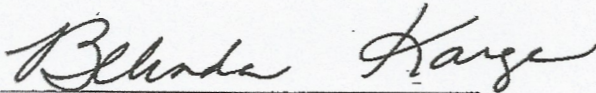
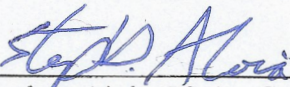


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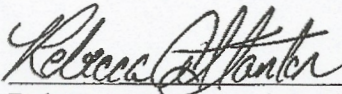
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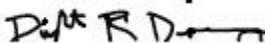


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REFLECTING WITH TEACHERS WHO WERE HIGHLY SUPPORTED IN THEIR FIRST
YEARS OF TEACHING: WHAT STRATEGIES HELPED THEM REMAIN IN THE
PROFESSION

by

Galit C. Reitman

A Dissertation

Presented in Partial Fulfillment of
Requirements for the
Degree of
Doctor of Education
in
Educational Leadership
May 5, 2018

School of Education
Concordia University Irvine

ABSTRACT

Success and satisfaction in the teaching profession are goals; teacher turnover and burnout being constant problems. This study explored factors of support to determine why teachers remain in teaching. Sixty teachers took part in a federal grant, the *AIMS* (autism, inclusion, math, science) Scholar Program, designed to provide transitional support for newly hired teachers. The participants were queried in order to ascertain sufficient data to identify the salient triggers of pre-attrition related casual agents. The grant was tailored for teachers completing university teaching programs. Enrolled students were from all areas of California, with most being in the southern part of the state. One hundred percent of the participants were still teaching at the time of the research. This dissertation was designed to discern how support early in their careers enabled these teachers to thrive. Open-ended survey questions and in-depth interviews provided insight into why these teachers stayed in the profession and have plans to continue to teach for many years to come. Classroom observations yielded data to support their effectiveness in the classroom.

This study was primarily based on teacher perceptions of teacher professional competence and their own performance in the classroom. There is a need to determine the relationship between teacher professional competence as measured by student achievement, student self-esteem, and parent perceptions of teacher competence as they relate to attrition. Six themes were determined as support strategies that helped this group of teachers remain in teaching. It is suggested that these 6 themes be integrated into all support programs to ensure teacher retention.

Keywords: teacher retention, teacher induction, teacher attrition, beginning teachers

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DEDICATION

I would like to dedicate this dissertation to my husband, who was right there beside me for the whole process, who helped coach, teach, and enrich, and helped me stay positive and realize that I can accomplish my goals. He is proud to have a second doctor in the house. To my wonderful twins, Ruthie and Brendan, who realized their mother had finally gotten her doctorate after 20 years of being a faculty member at the University. And most of all, for Dr. Karge, a big thank you from the bottom of my heart, who has been my mentor, role model, colleague, and dearest friend for the last 20 years. It was an honor and joy to follow in your footsteps. Your support, hard work, and inspiration will always be appreciated. Thanks for believing in me and helping me accomplish my goals. My dream of making a difference will forever be instilled in them. To my father and brother, who could not believe I finished all this, but always provided a word of encouragement. To Mrs. Toby Reitman, my mother-in-law, who pushed me to study hard, strive for the best, and accomplish my goals. Finally, to the memory of my mother, Ruth Vrobel, who was also an educator, who instilled in me much love and admiration for the profession. She taught me to believe in myself, dream big, and that anyone can learn. She would have been very proud. Thank you all for all you do.

ACKNOWLEDGMENT

I would like to acknowledge and thank Dr. Belinda Karge, who has been my committee chair, mentor, role model, and the biggest influence in my professional career. Thank you for always helping me excel and strive for the best. Your love, dedication, and support are a true gift in my life. Also Dr. Aloia, who has been my colleague for 19 years and my Master's advisor. Thank you for believing in me and supporting me throughout my career. You and Dr. Karge are truly an inspiration. I would like to thank Dr. Stanton, for sharing the love of teaching and mentoring. I appreciate all your support and dedication. Thank you to all of you, my committee, for the confidence and honor to achieve my goal. Thank you to Dr. Doering and the rest of the faculty at Concordia University, Irvine, Doctoral program, for the insight, the knowledge and wisdom you shared with me for the past few years. To my cohort and fellow colleagues, thank you for working hard and supporting me and for the collaboration. It was a great endeavor. Wishing you many successes and continued relationships. I feel incredibly blessed.

CHAPTER 1: INTRODUCTION

Teaching is a complex profession that entails a variety of critical skills complicated by sufficient capacity, and infrastructure to produce a highly qualified workforce (Smith, Montrose, Robb, Tyler & Young, 2011). The art of teaching requires a variety of refined pedagogical skills. The capacity to use these skills, behaviors and models to support students is a common goal. Research supports that highly effective teachers have a repertoire of essential skills, behaviors, and models (McEwan, 2002; Orlich, Harder, Callahan, Trevisan, & Brown, 2004). Teacher retention has purportedly been a key problem that the field of education has struggled with over the last century (Billingsley, 2004).

In 2009, the federal government, under the Obama Administration, introduced a series of initiatives intended to encourage innovation and reform at the district, state, and national levels. Among these were programs to support and retain teachers. Data indicate beginning teachers typically only stay in the profession 5 years (Billingsley, 2004). The United States Department of Education (2015) recognized this challenge in retaining teachers and in 2011 administered a series of grants to determine the best strategies for support and retention of highly qualified teachers. The grants were open to Institutions of Higher Education (IHE's), Local Education Agencies (LEAs) and Nonprofit Organizations State Education Agencies (SEAs). The participants in the study described in this dissertation were among a cadre of people who participated in an IHE program and were selected from the 30 funded grants. This study revisits the participants, to see if they remained in teaching and assesses their self-perceptions of teaching quality.

Background of the Study

During the past 7 years, the researcher served as a grant evaluator for a U.S. Department of Education Transition to Teaching Federal Grant. The Transition to Teaching funding allowed for new teachers in math, science, and special education to receive additional support from the university beyond their district support and their credential program support to enhance techniques and strategies. The attrition rate for the 5 years of the federal project was only 3% (Karge & Reitman, 2016). Why is it that these teachers stayed? The purpose of this investigation was to examine the factors that contributed to the teacher retention. It is hypothesized that the extra support and training in the areas of strategy instruction and behavior techniques provided these new teachers with the skills to remain in the classroom and to continue in the teaching profession. The grant evaluation included numerous data sets; however, prior to this study, there had not been a compilation of the data or interpretation of the data; so there were not answers to the questions proposed in this dissertation.

Historical Overview

In California during the 1990's and early 2000's, policymakers created a system of support for first-year teachers. They focused on increasing teacher effectiveness, reducing attrition, and basic overall support (Koppich et al., 2013). California Senate Bill 1422 (1992) formalized a program commonly referred to as Beginning Teacher Support and Assessment (BTSA). BTSA began as a 1992-93 funded mentor pilot program with 15 programs including collaborations of districts, county offices of education and university teacher education programs (Jonson, 2002). BTSA originally began as the California New Teacher Project (Jonson, 2002). The pilot program supported 1,100 first and second year teachers at a cost of \$5 million. The program was significantly expanded in 1997. Standards of effectiveness and quality were

established for California's induction program (California Council on Teacher Education, 2002). Six years after the BTSA program was implemented, California Senate Bill 2042 (1998) mandated a requirement of a 2 year induction support system for all new teachers in California. BTSA was initially a state program coordinated by a series of clusters of districts and universities across the state. One of the consequences of the induction programs was the formation of the group of experienced teachers, mentors, called "support providers" (Koppich, et al., 2013, p. 12). A support provider is a mentor to the beginning teacher. The support provider is a coach during the first few years teaching. These support providers were either fully or partially released from their teaching duties to work with new teachers. The idea of support providers was modeled after Rojewski and Schell's (1994) cognitive apprenticeship in which experts support novices as they moved toward mastery of a profession. A secondary outcome of the California Senate bills was a focus on a generic set of skills and abilities, pedagogical knowledge that all teachers must have experienced as a component of their training in teacher education. This set of knowledge, skills and abilities are referred to as the *Teaching Performance Expectations* (TPEs). According to the California TPE adoption (June 2016), the TPEs follow recommendations for national teaching expectations (California Commission on Teacher Credentialing, 2016). These pedagogical competencies have been validated as predictors of teaching excellence and are coextensive with the recommendations of the California Commission on Teacher Credentialing. The TPE's are specifically associated to the *California Standards for the Teaching Profession* (CSTP)--standards that drive induction programs in California. The CSTP domains provide the organization for the TPE's. These include "Engaging and supporting all students in learning, creating and maintaining effective environments for student learning, understanding and organizing subject matter for student

learning, planning instruction and designing learning experiences for all students, assessing student learning, and developing as a professional educator” (CTC, 2016, p. 3).

Statement of the Problem

From 1992 to 2008, California provided categorical funds to districts to support new teachers (Koppich, et al, 2013). However, when the recession hit in 2008, significant funding cuts occurred and the BTSA monies were included in flex funding. Flex funding meant that the district had to make the decision to use funds to maintain the program or cut it. Since 2009, California ceased its mandatory support for new teachers entering the teaching profession. As a result, many schools terminated their BTSA induction programs and elected to use existing funding for other priorities. The consequence of these decisions has resulted in newly hired teachers being left on their own to initiate and execute reflective interventions for purposes of professional improvement and emendation. California legislation (SB 1422) still requires the new teacher to have 2 years induction prior to obtaining their clear credential; however, there is not funding to back this legislation (Moir, 2015). The state once gave dedicated funds to underwrite these programs, but this funding source no longer exists. Research demonstrates support is critical during the first few years of teaching (Bowers & Eberhart 1988; Strong, 2009). When funds are limited and programs are cut, the problem becomes what kind of support is most effective for teachers to remain in the teaching profession?

Purpose of Study

The purpose of this mixed methods grounded research study was to discover the significant supports that helped teachers remain in teaching. This study surveyed 60 teachers and interviewed 10 teachers who received significant supports in the first year(s) of their teaching experience. The researcher was interested in knowing if the level of assistance and

support enhanced the beginning teacher's perceived instructional performance and their longevity in teaching. Additionally, did the research-based instructional techniques and strategies these teachers were introduced to in the early years remain pivotal in their later years of teaching? Overall, the primary purpose of the study was to find out what supports are necessary for teachers to receive early in their careers to ensure they remain in the teaching field.

Research Questions

The following primary research questions were explored with teachers working in the teaching profession for at least 5 years.

