with that.

The Induction Coordinator matches the teacher candidates with the mentors as names are received from Human Resources (I. Coordinator, personal communication, August 23, 2019). There are a few factors that are put in place when mentor matching, which include type of teaching credential, school site, and full time mentor caseload.

Changes

All 24 mentors had reflections on changes. Even though mentors liked the program, there were a few thoughts on what might make it stronger. Mentors shared their perceptions about future changes and what it might mean for the program. Mentor B stated,

> I wish there was more of a connection between human resources and the induction and principals. So I don't know how to word that besides saying like other district entities, knowing the work and having a little bit more of an involvement or support of. I think if they understood our work a little more then maybe they'd be less likely to do that unless they were in a situation where they had to. I know that's probably super optimistic, but that would be my hope is that more of the district bodies of themselves had more involvement and not necessarily like saying what we do, but understanding and learning about the ins and outs of our work just to help the program.

Although Mentor's B response focused on a few changes, this respondent really emphasized the support with the teacher candidates, mentors, and administrators. This is consistent with previous literature research. For example, Tillman (2003) investigated mentoring triads that included teacher candidates, mentors, and the principals. It is important for teacher candidates to receive the support from administrators and mentor. Beginning teachers might lack confidence and experience in the early years of teaching but having a strong guidance from both administrators and mentors will provide the necessary ongoing support.

Mentor A seemed to have a different key change in improving the School District's A Induction Program.

> At our team meetings, gosh, you know a lot of our teachers still reach out to us. It would be nice for us to be able to reach out to them. Sometimes we did not have time. I mean we really do not have time just, "Hey, how's it going?" But it would be nice to say; you know what, for the third year, maybe every other month we're going to have a meeting. Is there anything you need even if it's not a full formal year, but maybe just any reflective year. And let's meet up every other month and talk.

This is consistent with the research presented in the literature where Luft et al. (2002) and Algozinne et al. (2007) invested the success of a three-year induction program with secondary teachers. The opportunity to add a third year of induction to teacher candidates creates growth. The mentors in School District A believe that assisting teacher candidates with reflection is key during a third year. The extra year will allow teacher candidates to develop, organize and reflect on in-depth topics of interest they didn't get an opportunity during the first two years.

Hypothesis

Although the levels of satisfaction of the induction program varied, these results helped address the teacher candidate and mentor hypotheses:

> Hypothesis 1: School District A's Induction Program has a positive impact on teacher candidates in relation to (a) the level of helpfulness of a mentor, (b) its degree of impact upon their effectiveness as a teacher, and (c) ongoing professional learning.
>
> Hypothesis 2: School District A's Induction Program has a positive impact on the mentor in relation (a) to the level of helpfulness of the Induction Program, (b) its degree of impact upon their effectiveness as a mentor, and (c) ongoing professional coaching.

Teacher Candidate Hypotheses

To address the hypothesis in terms of teacher candidate perceptions, three survey items pertained to the induction program and their impact on teacher candidate in relation to level of helpfulness of a mentor, its degree of impact upon their effectiveness as a teacher and ongoing professional learning. For example, teacher candidates mostly agreed that School District A's Induction Program offers "additional professional development sessions" with 80.4% agreed or completely agreed. In terms of offering to set up observations, 79.7% of the respondents agreed or completely agreed. On the other hand, substitute release time was perceived to be the least accounted for. Approximately 74.4% of the teacher candidates agreed or completely agreed on induction program to provide teacher candidates with appropriate release time when observing other experienced teachers. This is important in regards to the induction program giving the proper release time for teachers to go out to conduct classroom observations.

Mentor Hypothesis

Four of the survey items on mentoring helped address the mentor hypothesis:

1) Best practices in adult learning.

2) Use appropriate mentoring instruments.

3) Goal setting.

4) Coaching.

About 75% indicated that the induction program helped them use appropriate mentoring instruments with their teacher candidates. Similarly, coaching had the same rate at about 75% of the mentors who agreed or completely agreed. This indicated that implementing the coaching skills are being carried onto their teacher candidates. Overall survey results provided positive evidence that coaching is an effective form of teacher support for implementing new learning

with teacher candidates. Approximately 70.9% said that goal setting was implemented with their teacher candidates.