1. Why does the teacher believe the support given to them in early years helped them remain in the teaching profession?
2. What professional experience do teachers recall as being the most beneficial and effective to their teaching practice?
3. How do teachers practice research-based instructional strategies and techniques?

Secondary research questions included:

4. What has been your experience with co-teaching?
5. How is the focus on Response to Intervention/Multi-tier Intervention important to classroom management?

Theoretical Framework

New teachers move through a series of stages of development related to teacher effectiveness (Fuller, 1969; Fuller & Brown, 1975). Fuller (1969) first introduced the concept of self, task and impact. As a beginning teacher, the first concern is with one's own survival. This is the time of thinking only of the daily content organization tasks in front of them. The teacher concentrates only on getting through each day. The focus is on teacher survival, keeping the

class under control and on fear of failure. Teachers move toward a more critical analysis of their teaching. Taking time to contemplate the implementation of actual teaching duties including working with large numbers of students, time pressures and instructional materials is part of the survival focus. Finally, the teacher becomes comfortable in the classroom and is able to reflect and focus on the impact made on their students and the student outcomes related to the teacher's instruction. Pataniczek and Isaacson (1981) indicate that this stage is where teachers recognize the emotional and social needs of students and understand how to tailor content to individual needs. A by-product of Fuller and Brown's (1975) 3-stage dynamic of teacher development (self, task and impact) is the proclivity to allow a focus on the growth process.

Drawing from Fuller's (1969) and Fuller and Brown's (1975) work, Moir (1999) outlined the stages of a teacher's first year. She identified 5 stages: anticipation, survival, disillusionment, rejuvenation, reflection. The anticipation phase begins during student teaching and includes the anxiety and excitement they feel over having their own class. A sensation of tremendous commitment and a need to make a difference is a common feeling of teachers in this stage. The survival phase is often isolated to the first month of teaching as the new instructor feels overwhelmed with the amount of preparation required for the task at hand; the time required, the details of lesson planning, back-to-school night, parent conferences, etc. Basically, the rookie teacher feels the full weight of being under the administration microscope. The disillusionment phase follows the survival phase and is often the crucible moment for the formation and incubation of despair, doubt, and discouragement – the formative elements that often predicate subsequent burnout. Midway through the school year rejuvenation occurs, where the teacher's attitude improves. This is helped along by a much-needed winter break period. The final phase of Moir's (1999) 5-step process is the reflection stage wherein the beginning

teacher reflects on his/her rookie teaching epoch and engages in a series of evaluation insights. Moir's (1999) 5 stages expanded Fuller (1969), and Fuller and Brown's (1975) initial work. Moir's anticipation and survival stages related to Fuller and Brown's self stage; focusing on the ability of the self to anticipate and survive the first few months, even years, of teaching. The disillusionment and rejuvenation stages represent the task stage from Fuller and Brown, the teacher is accomplishing the task of teaching and feeling successful with the day to day processes. However, it is not until the impact stage (Fuller & Brown, 1975), that true reflection on student progress, student outcomes and the impact the teacher is making on the students, is realized.

Kortman and Honaker (2002) provide the beginning teacher responses to 5 stages of first year teaching. Their 5 stages are identical to Moir's (1999) 5 step process. These stages were also represented by Thompson (2007) in *The First-Year Teacher's Survival Guide*.

The stages of concern (self, task and impact) were also utilized by Southwest Education Development (SEDL) Consortium for education program assessment (George, Hall, & Stiegelbauer, 2013, Hall & Hord, 2014; Hord, Rutherford, & Huling-Austin, 1987). The assessment uses Fuller and Brown's originals stages of self, task and impact to measure teacher awareness of change and the level of engagement they have with their students to produce student outcomes (impact stage).

The focus of much of the research has been on first year teachers. However, teachers remain in the lower stages (i.e. self) for longer periods of time when proper supports are not provided or the teacher moves school or location. Thus, the work of Kortman and Honaker (2002) and George, Hall, and Stiegelbauer (2013) as well as Hall and Hord (2014) becomes pivotal and leads to teacher evaluation and self-evaluation.

Teacher Evaluation

Teacher quality prior to 1950 was assessed by personal traits (Hallam, Chou, Hite, & Hite, 2012). Cogan (1973) introduced the clinical supervision model. This model required teachers to do certain things that the administrator wanted to see for the evaluation. The work of Danielson and McGreal (2000) assisted in changing the evaluation focus to a conceptual model that encourages teacher evaluation as a stage developmental process of reflective review and assessment.

Models such as Fuller (1969) and Moir (1999) serve as templates for self-assessment as well as other forms of professional evaluation and review. They encourage leaders to move away from the clinical supervision of the 1960's. Danielson and McGreal (2000) advocate for the concept of lesson design. Hunter (1991) introduced many educators to the lesson planning process whereby teachers plan and implement a lesson that includes objective, input, modeling, checking for understanding, and independent practice. In one way or another, these concepts are still vital to lesson design and implementation today. Additionally, the Danielson and McGreal theory encourages leaders to help teachers understand phases, such as Fuller's (1969), to guide them to a point where they can self-reflect on their own teaching practice.

Danielson and McGreal (2000) first introduced the pre-observation concept (later became the preconference) and the idea of viewing learning and pedagogical artifacts as a way of reflecting and analyzing both teaching and student progress. Fuller and Brown's (1975), Moir's (1999) and Danielson and McGreal's (2000) work represent the theoretical framework that grounds the research behind this dissertation.

Danielson's (2007) explication of constructivist learning and teaching serves as a comprehensive overview of learning and teaching. The framework may serve as the foundation

of a school or district's recruitment and hiring, mentoring, coaching, professional development, and teacher evaluation processes. The framework is composed of 4 domains: (1) planning and preparation, (2) the school environment, (3) instruction, and (4) professional responsibilities. The concept behind Danielson's work is that it aligns with Fuller and Brown (1975) and Moir (1999) and expands the framework to be a foundation for how the teaching profession should approach teacher evaluation. Furthermore, Danielson (2007) postulates that schools prosper when teachers can identify, implement, and use key strategies effectively. Danielson (2007) proposes that every teacher's goal should be to make an impact on their students and self-evaluation and self-perception of abilities should be key to attainment of this goal. This is why the phase work of Fuller and Brown (1975) and Moir (1999) are critical components for every teacher evaluation system.

Significance of the Study

This study will add to the scholarly literature by providing evidence to demonstrate that when beginning teachers receive structured support and professional development in key areas of need addressed by their employers (i.e. lesson planning, differentiation, co-teaching,) during the first 5 years of teaching, there is a greater tendency to remain in the profession. This is significantly different than past BTSA studies based on support during the first 2 years of teaching (Strong, 2009).

Definition of Terms

The following terms are used throughout the study and are defined here:

Assessment: A process of collecting and deliberating about multiple sources of information with the intention of creating an understanding of what students comprehend and how they apply knowledge (Stiggins & Chappuis, 2012).

Beginning Teacher: A person who starts a teaching career either right out of a credential program or who begins teaching after having another career (career path). Someone who is in the first 3 years of teaching (Breaux & Wong, 2003).

Beginning Teacher Support and Assessment (BTSA): A California state-funded 2 year program designed to support the development of beginning teachers (Darling-Hammond & Shields, 2016).

Grant Evaluator: A person who is hired to go out to schools and observe teachers on their jobs using an evaluation, forms, and protocols reflecting on their ability to teach following state guidelines, standards, TPA's/TPE's (U.S. Department of Education, 2015).

Induction: The support and guidance provided to beginning teachers in the early stages of their careers (Strong, 2009).

Instructional Coach: A person who provides help and support, facilitating guidance for teachers at a given school site.

Mentee: A person who receives guidance from a mentor; in this context, a beginning teacher (Strong, 2009).

Mentor: A person who supports a beginning teacher, providing them with additional tools, either professional or emotional (Strong, 2009).

Support Provider: A person at the participant's school site or in their district who helps with information about school procedures, paperwork/documents, classroom environment, or behavior management (Strong, 2009).

Transition to Teaching: A federally funded grant to support beginning teachers (U. S. Department of Education 2015).

Veteran Teacher: A teacher who has had extensive experience in their field (Fuller, Parsons & Watkins, 1973).

Limitations

A limitation refers to threats to the validity of the study as they relate to the manner in which data are collected and may impact the interpretation of the findings (Lunenburg & Irby, 2008). The limitations of this study are inherent to the process of the interview. Only 10 of the 60 teachers were interviewed. This limited the age, gender, and ethnicity of the data collected in this dissertation.

Delimitations

Delimitations are boundaries self-imposed by the researcher (Lunenburg & Irby, 2008). The primary delimitation utilized for this study involved the sample. The participants all come from a select group. They were not randomly selected; as the participants all were members of a federally-funded program to support new teachers.

One key delimitation is that the participants had professional development that was supported with funds for a federal grant. Not all schools can afford this type of funding. The participants were selected specifically from a population that participated in a federal grant program that provided a high level of support and training.

The author of this study was the primary researcher responsible for all data collection and analysis. The researcher knew the participants professionally. It was believed that this past history together, one of respect and trust, and the fact that they began their teacher careers together created a unique opportunity to investigate factors that impacted job satisfaction and their decisions to remain in or leave the field of education.

Researcher Background

As a part-time faculty member in the California State University system for 18 years, the researcher has been involved in many aspects of beginning teaching, from giving seminars in beginning teaching for both special and general education, to being an observer on federal grants. The researcher has also served on committees where she met with school district personnel to help design curricula for beginning teachers. Furthermore, the researcher's Master's thesis focused on the preparation for a beginning teacher. Therefore, this researcher is uniquely qualified to evaluate the efficacy of teaching strategies and what leads to a successful career in teaching.

Summary

This research paper is presented in 5 chapters. Chapter 1 contains a statement of the problem, the purpose of the study, research questions (or hypotheses), theoretical framework, significance of the study, definitions, limitations, delimitations, and a summary. Chapter 2 contains a review of the relevant literature, such as teacher shortage, teacher retention, and teacher support. Chapter 3 contains a description of the setting and participants, sampling procedures, instrumentation and measures, plan for data collection and analysis, plan to address ethical issues, and a summary. Chapter 4 contains the results, with an introduction, quantitative data analysis, findings of qualitative research, and a summary. Chapter 5 contains the discussion, with an introduction, implications for practice, recommendations for further research, conclusions, and a summary.