Adult learning was the last concept but had a lower percentage of mentors. Sixty-seven percent of the mentors reported that they received best practices in adult learning. In terms of adult learning, it is important to implement with mentors. CCTC (2016) components of mentoring design must be based on rationale informed by theory and research. Mentors are developing adult learning theory towards higher levels or learning and where they can focus on learning how to learn to assist teacher candidates (Gilstrap, 2013; Knowles, 1980).

Implications for Practice

School District A developed a successful induction program model of which they should be proud. School District A provided "job-embedded systems of mentoring, support, and professional learning" to all teacher candidates and mentors (CCTC, 2016, p. 1). Findings from this study proved that mentoring is essential in supporting beginning teachers throughout the induction program. Literature from St. George et al. (2011) and Goleman et al. (2004) reinforced the idea that work and connections develop positive relationships. The researcher believes that induction is essential because when mentoring is done correctly, it works.

Additionally, this case study sought to give a voice to teacher candidates and mentors for deeper conversations that may not always be given to them. This study allowed teacher candidates to talk about their experiences in School District's A Induction Program. Induction Programs cannot operate without the teacher candidate-mentor relationship. Consistent themes emerged throughout the dialogues, which indicated the positive relationship between teachers candidates and their mentors was a major factor in School District A's success. The following quotes are a representative of positive relationships:

> "My mentor listened to my worries and advised as needed, which helped me feel supported as a teacher rather than alone and helpless." Teacher Candidate 5
>
> "My mentor helped connect me with staff on campus who knew the struggles I was facing." Teacher Candidate 12
>
> "My mentor was very encouraging! She helped me get through the program with ease." Teacher Candidate 27
>
> "I honestly was blessed with my mentor. He taught me how to sequence and deliver my lessons effectively." Teacher Candidate 55

The researcher found it important to address mentor relationships in relation to the needs of teacher candidates in hopes of enhancing the level of growth.

Findings from this study were evidence that collaboration is essential not only with teacher candidates but also for mentors. Literature from Ingersol et al. (2011) reinforced the concepts of teamwork when members develop positive peer relationships. The researcher believed that monthly mentor meetings were essential. Mentors had the opportunity to be part of a cohort group that provided continuous guidance and collaboration. School District A's Induction Program was highly successful because it was designed to meet the needs of teacher candidates and mentors by providing the necessary support.

The results of this study show positive results in providing mentor-coaching techniques to induction mentors. Based on the results of this study, coaching serves as a promising framework to consider in exploring adult learning in the context of professional development for teacher candidates. According to CCTC (2016), the induction program's mentoring must be based on "sound rationale informed by theory and research" (p. 2). With this, school districts have a choice in what mentor-coaching activities they engage in to support the implementation of

research-based strategies for success. School districts cannot hire mentors without a structured plan for how mentor coaching will be carried out to support teacher candidates. Mentor-coaching protocols need to be well developed and implemented throughout the school year.

Professional development in the field of education is guided by educational policy. However, the policy does not ensure effectiveness. While there are policies in place, they are not always practice. The induction program is guided by the teacher's needs and is individualized for each teacher candidate. Throughout the research, induction professional development shows to be effective as a choice for first and second-year teachers. A recurring characteristic of effective professional development throughout the induction program literature includes implementing research-based strategies in the classroom through ongoing support (CCTC, 2016). However, there are gaps in the research that report the effectiveness of professional development when teachers have a choice. If school districts are to invest in professional induction development for teacher candidates, they cannot afford not to invest in mentors. Professional development is a costly investment but shows promising results when a system is put in place. Therefore, the findings of this study help fill this gap.

Recommendations for Further Research

Based on the findings of this research, there are several opportunities to extend the research. This research was focused on one program but needs to take place with several programs. Induction programs have been utilized in other states (Algozzine et al., 2005; Green, 2015; Jones et al., 2016). It will be interesting to analyze the results of utilizing the induction program in different states. Studies across different states would reveal the importance it has on beginning teachers. This will help educators determine in what areas the induction program would better serve beginning teachers.

The study was focused on one school year. A two-year long study could show the evolution of the teachers' progress from the beginning of the induction program to the end, allowing the researcher to follow up on the teacher candidates and mentors across a longer period of time. A full two-year replication could also prove to provide further insight.