CHAPTER 2: REVIEW OF THE LITERATURE

Once teachers are highly trained, it is desirable to keep them in the profession. Attrition in teaching has left many schools struggling to fill positions. In the preface of her book, *Powerful Teacher Education: Lessons from Exemplary Programs*, Darling-Hammond (2006) noted that “One of the most damaging myths prevailing in American education is the notion that good teachers are born and not made” (p. 10). Teachers need time to develop in their profession. There is ample research to demonstrate that there are stages of growth that teachers go through during the beginning years (Fuller, 1969; Fuller & Brown, 1975). There is also research to validate the type of teacher support necessary in the beginning years of teacher development to create stellar teaching. These will be reviewed in detail in the literature review.

Co-teaching, response to intervention, quality instruction, and behavior intervention techniques are hallmarks of the current reform efforts aimed at self-reflection and efficacy of beginning teacher evaluations. These innovations enhance the overall process of new teacher improvement and retention. Assisting with professional growth as beginning teachers become stronger educators who want to remain in the field and are capable of implementing reform efforts required by their districts. Ultimately, teacher evaluation provides data to determine whether the teacher made growth as an educator and if his/her students reported progress in outcomes. There are 6 major themes that are addressed in this chapter: teacher shortage, teacher retention, stages of teacher growth, teacher support, teaching strategy, co-teaching, response to intervention, and teacher evaluation.

Teacher Shortage

Since the mid-1970’s researchers have warned about the impending shortage of teachers qualified and willing to teach in the nation’s K-12 public school system (Murnane, Singer,

Willett, Kemple, & Olsen, 1991; Murnane & Steele, 2007). The changing landscape of public education has had a significant impact on the roles of personnel who serve our schools. Schools most in need of qualified teachers have the greatest difficulty recruiting and retaining them. Low performing and urban schools, which serve predominantly poor and minority students, have disproportionate numbers of under-qualified teachers in their classrooms. Teacher shortages, increasing numbers of English language learners, and the rising enrollment of students with disabilities and other special needs are just some of the factors that make the need for dynamic, well trained, highly qualified teachers more necessary than ever (Karge, Lasky, McCabe & Robb, 1995; Sherratt, 2017; Westervelt, 2015). Most regions of the country report moderate to severe shortages of math, science and special educators, even while recent graduates with general teaching credentials in elementary education find employment opportunities scarce.

Using data from the National Center for Education Statistics, 2012-13 Teacher Follow-up Survey (TFS), Goldring, Tale and Riddles (2014) examined teacher attrition and mobility for a sample of 3,377,900 teachers. The TFS is a nationally representative sample survey of public and private school K–12 teachers who participated in the previous year’s Schools and Staffing Survey (SASS). The results of Goldring et al. (2014) indicated that of the public school teachers who were teaching during the 2011–12 school year, 84% remained at the same school (“stayers”), 8% moved to a different school (“movers”), and 8% left the profession (“leavers”) during the following year. Among public school teachers with 1 to 3 years of experience, 80% stayed in their base year school, 13% moved to another school, and 7% left teaching in 2012–13. About 51% of public school teachers who left teaching in 2012–13 reported that the manageability of their workload was better in their current position than when they were

teaching. Additionally, 53% of public school leavers reported that their general work conditions were better in their current position than in teaching (Goldring et al., 2014).

Data from the 2012 Schools and Staffing Survey and the 2013 Teacher Follow up Survey indicate that teachers in science, mathematics, and special education are more likely to leave teaching than those in other fields (Carver-Thomas & Darling-Hammond, 2017). In addition, they claim 50% higher attrition for teachers in schools serving low-income students (i.e. Title I schools) and 70% for those teachers working with the largest concentrations of students of color. Breaux and Wong (2003) claimed an immediate demand for teachers, a 67% need for mathematics educators, 85% for special education and a 64% need for science.

Ingersoll and Perda (2009) review the many documents stating the shortages in science and math. They highlight many high-profile reports from organizations that verify the shortage, including one from the National Academy of Sciences (2006). In his report to the U.S. House of Representatives, titled *Rising above the gathering storm: Energizing and employing America for a brighter economic future committee on prospering in the global economy of the 21st century* Augustine (2005) suggests increased implementation and understanding of science by K-12 students will lead to stronger support for science, and teachers need skills to move in this direction. Currently, however, the committee specifies there is a current shortage of science teachers in the United States. Similarly, Benjamin (2016) reported 98% of the school districts in the United States reported shortages of science teachers. Considering the fact that the participants involved in this dissertation research were math, science, and special education teachers, these data are germane to, and complementary to, the purpose of this current research.

According to Eggers and Calegari (2011), 46% of teachers nationwide quit before their fifth year. Eggers and Calegari (2011) purport this is directly associated with lack of

preparation. Teacher turnover is costly to the United States; it is estimated that over \$7 billion is spent on teacher turnover annually (Aaronson, 1999; Eggers & Calegari, 2011).

In 2008, then California Superintendent of Public Instruction Jack O'Connell issued the following statement on *A Possible Dream: Retaining California Teachers So All Students Learn*, released by the California State University Center for Teacher Quality. Critical programs in California's schools were addressed. The report documents the shortage of qualified teachers in California, chiefly in our most challenging schools. Basically, due to retirements and teachers leaving the field during their first few years, he indicated the shortage would probably climb to as high as 33,000 teachers a year by 2015. The report indicated that 22% of California teachers leave after the first 4 years of obtaining their credential and first teaching position. The field struggles to maintain high quality teachers in high poverty areas; according to O'Connell 10% leave (Futernick, 2007). He suggested that if California is serious about ending the achievement gap there needs to be a way to ensure all students have highly competent, skilled and knowledgeable teachers.

According to National Public Radio many states and school districts are reporting severe shortages of special education teachers (Westervelt, 2015). The Individuals with Disabilities Education Act (IDEA) requires that every student with a documented disability has an IEP (Individualized Education Program). Individual Education Plans (IEPs) require the student to be taught at least part-time by a teacher fully certified in special education.

One avenue for credentialing more special education teachers is through alternative certification, whereby teaching candidates receive training and experience through non-traditional programs and do not go through the traditional teaching credential training (Karge, Pierson, & Robinson, 2011; Kee, 2012). In California, approximately 18% of new teachers

receive alternative certification (Kearney, 2013). Partnerships between universities and public school districts date back to 1967, with the passage of the Teacher Education Internship Act (Karge & McCabe, 2014). Currently there are over 100 alternative route programs in California (California Commission on Teacher Credentialing, 2014).

Teacher shortages in special education and math and science are widespread and chronic, and have increased in severity since the mid-1980's in the United States (Karge, Glaeser, Sylva, Levine, & Lyons, 2006; Sindelar, Brownell, & Billingsley, 2010; Tyler & Brunner, 2014). Alternative certification programs have proliferated in the past 2 decades as a partial solution to the shortage of teachers as well as a means to decrease the number of emergency certifications in high need areas (Chin & Young, 2007). Human capital experts advocate for teacher recruitment and retention strategies to enhance the offset of teacher shortages (Beteille, Kalogrides & Loeb 2009).

Teacher Retention

In a review of data from the Every Student Succeeds Act (ESSA), Sherratt (2017) expounds upon the top concepts related to teacher retention. Under this act, states are required to submit consolidated plans, laying the groundwork for their educational priorities. Some of the salient ideas include marketing the teaching profession through vehicles such as teacher recruitment videos, nurturing interest in students as young as high school, and supporting strategic teacher recruitment. Also mentioned were better collaboration between teacher preparation programs and school districts, promoting teacher leadership, and of course, increasing compensation.

Lochmiller, Sugimoto, and Muller (2016) examined teacher retention, mobility, and attrition in Kentucky public schools for the period 2008 to 2012; they found that 85% of

classroom teachers in the public schools stayed in the same school from one year to the next, while 6% moved within the system, and 8.25% left the system entirely. Factors found to correlate with teacher movement included age. Teachers age 31 or lower and 50 or higher showed more mobility than teachers between the ages of 32 and 49. Also teachers at schools with a high proportion of school lunch program-eligible students (presumably a marker for lower income and/or poverty) had a higher rate of turnover than those at schools with fewer eligible students. Watts (2016) similarly identified themes for high teacher retention, focusing in rural Kentucky. In his studies he found a turnover rate in rural areas as high as 30% compared to 15% to the annual national average; this is a retention rate of 75%. The findings suggest that a strong familial school culture among teachers and with school administrators positively impacts teacher retention.

Lochmiller et al. (2016) further found schools that experienced high mobility (teachers moving to different schools) or high attrition (teachers leaving the public school system), particularly urban schools and schools with a high share of students eligible for the school lunch program, appear to have lower student achievement in reading and math. Similarly, Kane and Staiger (2008) in their study of teachers in Los Angeles Unified School District found issues concerning how teacher attrition impacts student achievement. Similar to many authors, Kane and Staiger (2008) used a random-assignment experiment to evaluate various non-experimental methods for estimating teacher effects on student test scores. In this study 78 pairs of elementary school classrooms were randomly assigned between teachers in the 2003-04 and 2004-05 school years. Student test scores were observed at the end of the experimental year as well as 2 subsequent years. Reasonably accurate predictions of the causal short-term impact of a teacher on student test scores were determined. Regarding the typical design and methodology of the

studies related to teacher retention, the majority of the studies utilized intact groups of teachers and determined teachers needed to feel supported in order to remain in the classroom (e.g. Kaden, Patterson, Healey, & Adams, 2016; Karge & McCabe, 2014).

Cherng and Halpin (2016) explored students' perceptions of minority vs. white teachers. Using data from a previous study (the Measure of Effective Teaching study) the authors found that students perceive minority teachers more favorably than white teachers. Impressively, the study controlled for student demographic and academic characteristics, other teacher characteristics, work conditions, and teacher efficacy. The authors hypothesize that minority teachers can translate their experiences and identities to form rapport with students who do not share the same race or ethnicity. At the same time, they acknowledge the MET study only focused on urban school districts and not other areas; on the other hand, the greatest concentration of minority youth is in urban areas. Many of the current study participants are minorities and the researcher explored the student-teacher relationship during the data collection process. Unfortunately, many of the white teachers left the classroom after 3 years teaching. The minority teachers remained at least 5 to 7 years.

Karge and McCabe (2014) surveyed 124 California State University alternative route (Intern) program participants from 2 different California State University programs. Ten critical program features from other studies were identified, they included: high entrance standards, extensive mentoring and supervision, extensive pedagogical training, frequent and substantial evaluation, practice in lesson planning, high exit standards, meaningful collaboration, program length and rigor, standards-based curriculum, and program evaluation. It was found that inclusion of these attributes into the alternative certification programs resulted in enhanced retention rates of the graduating interns as well as improvement in quality. The retention rate

from the Karge and McCabe (2014) study was 96%; this is among the highest in the country. The participants in their study were 10-year teaching veterans who received quality support during their first few years teaching. Similar findings were documented by Karge et al. (2006). When appropriate support is provided to new teachers they improve their teaching abilities and acquire the self-confidence essential to remain in the teaching profession (Billingley & Cross, 1991; Brownell & Smith, 1992; Karge et al., 1995).