Additional research needs to be conducted to investigate the impact that mentoring has on student achievement outcomes. Since teachers implement the lessons and observe the students' development, they are a key to the outcomes. Furthermore studies can begin to investigate the relationship between teachers who received mentoring and their students' achievements.

Finally, 56 teacher candidates and 24 mentors responded to the open-ended survey describing the support to teachers, which resulted in a very large data set with emerging themes that went beyond the parameters of this study. A summary of these findings can be further explored and reported in another publication to contribute to the understanding of induction programs. Each study can help educators gain insights of how to strengthen the induction program from the teachers' and mentors' points of view. Perhaps the researcher will be able to follow up with each of these teachers in ten years to see if the mentoring led to retention in the profession.

Conclusions

The findings of this study expand on the work of previous researchers in the areas of induction programs, coaching, and professional development. This research study revealed that teacher candidates who go through an induction program have a positive impact on their experience as a beginning teacher. This is in support of what has previously been presented in the literature. For example, Breaux and Wong (2003) asserted that induction programs are "smart investment in the ongoing training, support, and retention of beginning teachers, who, as

a results of the programs, become more qualified, capable, and effective teachers" (p. 11). Similarly, mentors that were part of the induction program have a positive perception of School District's A Induction Program. Mentors revealed that the induction program positively impacts beginning teachers to become continuous reflectors.

The goals of a successful induction program are many: (a) provide ongoing teacher candidate support through their first years in the classroom; (b) improve teacher professional development to meet each teacher candidates' needs; (c) provide mentors the coaching training to further develop professional skills with teacher candidates, and (d) refine mentor matching to meet teacher candidate needs. This study supports previous research validating the strength of competent mentors, the self-reported growth of new teachers and the value of reflective practice (Kelly, 2004).

Summary

This mixed method case study examined the teacher candidates and mentors in an Induction program by answering two research questions. The first focused on teachers' experiences in the induction program and the impact of these experiences on their professional growth. The second focused on the mentors' experiences in the induction program and their impacted on new teachers. The results showed that teacher candidates grew to accept the induction program and become more accommodating of the induction program over time. This study shows that teachers can be successful in an induction program that caters their specific needs. Successful induction programs, such as District's A Induction Program, allowed for individualized learning to a better teacher and mentor experience. This research was important and significant since it provided findings for School District A. The findings of this study indicated that District A's successful induction program possesses the qualities of: (1)

mentorship, (2) collaboration, (3) online portfolio, (4) choice on professional learning, (5) program modifications, (6) training mentors, and (7) future recommendations for the district. It expressed the insights of the 2018-2019 Induction teacher candidates and mentors related to their experiences of the program. Finally, the study formally documented District A's case study of a year in induction. The new teachers are surviving, thriving as indicated by their experiences detailed in the study.

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APPENDIX

Appendix A: 2018-2019 Induction Professional Development Menu

2018-2019 INDUCTION PROFESSIONAL DEVELOPMENT MENU

Date & Location	Professional Development Session	Time	Notes
August 16, 2018	Induction Kickoff Orientation (Not for PD- one Orientation required)	4:00-5:30	JDP not available until 3:30 Pre-K Orientation
August 23, 2018 Enrollment Center	Induction Kickoff Orientation Make-Up (Not for PD-one Orientation required)	3:45-5:15	NGSS in Enrollment Center until 3:00
September 6, 2018 John D. Piazza Ctr.	**Classroom Management (Elementary & Sec.)** **Growth Mindset**	3:45-5:45	Repeat on Sept. 20th
September 13, 2018 John D. Piazza Ctr.	**Bryan Harris-** **Supporting Students of Poverty**	3:45-5:45	Induction Candidates
September 15, 2018 Enrollment Center	**Bryan Harris-** **Teaching w/Poverty & Equity in Mind** (May count as 4 additional PD hours)	8:00-3:00	ALL District Teachers *You may get 4 additional PD hours OR pay, but not both
September 20, 2018 John D. Piazza Ctr.	**Classroom Management (Elementary & Sec.)** **Growth Mindset**	3:45-5:45	Repeat of September 6th
October 4, 2018 John D. Piazza Ctr.	**Home/School Communication** -Parent/Teacher Conferences/Role Play -Student Led Conferences	3:45-5:45	
October 18, 2018 John D. Piazza Ctr.	**Teach Like a Champion/Student Engagement**	3:45-5:45	JDP not available until 3:00pm Principal's Meeting
November 8, 2018 John D. Piazza Ctr.	**Meeting the Needs of SpEd Students in ALL Classrooms** - Inclusion - Severe/Profound SpEd Students - Managing Paraprofessionals	3:45-5:45	Repeat on March 28th Gen. Ed & SpEd candidates welcome
November 29, 2018 John D. Piazza Ctr.	**Stress Management** **Mindfulness**	3:45-5:45	
January 17, 2019 John D. Piazza Ctr.	**Hitting the Reset Button- Michael Linsen book:** ***The Classroom Management Secret***	3:45-5:45	
January 31, 2019 John D. Piazza Ctr.	**PD Survey Needs TBD** *Will survey candidates in the fall for topics	3:45-5:45	

Appendix B: Mentor Meetings

Induction Mentor Meetings 2018-19			
Date	Location	Time	Topic
July 26, 2018	C202	8:00-3:00	Induction Mentor PD
August 27, 2018 (For those who did not attend 7/26/'18)	Enrollment Conf. Room	8:00-3:00	Induction Mentor PD Make-Up
September 14, 2018	John Piazza	8:00-3:00	Bryan Harris All Mentors & TOAs "How to Support Teachers Who are Stuck"
September 24, 2018	C-202	3:45-5:45	Part-Time Mentors 3:45-5:45 Full-Time Mentors 3:45-4:45
October 25, 2018	C-202	3:45-5:45	All Mentors 3:45-5:45 for Portfolio Check #1
November 15, 2018	C-202	3:45-5:45	Part-Time Mentors 3:45-5:45 Full-Time Mentors 3:45-4:45
December 6, 2018	C-202	3:45-5:45	Part-Time Mentors 3:45-5:45 Full-Time Mentors 3:45-4:45
January 10, 2019	TBD	3:45-5:45	Part-Time Mentors 3:45-5:45 Full-Time Mentors 3:45-4:45
February 7, 2019	C-202	3:45-5:45	All Mentors 3:45-5:45 for Portfolio Check #2
March 14, 2019	C-202	3:45-5:45	Part-Time Mentors 3:45-5:45 Full-Time Mentors 3:45-4:45
April 18, 2019	C-202	3:45 5:45	All Mentors 3:45-5:45 for FINAL Portfolio Check

Appendix C: New Teacher Orientation

NEW TEACHER ORIENTATION

Center

July 31, 2018

Agenda

8:00-8:45	**Continental Breakfast with Principals** **Afternoon Breakout Sign-Ups** ***Breakfast generously provided by Grand Canyon University**
8:45-9:15	**District Vision and Goals**
9:15-9:30	**Overview of T&L Division Goals and Services & Academic Institute**
9:30-9:45	**Certificated Human Resources**
9:45-10:00	**Break**

10:00-11:00	**Q/Attendance**
11:00-12:00	
	Schools First Federal Credit Union **California Casualty**
12:00-12:30	**Lunch *Provided by Fontana Teachers Association**
12:30-12:45	**Break/Passing Period**
12:45-1:45	**Breakout Session #1**
1:45-2:00	**Break/Passing Period**
2:00-3:00	**Breakout Session #2**

Breakout Sessions:

#1 C-202---Avoiding Teacher Burnout

#2 Bldg. 14 Computer Lab---Special Education

#3 C-204---Growth Mindset

#4 JDP---Teach Like a Champion- Setting the Stage

Appendix D: Introductory Email

My name is Hugo Sierra, math teacher at . I am reaching out to you since you were part of School District A's Induction Program last school year. I am currently working on my dissertation entitled "*SURVIVING AND THRIVING THROUGH THE LENS OF A BEGINNING TEACHER: A DESCRIPTION OF THE EXPERIENCES AND RESOURCES USED BY TEACHERS OF A CALIFORNIA INDUCTION PROGRAM*," and wanted to know if you can complete a 10-minute survey about your experience in our district induction program. Your response will help with ways to strengthen the induction program for future teacher candidates and mentors. Again, all responses will be anonymous. Enjoy the rest of your summer!