Gore (2008), in a doctoral thesis, explored the factors that influenced the retention of highly qualified special education teachers. She found that age was the only demographic consistently linked to attrition in the special education literature. Young special education teachers leave at rates nearly twice that of mature teachers; this data was also reported by Karge and McCabe (2014) and Hanushek, Kain, and Rivkin (2004). Young teachers between the ages of 25 and 30 are eager to move into the profession, yet quickly get disillusioned and leave the field between ages 35 and 40.

Muelrath (2013) noted that there are more than 400 school districts in California that hire teachers from the Teachers Corps program, an alternative certification program. She said this pool of candidates is valued because many are second-career professionals who want to give back to their community, such as scientists, accountants, lawyers, military servicemen and women, and technology specialists. The Alternative Pathway to Certification (Intern) Program Report (Creegan & Noelting, 2009) found that principals considered more than 90% of the intern teachers at their schools as good as or better than other beginning teachers who taught at schools where they had been administrators. In fact, intern skills were rated highly across several areas, as shown in Figure 1 (Creegan & Noelting, 2009). Furthermore, these career

changers tended to remain in the field of education with a retention rate of 84% (Muelrath, 2013).

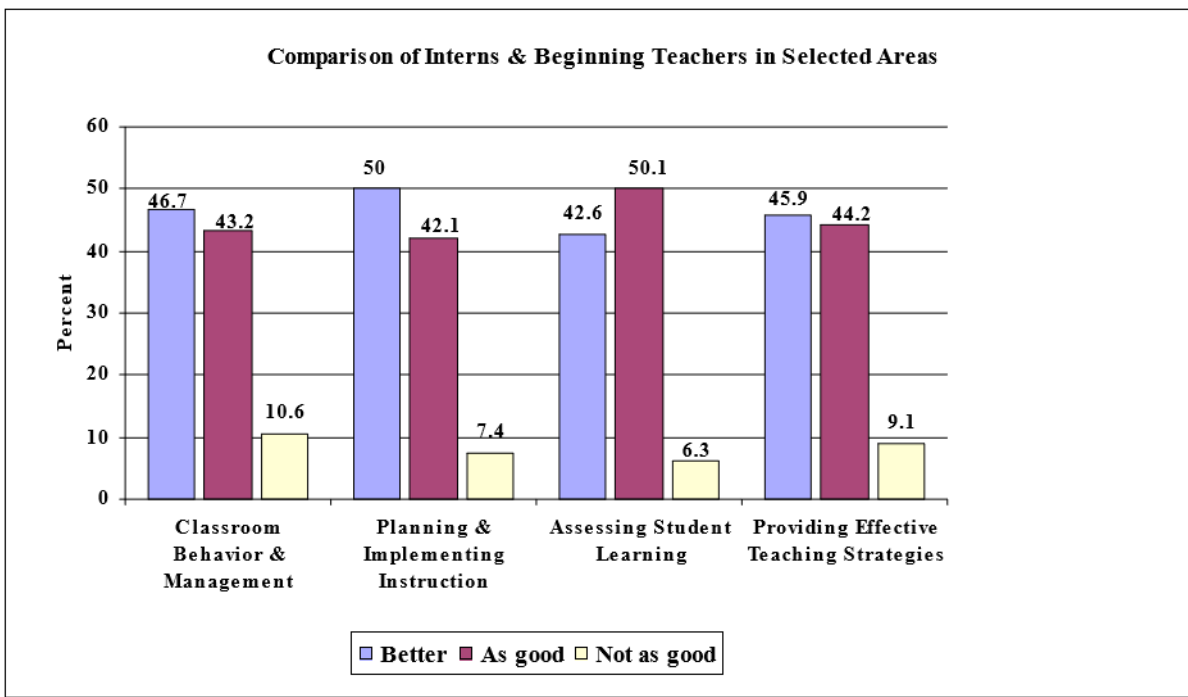


Figure 1. Comparison of Interns and Beginning Teachers in Selected Areas

Regardless of type of certification, teachers need to feel supported by their administrator. Karge et al. (1995) reported one of the primary reasons teachers leave the profession was lack of support from administration. Administrators need to understand the stages of growth teachers go through and be prepared to assist teachers with this professional growth process (Darling-Hammond, Holtzman, Gatlin, & Heilig, 2005; Protheroe, 2012).

Stages of Teacher Growth

Beginning teachers move through a series of stages of teacher growth and development associated with teacher effectiveness (Fuller, 1969; Fuller & Brown, 1975). Fuller (1969) first introduced the concept of self, task and impact. Fuller and Brown (1975) further expanded upon stages of teacher growth discussing the first stage as concerns about basic classroom survival,

such as just making it through the day. The second stage was related to the task of teaching and concerns about one's own teaching and all that entails (implementation of lesson designs and plans, behavior strategies, classroom assessment etc.). Then finally the impact stage, which deals with concerns related to the students and student outcomes. Moir's (1999) 5 stages enlarged Fuller (1969), and Fuller and Brown's (1975) initial works to include feelings related to personal growth as a teacher. Moir introduced 5 stages: anticipation, survival disillusionment, rejuvenation and impact. These stages were meant to display the feeling teachers move through as a first year teaching progresses. These were described in more detail earlier in this dissertation.

Germane to the current study are other studies exploring stages of teacher growth. Kugel (1993) elaborated on the teaching abilities of college professors. He noted 5 stages of development among this group of professionals. These stages align with the Fuller and Brown's (1975) stages. The first stage for college professors was self; this is when professors begin their career they typically focus on their own role in the classroom. The next stage was subject; here the professor focuses on the subject matter he is teaching. In the next progression for the college professor, the student becomes the emphasis. The idea is to support their students to absorb and learn as much of the subject matter as possible. The next stage is student as active, the process of helping students learn to use what they have been taught. The final stage is the student as independent, helping students to learn on their own. This study affirms that regardless of where teachers are teaching, K-12 or college, teachers move through similar experiences termed 'stages of growth' by Fuller, (1969) Fuller and Brown (1975) and Moir (1999)).

The Asaf, Shachar, Tohar, and Kainan (2008) study verified that at the beginning of their careers, the teachers were more significantly linked to people with whom they worked. The

emphasis was on interpersonal relationships. By the third phase of their careers, the more the teachers' professional knowledge expands and improves, the more they are in control of themselves and their surroundings, and they can relate to the needs of the whole class and less to individual learners. Asaf et al. (2008) interviewed and asked teachers to tell 3 narratives: a story from the beginning of their career (first phase), then a story from the last years of teaching (third phase), and finally a story from the middle of their career (second phase). Thus, the retrospective narratives about the teachers' careers were collected and divided into 3 periods—the beginning and middle of the career and a current story. Findings show that the teachers underwent changes in their perception of themselves, of their role, and of their learners, and that they were involved in educational activity and renewal despite being in a late stage of their careers. The authors summed up the teacher educators' careers as follows: There is a transition from treating personal problems by means of interpersonal relations to relating to a group of learners and activating professional abilities. This conceptually is the same process of Fuller (1969), Fuller and Brown (1975), and Moir (1999).

Veteran teachers have different professional learning needs than beginning teachers. Classroom management, grading and organization of the class are critical to beginning teachers. These skills fall under the task stage (Fuller, 1969). Most veteran teachers have mastered these skills and are more concerned with creating a classroom environment that enhances student outcomes, i.e. making an impact on the learner (Fuller, Parsons & Watkins, 1973).

Exploring the relationship between stages of effective teaching, teaching experience, and teacher professional development approaches, Antoniou (2013) compared the outcomes of 2 groups of teachers exposed to different approaches to professional development--the Holistic Approach and the Dynamic Integrated Approach. The Holistic Approach expects that increased

reflection on experiences and beliefs will translate into action, which will eventually result in improvements of teaching and learning, while the Dynamic Integrated Approach takes into account both the importance of teacher reflection and research findings on teacher effectiveness, identifying teacher skills which were found to be related with student outcomes. It was found that none of the teachers of the group employing the Holistic Approach moved from one stage of professional development to another. On the other hand, in the Dynamic Integrated Approach group, 34% of the teachers moved from task to impact in one year. This is similar to what Fuller and Brown found in 1975. Thompson (2007) verified the critical importance of an integrated approach to new teacher survival including a variety of teacher supports.

Teacher Support

In 1980, induction, also known as teacher support, was minimal. At worst, the new teacher was asked to perform as a veteran without any additional classroom support; at best, a mentor was assigned to a new teacher. In Greek literature, a character, Mentor, was assigned to Odysseus' son, Telemachus, when Odysseus departed for the Trojan War (Strong, 2009). Mentor provided wisdom, dedication and served as a trusted friend and counselor to Telemachus. The mentor-mentee relationship was one of honoring the senior experience and knowledge and learning from the hands-on support. In education, mentors assist and support beginning teachers (Bowers & Eberhard, 1988; Britton & Paine, 2005; Gehrke, 1988; Gehrke & Kay, 1984; Henry, 1988; Littleton, Tally-Foos, & Wolaver, 1992; Strong, 2009).

Mentoring is subsumed under the term induction. Induction denotes an initial stage or phase of the teacher's career or the support provided systematically during the beginning of the career (Strong, 2009).

As indicated in Chapter 1, the Beginning Teacher Support and Assessment (BTSA) program provided a strong beginning for induction in California. Another highly regarded induction program is the Connecticut Beginning Educator Support and Training (BEST) program. The BEST program was originally cultivated by the state's commissioners of education and was designed to raise teacher licensure standards and provide an equitable spending program throughout Connecticut. The crucial goal was to support new teachers in effective instruction and thereby leading to student improvement (Connecticut State Department of Education, 2007).

By 2000, most new teachers had some kind of induction program available to offer support (Britton & Paine, 2005; Wayne, Youngs, & Fleischman, 2005). Wayne et al. (2005) argued for a comprehensive induction program to address teacher attrition. The authors note that less than 1% of teachers get a "comprehensive" induction program. Such a program would include a reduced number of course preparations, a mentor in the same field, a seminar tailored to the needs of beginning teachers, communication with administrators, and time for planning and collaboration with other teachers. They argue that much of the onus falls on the principal and school administrators, and that induction varied across schools.