Link to Survey: Teacher Candidate Survey/Mentor Survey

Appendix E: End of the Year Survey-Teacher Candidate

Dear Induction Teacher Candidate,

The study in which you are being asked to participate is designed to investigate the effectiveness of a California Induction Program. This study is being conducted by Hugo Sierra under the supervision of Dr. Belinda Karge, Dissertation Committee Chair, School of Education. This study has been approved by the Institutional Review Board at Concordia University, Irvine.

Purpose: The purpose of my study is to evaluate the effectiveness of a California Induction Program by focusing on the experiences and resources used by teacher candidates. The findings will be used as part of my research study and could potentially lead to improvements towards a successful program.

Description: You are being asked to complete a survey regarding your experiences of the Induction Program. The survey consists of Likert-scale type questions, open-ended response questions, and demographic questions.

Participation: Participation in this study is completely voluntary and can be withdrawn at any time with no penalty.

Confidentiality: Your participation in this research study is voluntary and your identity will remain confidential. If you chose to participate in the focus group, your information will only be made available to the researcher and used for contact purposes only. Contact Information will be removed once the focus groups are scheduled. Once the contact information is removed, the survey responses will be known to the researcher and his dissertation chair, Belinda Karge, Ph.D. Participants will not be identified by name in the results. Data will be stored with password protected portal and on the researcher's Apple MacBook protected with a password. All data will be deleted and destroyed after data analysis has been completed in December 2019.

Duration: The total time of participation is approximately 10 minutes to complete the survey.

Risks: A potential risk perceived by a participant may be a felling of uneasiness by teachers to give negative information in the survey or focus group. To reduce the feeling of uneasiness, the participants will not be identified by names. Participants will be assured of confidentiality. The personal contact information will only be used for focus group invitations.

Benefits: This study will expand on the literature available on inductions programs in California. It will give the school district what is being done well and what areas can be improved upon.

Video/Audio/Photograph: No video or photographs will be taken. Audio-recording will be used during Focus Group Interviews and will be destroyed after transcriptions.

Contact: This study has been reviewed and approved by the Instructional Review Board at Concordia, Irvine. If you would like to contact the researcher please free to contact via email at hugo.sierra@eagles.cui.edu. You may also direct questions about the research participant's rights and research-related concerns and issues to Dr. Belinda Karge, Ph.D., Professor of Doctoral Programs Concordia University School of Education. Dr. Karge may be reached via email at belinda.karge@cui.edu.

Results: The results will be published in the researcher's doctoral dissertation at Concordia University, Irvine. The findings could potentially lead to improvement.

Today's Date:

I agree with the information presented above and understand the risks and benefits of participating in this study.

Yes No

1) **My participation in the Induction program helped me to increase my competence as a teacher.**

Completely Agree

Agree

Neutral

Disagree

Completely Disagree

1. Through my participation in Induction, I was provided with the necessary resources to accomplish the goal in my Individual Learning Plan (ILP/IIP).

1= Completely Disagree; 2= Disagree; 3= Neutral; 4= Agree; 5= Completely Agree

Substitute release time	1	2	3	4	5
Offers to set up observations	1	2	3	4	5
Additional professional development sessions	1	2	3	4	5

2. The design of the Induction Program provided me with multiple opportunities to:

1= Completely Disagree; 2= Disagree; 3= Neutral; 4= Agree; 5= Completely Agree

Reflect on the effectiveness of my instruction	1	2	3	4	5
Analyze student data	1	2	3	4	5
Use the data to further inform the repeated cycles of planning and instruction	1	2	3	4	5

3. **This years Induction Program's mentoring design provided me with multiple opportunities to demonstrate growth in the California Standards for Teaching Profession (CSTPs).**

Completely Agree

Agree

Neutral

Disagree

Completely Disagree

4. **The professional development offered through the Induction Program has helped me to strengthen my professional practice.**

Completely Agree

Agree

Neutral

Disagree

Complete Disagree

5. **I was effectively matched with a mentor that was closely aligned with my grade level and subject matter knowledge.**

Completely Agree

Agree

Neutral

Disagree

Completely Disagree

6. **My Support Provider/Mentor has encouraged me and assisted me in reflection of my practice and the impact of my instruction on student achievement.**

Completely Agree

Agree

Neutral

Disagree

Completely Disagree

7. **Please rank 1 star to 5 stars (1 being not satisfied at all, 5 being extremely satisfied) the degree to which the work with your Support Provider/Mentor has positively impacted your teaching practice.**

8. **Please rank 1 star to 5 stars (1 being not satisfied at all, 5 being extremely satisfied) the degree to which the work with your Support Provider/Mentor has positively impacted the student achievement.**

9. **Please rank 1 star to 5 stars (1 being not satisfied at all, 5 being extremely satisfied) the rate of level of helpfulness provided by your Support Provider/Mentor.**

10. **What services and support have you received from your support provider?**
11. **How has the Induction Program impacted your effectiveness as a classroom teacher?**
12. **What additional changes could the Induction Program make to strengthen the program for participating teachers?**

Teacher Candidate Information

The following information will be only used to report demographic trends and your identity will remain confidential throughout the study.

13. Induction Year: Year 1 Year 2 ECO (Early Completion Option)
14. Age:
15. What type of Credential are you clearing (Select all that apply):
    Multiple Subject Teaching Credential

    Single Subject Teaching Credential

    Specialist Credential (M/S, M/M, D/H)

    Other (please specify):

16. Grade level(s) currently teaching:
    Elementary

    Middle

    High School

    Continuation/Alternate Education

17. Are you interested in participating in this study further via a 20-30 minute focus group interview? If so, please provide your contact information below (Name, Email and School Site).

Appendix F: End of the Year Survey-Mentor

Dear Induction Mentor,

The study in which you are being asked to participate is designed to investigate the effectiveness of a California Induction Program. This study is being conducted by Hugo Sierra under the supervision of Dr. Belinda Karge, Dissertation Committee Chair, School of Education. This study has been approved by the Institutional Review Board at Concordia University, Irvine.

Purpose: The purpose of my study is to evaluate the effectiveness of a California Induction Program by focusing on the experiences and resources used by mentors. The findings will be used as part of my research study and could potentially lead to improvements towards a successful program.

Description: You are being asked to complete a survey regarding your experiences of the Induction Program. The survey consists of Likert-scale type questions, open-ended response questions, and demographic questions.

Participation: Participation in this study is completely voluntary and can be withdrawn at any time with no penalty.

Confidentiality: Your participation in this research study is voluntary and your identity will remain confidential. If you chose to participate in the focus group, your information will only be made available to the researcher and used for contact purposes only. Contact Information will be removed once the focus groups are scheduled. Once the contact information is removed, the survey responses will be known to the researcher and his dissertation chair, Belinda Karge, Ph.D. Participants will not be identified by name in the results. Data will be stored with password protected portal and on the researcher's Apple MacBook protected with a password. All data will be deleted and destroyed after data analysis has been completed in December 2019.

Duration: The total time of participation is approximately 10 minutes to complete the survey.

Risks: A potential risk perceived by a participant may be a felling of uneasiness by teachers to give negative information in the survey or focus group. To reduce the feeling of uneasiness, the participants will not be identified by names. Participants will be assured of confidentiality. The personal contact information will only be used for focus group invitations.

Benefits: This study will expand on the literature available on inductions programs in California. It will give the school district what is being done well and what areas can be improved upon.

Video/Audio/Photograph: No video or photographs will be taken. Audio-recording will be used during Focus Group Interviews and will be destroyed after transcriptions.

Contact: This study has been reviewed and approved by the Instructional Review Board at Concordia, Irvine. If you would like to contact the researcher please free to contact via email at hugo.sierra@eagles.cui.edu. You may also direct questions about the research participant's rights and research-related concerns and issues to Dr. Belinda Karge, Ph.D., Professor of Doctoral Programs Concordia University School of Education. Dr. Karge may be reached via email at belinda.karge@cui.edu.

Results: The results will be published in the researcher's doctoral dissertation at Concordia University,

Irvine. The findings could potentially lead to improvement.

Today's Date:

I agree with the information presented above and understand the risks and benefits of participating in this study.