Martin, Buelow, and Hoffman (2016) described support that impacts beginning middle-level educators. They note that less than 1% of teachers actually receive what is considered a comprehensive induction, where new teachers have opportunities to work with other colleagues in learning communities, observe experienced teachers' classrooms, be observed by mentors, analyze their own practice, and network with other novice teachers. Support that was beneficial included mentoring with trusted colleagues, common planning times, and analysis of student work.

According to Martin et al. (2016), almost 2/3rds of teachers reported participating in a first-year induction program and 71% had a mentor. In this study they interviewed 5 beginning teachers from culturally diverse, high poverty schools to understand the first year from their point of view. The teachers reported 2 types of mentoring: 1) one that helped meet the teacher's basic needs such as paperwork, procuring supplies, and being available for immediate assistance and, 2) one that worked on improving the teacher's practice with, for example, monthly strategy sessions. The new teachers in this study did not find school-wide professional development particularly helpful, because the focus was on school-wide changes with which they had little background or understanding.

Besken-Ergisi (2010) used a qualitative case study to observe candidates in the beginning teacher program at Arizona State University (ASU). At the time new state requirements mandated that individuals working with young children were to obtain either early childhood licensing or endorsement this mandate meant teachers needed experience with young children. In light of those requirements, ASU required student teaching in a preschool setting in addition to the existing requirement of a semester with students Kindergarten to third grade. The author found that a positive student teaching experience (like the experiences of some of these participants) made a difference in their decision to enter teaching. Additionally, most candidates placed great importance on the mentor-mentee relationship. Some participants stated that due to various reasons, they had little or not enough support from their mentors in their first year.

Curry et al. (2016) studied 72 novice teachers (in their first semester of teaching) in alternative certification programs. The participants were asked to draw pictures representing their current teaching environments. Content analysis was used to analyze the pictures. Five themes from the novices' pictures emerged: (a) concerns about students, (b) overwhelmed and

struggling, (c) relationships with others, (d) concerns about education quality and excessive accountability, and (e) issues with administration. Importantly, this study cited statistics about teacher retention comparing traditional and alternative certification programs. In the second year of teaching the retention rates were 90% in both the traditional and alternative pathways. However, the retention rates were lower after 5 years in the alternative pathway (79.2%) versus the traditional (84%). Sandlin, Young, and Karge (1994) found a comparison in the development of regular and intern (alternatively certified) beginning teachers, with high retention rates from both pathways.

Manning (2011) examined the East Tennessee School Systems' Mentoring Program. Undertaking a qualitative study, Manning examined the usefulness of the program, looking specifically at the opinions and feelings of beginning teachers in their first year of service. Each of 4 new teachers was paired with an experienced mentor, and qualitative interviews were conducted with all 8 of the participants. During the interview process, 3 commonalities were found among the 4 sets of teachers. The first was the need for better training, the second was the recommendation for common grade level assignments, and the third related to the overall positive experience of mentoring (Manning, 2011). The study recommended extending the mentoring program beyond the first year.

Will (2017), in her blog on edweek.org, reinforced the benefit of mentoring. She reviewed a study, conducted by SRI education, about the effectiveness of the New Teacher Center's (NTC) induction program. The mentoring program was extensive, with the full-time mentors receiving more than 100 hours of training every year from the NTC, while the new teachers received 2 years of coaching and met with their assigned mentors every week, for at least 180 minutes a month. The main finding was that the students in grades 4-8 of teachers who

received NTC mentoring for 2 years outperformed their peers in both English/language arts and mathematics.

Further lending support to the importance of mentoring, Brenneman (2015), in his blog on edweek.org, notes that teachers without mentoring leave the profession much faster. Brenneman cites a longitudinal study between 2007 and 2012 to help determine teacher attrition, retention, and mobility. Starting in the 2007-2008 school year, a cohort of 1,990 first year public school teachers were followed for 5 years. Among cohort members, 86% who had first-year mentors were still in the profession in comparison with 71% without mentors.

Nobles (2009) examined administrative support of veteran secondary teachers. The participants were selected from 2 high schools in southeast Georgia, and semi-structured interviews were conducted. The study found that when administrators handle student discipline issues on a consistent basis, in a timely manner and with appropriate consequences, the veteran teachers feel supported (Nobles, 2009). Also, the teachers said they felt supported when administration backed them up during dealings with disrespectful parents. Other administration support that was appreciated by the teachers in the study included initiating frequent communication, providing necessary resources, and being visible.

On the national stage, the Schools and Staffing Survey (SASS) provide data for analysis including beginning teacher support and mentor data. Authors have used this data to reinforce the importance of induction, individual mentoring, and access to research based strategies as necessary to high retention in the field (Bobbitt, Leich, Whitener, & Lynch, 1994, Boe, Bobbitt & Cook, 1997). The research highlighted in this section led to the importance of meaningful support for new teachers. One way to provide meaningful support is by instruction and mentoring the teachers on research based teaching strategies.

Teaching Strategies

Teachers need support with implementation of research based effective teaching strategies. Perceptions of effectiveness often led to career decisions, meaning teachers left the field if they did not believe they were effective (Moscovici, 2009; Yost, 2006). Scheetz, Lare, Waters and Smeaton (2005) found that the instructional processes of seeing theory translated into practice and knowing how to fine tune lessons are critical skills needed by all teachers; and they are especially important to teacher retention. Peterson (2011) studied instructional strategies used by elementary general education teachers in inclusive classrooms. Peterson undertook 15 in-depth interviews with elementary general education teachers from across Michigan's Upper Peninsula to better understand general education teachers' deeper perspectives, thoughts, feelings, and beliefs about their instructional strategies. The actual experiences of general education teachers about the phenomenon, instruction for students with disabilities, was examined in detail in order to obtain a description of the "essence" of teaching in inclusive classrooms.

Peterson (2011) found general education teachers perceive their instructional planning and strategies as meeting the needs of their students with learning disabilities. The participants did not express needing additional training, collaboration with colleagues, or assistance to plan or provide instruction and accommodations. Participants thought additional staff members and volunteers provided the most support, while parents were the biggest barrier to the inclusion of students with learning disabilities (Peterson, 2011).

Koeze (2007) examined differentiated instruction and its effect on student achievement. A differentiated classroom is one where the educator prepares and implements the lesson plan in preparation to support student differences in student readiness, interest, and

individual needs (Tomlinson, 1999). Koeze's study followed a mixed method design and consisted of 2 parts. First, a quantitative analysis of test scores from the Michigan Education Assessment Program, along with teacher and student survey results, was evaluated. Second, a qualitative analysis of classroom observations and interviews with teachers was conducted. The findings suggested that the differentiation strategies of choice and interest play a vital role in achievement and student satisfaction in learning.

Champion (2015), in a phenomenological study, examined instructional practices that lead to academic success for public school English-language learners (ELL). She sought to elaborate on which teaching strategies teachers and administrators perceive to have the most positive impact on learning for ELLs and how the culture of the classroom and school impact ELLs' academic success. Relevant factors were found to include: (a) specialized programs, (b) differentiation, (c) hands on learning, (d) high expectations, (e) respect for home cultures, (f) bilingual staff and translators, (g) community, (h) safety, (i) language barriers, and (j) lack of personal experiences.

Wenglinsky (2001) looked at the relationship between teacher classroom practices and student performance. The study found that the effects of classroom practices, when added to those of other teacher characteristics, were comparable in size to those of student background, suggesting that teachers can contribute as much to student learning as the students themselves. The author notes that the interaction that occurs between teachers and students in the classroom is greater than the sum of its parts. Students can leave the classroom with their knowledge and attitudes dramatically altered from what they were before they entered. sky used quantitative methods to study the link between student academic achievement and teacher classroom practices, as well as other aspects of teaching; such as the professional development teachers

receive in support of their classroom practices. The finding documented the fact that schools indeed matter, due to the overwhelming influence of the classroom practices of their teachers.

Educational Resource Strategies (2013) suggested organization and investment in professional growth and support of all teachers to strengthen teaching capacity and effectiveness at the system level. The Educational Resource Strategies organization examined how school systems allocate time, people, technology, and money to improve teaching effectiveness at the individual and organizational level. The report states that the onset of Common Core standards and more precise teacher evaluation standards put significant pressure on teachers. Figure 2 illustrates the comprehensive framework that includes the essential components that a school strategy for improving instruction must address and where professional growth efforts fit in. The vision for teacher professional growth and support provides 6 steps to more powerful education resource strategies (Educational Resource Strategies, 2013).

Professional growth is a factor in both organizational improvement and individual growth. Highly effective schools begin by defining standards for student learning, instructions, and professional practice. These standards then drive action, organization, and spending in 3 categories: Hiring and Assignment, Organizational Improvement, and Individual Growth (Education Resource Strategies, 2013). Six steps are identified to use to create more powerful system level strategy for professional growth; (a) Quantify current spending on the universe of teacher Professional Growth & Support, (b) Capitalize on mandates and growing investments in Common Core standards, student assessment systems, and teacher evaluation to create integrated systems for teacher growth, (c) Leverage expert support to guide teacher teams who share instructional content, (d) Support growth throughout a teacher's career by restructuring

compensation and career path, (e) Add and optimize time to address organizational priorities as well as individual needs and (f) Overhaul legacy policies and make strategic trade offs.