Yes No

1. **As a mentor, I had the opportunities to network with mentoring peers by reflecting on ways to improve my abilities to support beginning teacher during the monthly mentor meetings**

Completely Agree

Agree

Neutral

Disagree

Completely Disagree

2. **As a mentor, I provided my participating teacher(s) with "just in time" support.**

Completely Agree

Agree

Neutral

Disagree

Completely Disagree

3. **As a mentor, I provided long-term analysis of teaching practice to help my participating teacher(s) develop enduring professional skills.**

Completely Agree

Agree

Neutral

Disagree

Completely Disagree

4. **I was effectively matched with a participating teacher that was closely aligned with my grade level and subject matter knowledge.**

Completely Agree

Agree

Neutral

Disagree

Completely Disagree

5. **If my credential and experience did not match my Teacher Candidates' specific subject matter and/or grade level, I was able to solicit resources and information form other colleagues to assist the beginning teacher(s).**

Completely Agree

Agree

Neutral

Disagree

Completely Disagree

Not Applicable

6. **I gained information and coaching skills during the monthly mentor meetings that I used as a mentor.**

Completely Agree

Agree

Neutral

Disagree

Complete Disagree

7. **The Induction Program provided me support in my role as a mentor in the areas of:**

1= Completely Disagree; 2= Disagree; 3= Neutral; 4= Agree; 5= Completely Agree

Coaching	1	2	3	4	5
Goal Setting	1	2	3	4	5
Use appropriate mentoring instruments (i.e. CTP/ILP)	1	2	3	4	5
Best practices in adult learning	1	2	3	4	5
Support for individual mentoring challenges					

8. **Please rank 1 star to 5 stars (1 being not satisfied at all, 5 being extremely satisfied) the degree to which the work with your Teacher Candidate (s) has positively impacted your mentoring practice.**

9. **Please rank 1 star to 5 stars (1 being not satisfied at all, 5 being extremely satisfied) the rate of level of helpfulness provided the Induction Program.**

10. **What services and support have you received from the Induction Program?**
11. **How has the Induction Program impacted your effectiveness as a mentor?**
12. **What additional changes could the Induction Program make to strengthen the program for mentors?**

Mentor Information

The following information will be only used to report demographic trends and your identity will remain confidential throughout the study.

13. Years of Teaching Experience:
14. Age:
15. What type of Credential do you hold that apply to the Induction Program (Select all that apply):
    Multiple Subject Teaching Credential

    Single Subject Teaching Credential

    Specialist Credential (M/S, M/M, S/D)

    Other (please specify):

16. Grade level(s) currently teaching:
    Elementary

    Middle

    High

    Continuation/Adult Education

17. Are you interested in participating in this study further via a 20-30 minute focus group interview? If so, please provide your contact information below (Name, Email and School Site).

Appendix G: Focus Group Questions

Teacher Candidates Questions

1) How has participating in the Induction Program encouraged you to develop and enhance your skills and abilities as a teacher?

2) What are some of the benefits that you have encountered in working with your Mentor?

3) What are some of the challenges that you have encountered in working with your Mentor?

4) How has your work in the Induction Program helped in understanding the California Standards for the Teaching Profession?

5) When I ran the focus groups with mentors, the top two priority things that they came up with were "just in time" support and reflection. Can you give me an example of a time your mentor provided you with just in time support? Can you give me an example of a time your mentor provided you with reflection?

6) If you were to design an Induction Program, what modification(s) would you make? What would you have done differently?

7) Is there anything you would like to share regarding your induction experience?

Mentor Focus Group Questions

1) What support have you provided to your teacher candidates(s) this school year?

2) Which aspects of coaching did you find to be the most beneficial to you in trying to support your teacher candidate?

3) Describe one of your most successful mentor experiences. What made it so successful?

4) Have you ever experienced a situation with one of your teacher candidates that did not go well? What were the challenges?

5) As a mentor, are there any modifications to the District's A Induction Program you would change?

Appendix H: School District A Approval

Appendix J

CONCORDIA UNIVERSITY IRVINE

Date when the records, data, tapes, or other documentation will be destroyed: June 1, 2020

Researcher's Signature _____ Date 4/22/19

Authorization

I understand that participation in this study is confidential. Only the researcher, collaborators, and supervising professor will have access to participants' identities and to information that can be associated with their identities. Please check the appropriate box below and sign the form:

☑ **I give permission** for my organization to participate in this project. I understand that I will receive a signed copy of this consent form. I have read this form and understand it.

☐ **I do not give permission** for my organization to participate in this project.