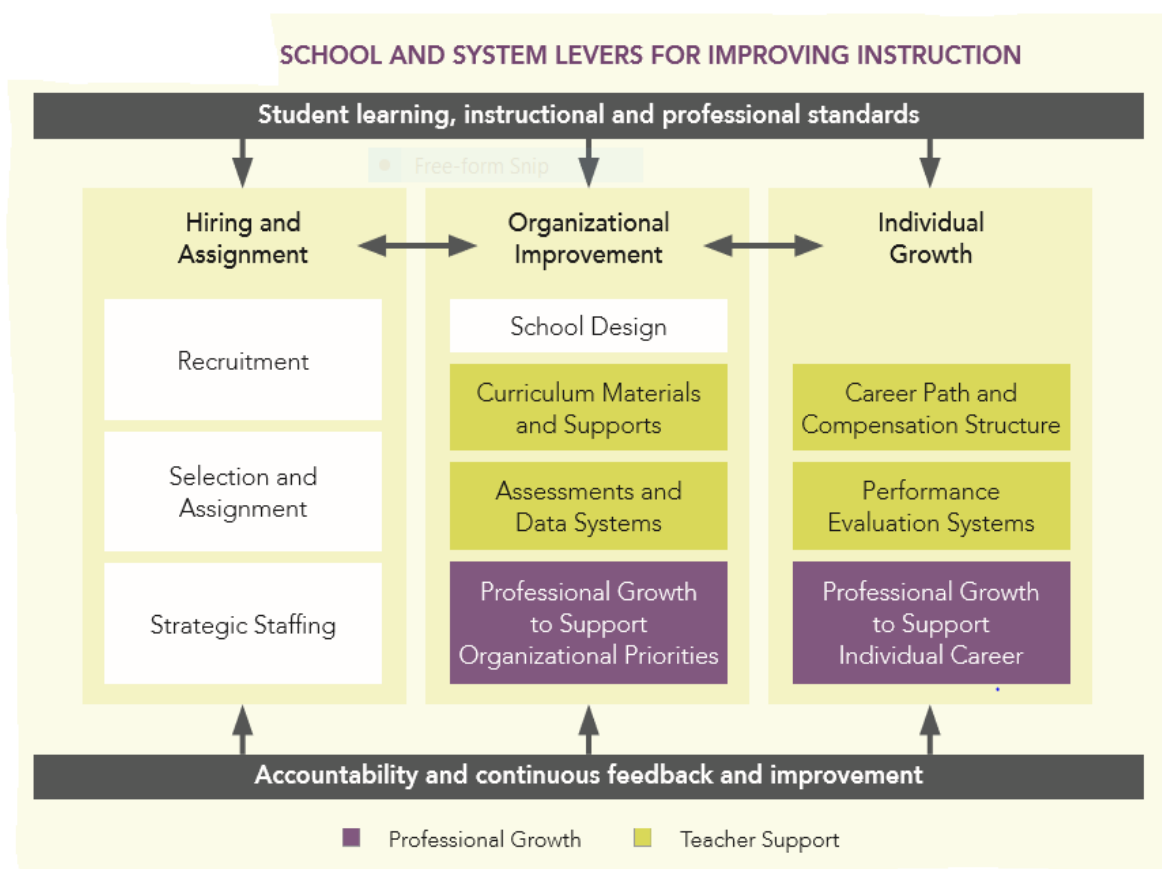


Figure 2. Vision for Teacher Professional Growth & Support Education Resource Strategies, (2013).

Education Resource Strategies (2013) concluded that the school system's role in professional growth and support should be to distribute expertise, create school schedules, structure teacher compensation and career path, and acquire new knowledge to ensure consistent high levels of student performance and continuous improvement. This all-encompassing view includes significant induction support for new and veteran teachers. In many ways this 2013 model aligns with Zey's (1984) original research focusing on the benefits given to an organization when the mentor-mentee relationship is strong.

Scheetz et al. (2015), Peterson, (2011), Koeze (2007), Champion (2015) and Wenglinsky (2001) all provide details explaining the effects of using research-based instructional strategies to enhance the classroom experience. These studies verify that using such strategies lead to positive student outcomes. Although these 5 studies do not refer to teacher retention, the assumption can be made that if beginning teachers are properly trained in these research-based methodologies, and supported with implementation of the strategies, they may remain in teaching (Sherrat, 2017).

Response to Intervention (RTI)

Response to Intervention is a 3-tiered approach (see Figure 3) to instruction designed to ensure all students are successful in school (Rinaldi & Samson, 2008; RTI Action Network, 2017). Fuchs and Fuchs (2006) described methods of measuring response to and tailoring of intervention. RTI has 2 components, the first is response and the second is intervention. For response, the steps are: (a) identify students at risk (norm-referenced vs criterion-referenced measurements) using universal screening, (b) monitor response to general education, and (c) assess rate of change in students' learning. For intervention, multi-tiered (4 levels) instruction is used where students who do not respond to traditional curricula are brought into a higher, more intensive type of instruction. Each tier becomes more individualized and more intensive. Hughes and Dexter (2017) have expanded these areas and others to include scientifically-based instruction for all students (Tier 1), Secondary prevention interventions (Tier 2) and Tertiary prevention instruction (Tier 3).

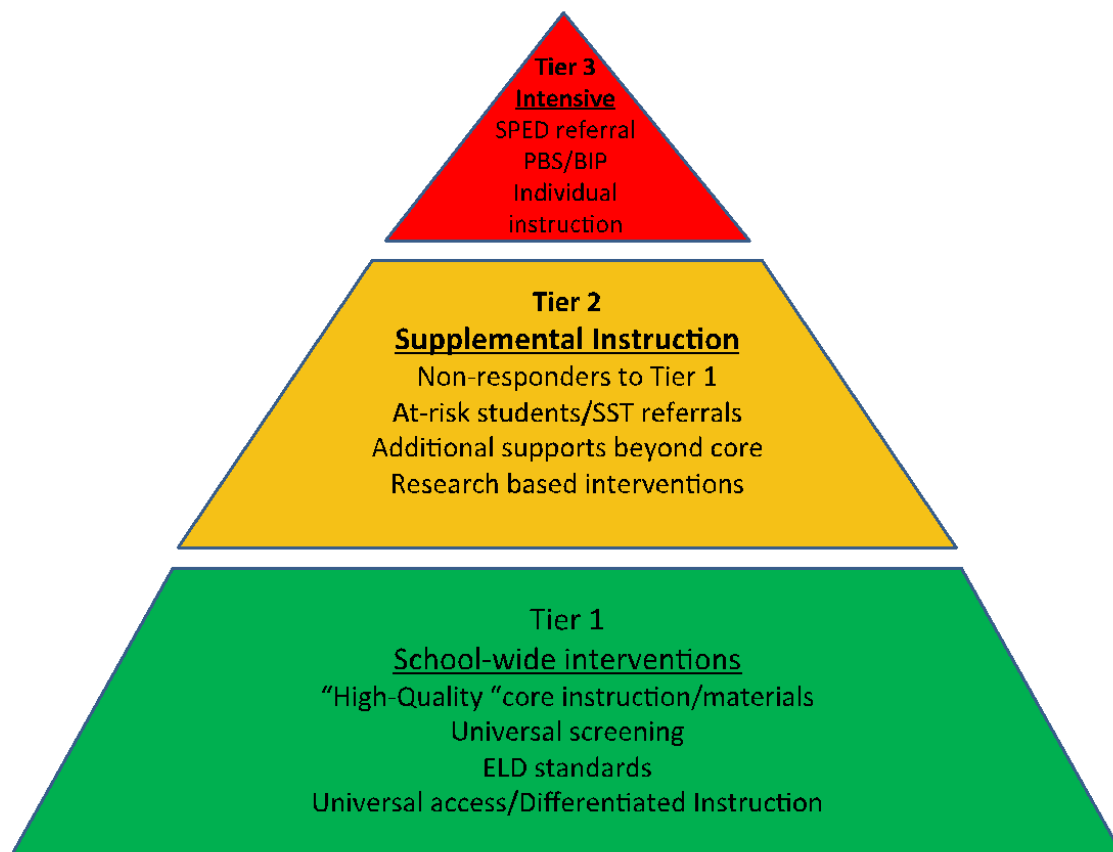


Figure 3. The 3-Tier Approach to Response to Intervention (Karge, 2016)

The first tier focuses on school-wide interventions that are considered first best instruction. These are interventions that happen in the classroom. A teacher refers a student to Tier 2 when they have not been successful in Tier 1 and need small group intensive support. Typically these sessions run for 6 to 8 weeks. The concept is to get the support and move the student right back into the general education classroom. If the student is not successful in Tier 2 then the student is placed at the Tier 3 level. This level is for intensive support. The origination of Response to Intervention is unique. In 2004, Congress was reauthorizing the Individuals with Education Act (IDEA) and asked a task force of experts in disability to provide ideas. The outcome of this task force was the realization that children were being placed in special

education classrooms and being called “learning disabled” when in fact they did not have a disability. These students did not have the benefit of high quality instruction in the general education classroom (RTI Action Network).

Response to Intervention can be defined as student-centered assessment models that use problem-solving and research-based methods to identify and address learning difficulties in children (Berkley, Bender, Peaster & Saunders, 2009; Linan-Thompson, Cirino, & Vaughn, 2007). Per the California Department of Education (2009):

Response to Intervention offers a way to eliminate achievement gaps through a school-wide process that provides assistance to every student, both high achieving and struggling learners. It is a process that utilizes all resources within a school and district in a collaborative manner to create a single, well-integrated system of instruction and interventions informed by student outcome data.

Ridgeway et al. (2012) reviewed the roots of Response to Intervention and queried if there is enough research to support the promise of intervention. Response to Intervention provides a protocol for identifying students with specific academic deficits and who demonstrate the need for individualized forms of instruction. The RTI design is a multi-tiered approach to providing individualized instructional services and interventions to students at increasing levels of intensity, based on careful monitoring of student progress and data analysis (Batsche et al., 2006). Ridgeway et al. (2012) concluded that the majority of studies that examined the impact of Response to Intervention on academic achievement or student performance resulted in improvement, thereby suggesting that a multi-tiered intervention approach can improve the academic outcomes for students at risk of academic failure. However, limitations exist due to

the use of particular research designs and procedures that deter the degree to which the measured outcomes can be associated with the intervention approach.

Berkley et al. (2009) provided a snapshot of how all 50 states are progressing with the implementation and development of RTI one year after the final regulations for the IDEA act were passed. Findings indicated that most states are in some phase of RTI development, although approaches vary widely throughout the country. Implications for research and practice are discussed. The 2004 reauthorization of the Individuals with Disabilities Education Improvement Act made, for the first time, the use of RTI acceptable as an alternative means of identifying students with specific learning disabilities (RTI Network, 2017). For each of the 50 states, 2 independent researchers reviewed information posted on the department of education's website related to RTI. Most states have adopted some form of the 3-tiered model.

Kuo (2014) undertook a case study looking at pre-service teaching candidates' learning outcomes on an educational module learning system (IRIS) to examine RTI. The study examined 26 pre-service teachers enrolled in a special education teacher prep program at a large Midwestern public university who were learning about RTI. The participants studied 8 IRIS learning modules. The results showed that, after the intervention, all participants displayed increased knowledge across all modules.

Many districts are combining intervention and behavior, termed Multi-Tiered Intervention System (MTIS). Regardless of which RTI approach is adopted, a method for measuring students' responsiveness to instruction and criterion for defining non-responsiveness components of the assessment process must be specified (Van Der Heyden, Witt, & Gilbertson, 2007). The diagnostic tools can assist with eligibility and identification for special education (Mandlawitz, 2007; Rinaldi & Samson, 2008). Teachers who understand the response to

intervention concept and integrate research-based strategies into their tier 1 instruction see many rewards (Fuchs & Fuchs, 2006). Because the response to intervention system links to special education, often districts implement co-teaching as a first and second tier strategy.

Co-Teaching

Many school districts have been requiring teachers to participate in co-teaching classrooms (Friend, Cook, Hurley-Chamberlain, & Shabarger, 2010). Teachers who have been trained to use strategies and techniques to work together as a team have been shown to meet their students' needs and program them for success academically and socially; the professional learning opportunity is necessary to make this happen (Murawski & Bernhardt, 2015). Administrators need to understand the principles behind co-teaching and the various models before school wide implementation or teacher evaluation in co-taught classrooms (Lea, 2017; Murawski & Bernhardt 2015). Planning time is critical (Fennick & Liddy, 2001). Teachers need the opportunity to work together to determine the lesson implementation and evaluation.

Austin (2001) suggested that special education teachers view co-teaching more favorably than their general education peers. General education teachers perceive they are doing more than their special education colleagues in inclusive classrooms where co-teaching is prominent (Austin, 2001). Part of the challenge was that general education and special education teachers have not been properly trained in co-teaching to understand the necessary collaboration that must take place and the time invested to produce an effective co-teaching team (Murawski & Bernhardt, 2015).

Since its inception, co-teaching has evolved into one of the most widely used approaches for providing students with disabilities with access to the state-approved curriculum in the general education classroom (Stricker, Gillis & Zong, 2013). Stricker et al. (2013) provided an

analysis of the data to indicate that the systematic co-teaching preparation approach was effective in increasing pre-service teachers' awareness of the challenges of co-teaching as well as their confidence, competence and commitment to co-teaching.

Co-teaching is a service delivery option designed to address the needs of an inclusive classroom by having a general education teacher, as well as a special education professional, teach in the same classroom. There are benefits for both general education and special education students (Fenty, McDuffie-Landrum & Fisher, 2012; Murawski & Dieker, 2008).

Scruggs, Mastropieri & McDuffie (2006) undertook a meta-analysis of qualitative research in the area of co-teaching in inclusive classrooms. Thirty-two research articles were reviewed. It was concluded that co-teachers generally supported co-teaching, although a number of important needs were identified, including planning time, student skill level, and training; many of these needs were linked to administrative support. The dominant co-teaching role was found to be "one teach, one assist," in classrooms characterized by traditional instruction, even though this method is not highly recommended in the literature (Friend et al., 2010). The special education teacher was often observed to play a subordinate role. Techniques often recommended for special education teachers, such as peer mediation, strategy instruction, mnemonics, and training of study skills, self-advocacy skills, and self-monitoring, were infrequently observed.

Different authors describe the various ways to co-teach. Karge (2016) builds on the research in the field and describes 11 models under 3 subheadings. The first subheading is defined as supportive co-teaching. Supportive co-teaching includes the areas of one teach, one assist; one teach, one observe; and one teach, one support. The second subheading is team co-teaching. This area requires teachers to plan together so they can implement as a team in front of the students. The strategies include graze and tag teaching, parallel teaching, station teaching

and alternative teaching. Finally, the last area includes advanced co-teaching skills. These include conversation teaching, role-play teaching, interactive teaching and shared teaching. When teachers are taught all of these strategies, and given time to work together, the greatest successes are seen in the classroom. The participants in this dissertation had comprehensive instruction in both RTI and in co-teaching as a component of their transition to teaching program.

Transition to Teaching Grant Program

The U.S. Department of Education (DoE) hosted a Transition to Teaching (TTT) grant competition for many years. The final competition was in 2012. The TTT grant was a federal program intended to attract and retain mid-career professionals into the teaching profession at "high need" schools. Mid-career professionals are teachers who began their employment life in a different field than education and transitioned to the teaching profession. The grant specifically mentioned that alternative certification was encouraged under the grant in order to have candidates ready to teach sooner. According to the DoE TTT program application, the program provided 5-year grants to state and local educational agencies, or for-profit organizations, non-profit organizations, or institutions of higher education collaborating with state or local educational agencies. Grantees developed and implemented comprehensive approaches to train, place, and support teacher candidates whom they have recruited into their programs, which must meet relevant state certification or licensing requirements. Grantees then ensure that program participants are placed to teach in high need schools and districts and support candidates to serve in these placements for at least 3 years.

The grant was designed for educational institutes, local education agencies (LEAs), non-profits, and state educational agencies (SEAs). Individual teaching candidates were not eligible

to apply. According to the American Institutes for Research (AIR, 2005), the purpose of the TTT grant is: to recruit and retain highly qualified mid-career professionals (including highly qualified paraprofessionals) and recent graduates of an institution of higher education (IHE), as teachers in high need schools, including recruiting teachers through alternative routes to certification. Another goal of the program is to encourage the development and expansion of alternative routes to certification under state approved programs that enable individuals to be eligible for teacher certification within a reduced period of time, relying on the experience, expertise, and academic qualifications of an individual, or other factors in lieu of traditional course work in the field of education. In exchange for certification, candidates were required to teach in high need schools for at least 3 years. Three salient points were noted by AIR. First, alternative certification programs must coordinate with schools and districts. Some of these schools might offer inducement to candidates in TTT programs. Second, projects could help candidates meet requirements by counseling them on the necessary credits to earn and/or courses to take or by coaching them in preparation for teacher certification tests. Third, projects must be able to expand or modify their original vision. These factors lead to highly qualified teachers who teach in schools and districts with high acuity. The AIR report developed a model to show how TTT projects enter and sustain cycles of recruitment, selection, placement, support, and retention.

Per the U.S. Department of Education Transition to Teaching Evaluation, Transition to Teaching Annual Performance Report (2004–05), in making the decision to pursue teacher certification through TTT, 47% of recent college graduates indicated that they were influenced by the incentives offered by TTT projects, while 45% noted the promise of support while teaching, and 34% the location of the TTT project were influential factors. Among

paraprofessionals, 61% said they were attracted to the TTT program by the incentives offered, 31% by its location, 27% by the method of delivery (such as online seminars or weekend sessions), and 36% by the guarantee of employment (U.S. DoE, 2004-2005). The TTT process is an explanatory model (figure 4).

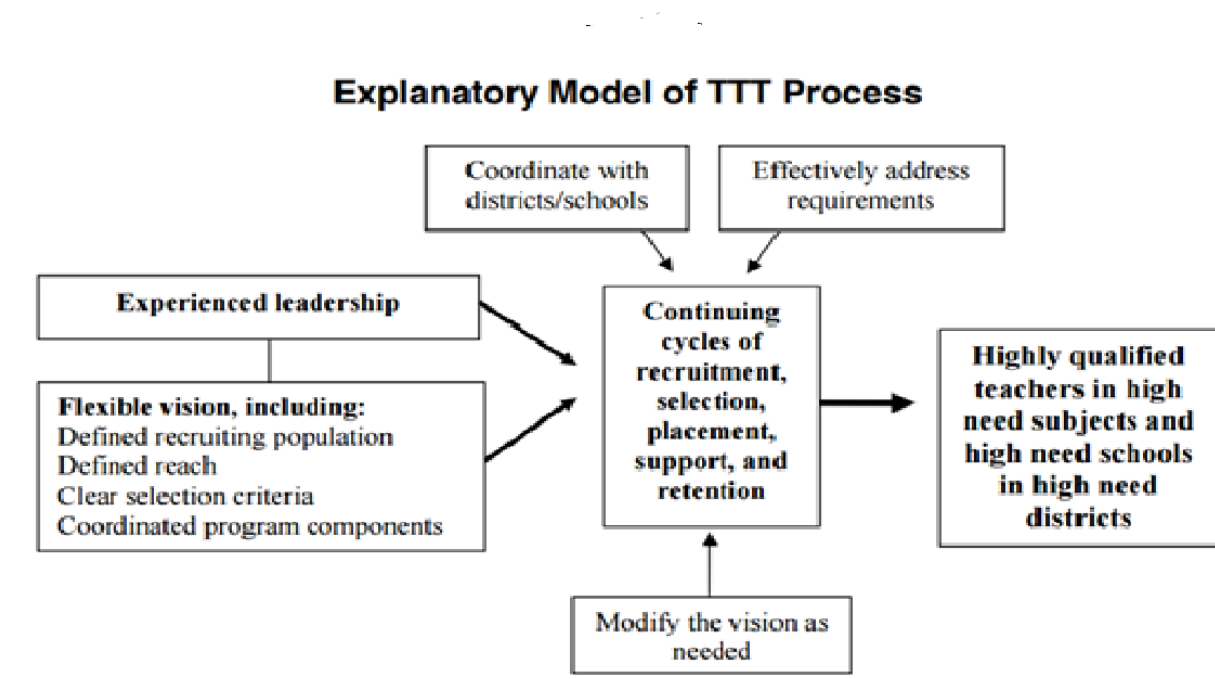


Figure 4. Explanatory Model of TTT Process

In reviewing the prior work experience of TTT participants, Karge and McCabe (2014), in a study of 2 California State University teaching intern programs (alternative certification), noted that 79% had worked with children with disabilities, 35% were paraeducators, 31% supported special education students in general education settings, while 56% taught in self-contained classes for such students.

The AIR report (2012) noted some of the incentives for participating in the program which include individual support and monitoring of progress that lead to their success. The report stated in the Baldwin Park Unified School District TTT program, the participants felt

reassured that they would have teaching positions available to them because the grant required them to work for a period after their training, so in a sense there was some job security. The Orange County Public Schools (Orlando, FL) approach for mid-career professionals seemed to strike a good balance with the participants desired expectation between book learning and training on real-life classroom skills (AIR, 2005). The reported retention rates for participants were 100% for current teachers of record, and 90% for the program's paraprofessionals. One complaint among the paraprofessionals, however, was regardless of the number of years of prior experience in the district, they were still on the lowest end of the pay and teaching scale when they finished the program. In the Green River Regional Education Cooperative (Kentucky), AIR reported participants described the support they received as a major bonus. Other commendations include the cohesiveness of the cohort and the usefulness of the teaching tools they received (AIR, 2005). Among mid-career professionals, 43% were influenced by the guarantee of employment, 46% by the support provided by the program, and 37% by the in-classroom teaching support.

The U.S. DoE also provided funding figures from October 2008 in the cohort database. See Table 1 for the number of new teachers of record (TORs) and Cost per TOR by organization type. With the funding described in Table 1 many may ask if the extra funds and extra support made a difference. This dissertation began to answer that question from the perspective of one funded program. The research design in Chapter 3 details the program and explains the instruments that were used to assess if the support the participants received while in the program benefited them years after participation.

As noted above, teaching in high need schools is a requirement of this program. For the *AIMS* Scholar program, this meant teaching in areas of poverty and learning about poverty.