Authorized Signature

Printed Name & Title

Appendix I: Audio Consent Form

CONCORDIA UNIVERSITY IRVINE

AUDIO RECORDING - INFORMED CONSENT

During each focus interview, I will be recording audio of interview responses. After data collection, I will compile all recorded interviews to begin analyzing results for discussion. Only I will have access to the recordings, as they will be kept on my password protected laptop. Please indicate your audio recording consent below by initialing. Should you not consent to an audio recording, as the researcher, I will type up your responses during the interview. I will only use recordings in a way that participants agree to. In any use of the recordings, participant names will not be identified. Once I analyze all data collected, each audio recording will be deleted.

Please indicate the type of informed consent.

The photograph/videotape/audiotape can be studied by the research team for use in the research project.	Please initial _____

I have read the above description and give my consent for the use of the photograph/videotape/audiotape as indicated above.

Signature: _____ Date: _____

Printed Name: _____

Appendix J: Individualized Learning Plan (ILP)

Individual Learning Plan

(ILP)- Rev. 6.2019

Candidate			Year	1	Goal Plan Development/Updates		Collaborative Development Team	
Credential Type		Dual Credential			Fall		Content Contact	
Mentor		Grade Level			Winter		Site Administrator	
Mentor Match Date (within 30 days of enrollment)		Site			Spring		Induction Coordinator	

Portfolio Checks Goal implementation and Growth		Introduction to Site Administrator/Evaluator	Observations of Veteran Teachers	
Fall			Name:	Date:
Winter			Name:	Date:

PROFESSIONAL GOAL(S): *Please indicate goals based on YOUR professional interests such as, advanced education, certifications or authorizations, additional content area literacy, and/or early childhood education. Considerations for district, site, classroom/student, and/or personal educator goals may be included in this section.*	
Goal(s):	**Rationale for goal:**

CSTP GOAL(S): Based on your individual self-assessment of the CSTP, collaboratively develop your individual growth goals. These goals will guide your Induction Program.	
GOAL # 1 *Developed within the context of the ILP within the first 60 days of the candidate's enrollment in the FUSD Induction Program	
CSTP Growth Goal(s): *Based on your self-assessment on the Continuum of Teaching Practice, select specific **elements**/goals as your focus.*	**Determining Outcomes:** *Use these questions to determine how you will meet these goals. What achievement will your students attain?*
CSTP Standard and Key Element(s): **GOAL 1:** **Goal Modifications** *(as needed)*:	1. **What growth or instructional habits will be implemented on your part?** *(Considerations: overall, related to approaches, interactions, effectiveness w/ planning, instruction, or assessments, etc.)* 2. **What are the indicators of success/achievement?** *(Considerations: target/ideal outcome, mindsets, interactions with learning, achievement, etc.)* 3. **What evidence do I want to collect to measure effectiveness?** *(Considerations: General thinking on how or what evidence will support measuring teacher or student growth)*

Appendix K: Early Completion Option

Consideration for Early Completion Option

An Induction Program allows Candidates to clear their California Teaching Credential by meeting standards and requirements during a two-year period of professional growth and reflection. However, candidates who are **"experienced AND exceptional"** *may be eligible* to complete the program in one year. Candidates who qualify for ***consideration*** must include one of the following:

- First year candidates who have completed a two-year Intern Program within California;
- First year out-of-state candidates with 3 years or more of teaching experience;
- First year out-of-country candidates with 3 years or more of teaching experience;
- First year candidates with 3 years or more of teaching experience with a clear (tier 2) credential in a private school setting

If you meet the above criteria you will be asked to provide copies of the following:

1. Successful (proficient or higher) evaluations from the most recent 2 years from an administrator/evaluator
2. A current letter of recommendation from your site principal
3. A description of the evidence you would present if asked to demonstrate how your teaching is exceptional in relation to the 6 California Standards for the Teaching Profession. Please address each CSTP separately.

contact you. The Induction Coordinator will decide whether or not you *may be eligible* for the Early Completion Option based on submitted documentation. Finally, the Induction Coordinator will schedule a time to observe a lesson and email you with a decision regarding the Early Completion Option.

The deadline to be considered for Early Completion Option is October 1, 2019 OR within 60 days of late hire

*This information is evidence of the Induction Preconditions #6- "An Induction Program sponsor must make available and must advise participants of an Early Completion option for "experienced and exceptional" candidates who meet the program's established criteria."