Teaching in Areas of Poverty

Greever (2014) reviewed the pertinent literature on poverty in education, confirming that students growing up living in poverty will suffer physically, psychologically, and educationally. Educational issues include low achievement, truancy, and deviant behavior. Juvenile violence and crime has been linked to poverty as well.

Table 1

Number of New Teachers of Record and Cost per Teacher by Organization Type

Organization Type	New TOR's	Total Expended in FY 05, 06, & 07	Cost per TOR
IHE (n=15)	1,321	\$13,830,622	\$10,470
LEA (n=10)	2022	\$8,102,333	\$4,007
SEA (n=3)	141	\$1,660,545	\$11,777
Non-profit (n=3)	505	\$4,495,027	\$8,901
Total (n=31)	3989	\$28,088,527	\$7,041

SOURCE: U.S. Department of Education, Transition to Teaching Cohort Database (2008).

Regarding educational achievement, in addition to poverty, factors such as health and nutrition, effort, lack of a positive mindset, poor interpersonal relationships, and distress also have a major impact (Greever, 2014). Students living in poverty should have an education program that includes frequent review sessions, breaking material down into smaller bits, modeling, and constant assessment (Greever, 2014; Payne 2005). Family involvement is vital for ensuring the success of these students (Lubetkin, 1996). Students exposed to curricula that are learner-centered are more likely to succeed academically and socially (Payne, 2005).

Bohn and Danielson (2017) reported that currently 21.2% of children live in poverty. Twenty-one states claim low income students rank high in their school systems, with the southern states continuing to have the highest rates of low income students (Suits, 2016). Suits (2016) also states that 52% of children in the United States qualify for free or reduced-price lunch. Without federal and state safety net program, Bohn and Danielson (2017) found that the poverty rate for children would go up to 37.1%. The programs found to lower poverty most substantially were CalFresh (California's food stamps program), CalWORKs (cash assistance for families with children), General Assistance (GA), the federal Earned Income Tax Credit (EITC; the state EITC is in place as of 2015), the federal Child Tax Credit (CTC), Supplemental Security Income (SSI/SSP), federal housing subsidies, the Supplemental Nutrition Program for Women, Infants, and Children (WIC), and school breakfast and lunch (Bohn & Danielson, 2017; Payne, 2005).

The world continues to change. Parett and Budge (2012) state that one of the things that schools need to do is for leaders to spark the change in the fundamental philosophy and culture of the school. They define the culture of a school by looking at norms, values and beliefs related to working in a poverty area.

Despite a large growth in Latino population in the county of this study (expected to be 41% by 2040), there is a substantial and persistent academic gap compared to non-Latino students (Payne, 2005). Ten percent of Latinos drop out of high school, and of the ones who do graduate, only one third are eligible for enrollment in a California public 4-year university. In regard to poverty, the rate had risen from 8.8% to 13.5% for Orange County in the 9 years preceding the article. Children are acutely affected by poverty, with a third of children in Orange County living under the poverty level. A poignant example of the challenges faced by lower

wage workers is that at California's prevailing minimum wage, a worker would have to work 110 hours a week to afford a one bedroom apartment, which at the time of the article rented at \$1,238 per month (Roosevelt, 2015).

Rizzo (2001), writing in the journal *Hispanic*, talks about the barriers faced by Hispanic students and how to overcome them. Some of the salient points include preparing limited-English speaking preschoolers for kindergarten and having community homework centers where ESL students can get help with homework. The main challenge to implementing these goals is funding. In the Los Angeles Unified School District, where 71% of the students are Hispanic, there is an emphasis on professional development for teachers, with literacy and math coaches being hired to help train teachers. The article notes that in a survey of scholarship recipients from 1976 through 1998, the top 5 barriers to succeeding in education were lack of financial resources, responsibilities to a parent or family member, feeling different, lack of academic preparation, and negative attitudes at their schools.

Miller et al. (2005) describes how school-university partnerships have helped close 2 achievement gaps; the achievement gap for economically disadvantaged students and the preparation gap for those who teach them. The authors have participated in a partnership between the University of North Carolina-Greensboro and Hunter Elementary School. The elementary school is a high poverty school, with 76% of students eligible for free or reduced-price lunch. Student achievement was low. Beginning in 1996, 25 preservice teachers had the opportunity to work at the school, allowing for more individualized instruction for students. The placement of all the teachers at one school allowed for more focused supervision of their training. Student achievement improved markedly, with 88.9% of Hunter's 3rd grade students,

83.3% of 4th grade students, and 84.9% of 5th grade students passing the North Carolina end-of-grade reading test.

Teacher Evaluation

Donaldson and Papay (2012) report that over 40 states have established laws requiring teacher evaluation systems. In the 1920's teacher evaluation became systematized. Evaluation was run like factories with the evaluator monitoring and evaluating tasks (Rousmaniere, 1997). The systems established then resemble the current formats for evaluation. A "teaching and learning system that supports continuous improvement" is seriously needed (Darling-Hammond, 2014, p. 5).

In California, the framework for evaluation was established in 1971 under the Assembly Bill 293: the Stull Act. Teacher evaluation is based on employment status and contains no guidance for how the new teacher should improve (Koppich et al., 2013). Typically, evaluation is not designed to assist new teachers with deciding what form of professional development will benefit them (National Board Resource Center, 2010). Darling-Hammond (2014) purported that evaluation must include useful feedback associated tightly to professional development.

Darling-Hammond et al. (2012) evaluated popular modes of evaluating teachers. She purports that evidence of teacher contributions to student learning should be part of teacher evaluation systems. The article analyzes the usefulness of value-added models (VAM) as a tool to measure the teacher's influence in students' scores over time. The VAM does have limitations as it assumes that student learning is measured well by test scores, is influenced solely by the teacher, and is independent of other classroom factors. Other issues with the VAM are: (a) value-added models of teacher effectiveness are inconsistent, differing substantially from class to class; (b) teachers' value-added performance is affected by the students assigned to them; (c)

value-added ratings cannot ferret out the many influences on student progress. The authors point to the development of professional standards by a group of states working under the auspices of the Council for Chief State School officers as an improvement in teacher evaluation. These standards have been aligned with Common Core standards to reflect the knowledge, skills, and understanding teachers need. In many cases the standards involve multiple classroom observations and written feedback to teachers. The authors conclude that VAMs should not be used for individual-level decisions, but rather as a research tool to help validate measures that are effective for teacher evaluation.

As evaluator of the *AIMS* program, the researcher spent time in the participants' classrooms. Over the past 10 years a continued connection has existed. The connection allowed access to the sample population in this study and allowed the researcher to once again visit their classrooms to observe for this dissertation.

Summary

This chapter described the historical and current literature related to the study. Teacher shortage and retention provides the baseline for the project significance. Teacher support, stages of growth, co-teaching, response to intervention, and instructional strategies are areas of critical importance to successful teaching experiences. Teacher evaluation is critical to ensure teacher perception of technique is accurate. Chapter 3 will provide the methodology of this study and explain how the areas covered in the literature review will be explored in the research design.

CHAPTER 3: METHODOLOGY

The fundamental objective of the researcher was to answer the following primary research questions: (a) Why does the teacher believe that the support given to them in early years helped them remain in the teaching profession? (b) What professional experience does the teacher recall as being the most beneficial and effective to their teaching practice? (c) How does the teacher practice research-based instructional strategies and techniques?

Secondary research questions included: (a) What has been your experience with co-teaching? (b) How does the focus on Response to Intervention/Multi-Tier Intervention guide the teacher's differentiations for student needs? The methodology used to test the defined research questions included a mixed-methods approach. The chapter is organized into several sections, including: (a) participants, (b) sampling procedures, (c) instrumentation, (d) data collection, (e) data analysis, and (f) ethical considerations.

Participants

Sixty teachers were surveyed. These teacher participants were all members of the *AIMS* Scholar federal grant program designed to provide support and strategies to new teachers. The participants were teachers supported under the *AIMS* Scholar program. "The purpose of the *AIMS* Scholar program was to train highly qualified teachers from underrepresented ethnic groups in the high need areas of math, science and special education" (Karge & Reitman, 2016, p. 2). The term *AIMS* Scholar refers to persons enrolled in the Autism, Inclusion, Mathematics Core and Science Innovation Scholar Transition to Teaching Program. Figure 5 displays the program objectives.


	<p>By the completion of year 5, <i>AIMS</i>...</p> <ul style="list-style-type: none"> ...will have recruited 90 participants to become teachers of record in high need schools in high need LEAs. ... will have supported 90 participants to achieve state certification/licensure in an expedited manner (1 to 2 years). ... will have ensured participants are retained in high need LEA's as teachers of record for 3 years. ... 60% of the <i>AIMS</i> participants will be from underrepresented ethnic groups ... all participants will have an in-depth working knowledge of how to effectively support children with autism. ... will learn instructional methods that will help students with disabilities to be successful in general education classrooms. ... will use effective strategies to teach the Math Core Standards. ... will use innovative science strategies to enhance the knowledge of the students in their classrooms. ... will provide extensive, in depth pre-post induction and/or support activities. ... scholars employed in high need schools will receive intensive training in using research based effective data collection analysis.
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Figure 5. *AIMS* Program Objectives (Karge & Reitman, 2016)

The program was comprised of monthly cohort meetings and individualized classroom support. The *AIMS* Scholar program provided a small stipend for the participants to attend these meetings where the professional learning was intentionally provided in the areas of Autism, Inclusion, Mathematics and Science (*AIMS*). Deeper learning, thinking skills, and problem solving were emphasized during all professional learning sessions. Teachers were fortunate to have a mentor visit their classroom and provide individualized support out at the school site. This is unique to most mentor programs, as the mentors were from university faculty and not the

teacher's district. This allowed for non-biased mentors (who were not employed by their school district) to give candid advice and support. Examples of support included setting up behavior programs, designing mathematics lessons, curriculum for science, and setting up classroom climate and environment. All teachers who attended the professional learning sessions were surveyed. Figure 6 provides the sequence of professional learning opportunities for the *AIMS* Scholars.

Participant ethnicity was made up of: Hispanic or Latino (39.1% of the student body), White (27%), Asian (20.7%), Black or African American, Native Hawaiian or Other Pacific Islander, and American Indian or Alaska Native (12.7%). Additionally, 10 teachers were randomly selected for an interview and a follow-up classroom observation. The 10 participants were 50 % male and 50 % female. Participants taught in a variety of settings including 30 different school districts.

Table 2

Demographics of Participants

Number of Participants	Male	Female	Age	Currently Teaching?
60	20	40	28 to 49	ALL participants

The participants held different teaching credentials, including 12% Early Childhood Special Education, 25% Mild/Moderate Special Education, 12% Moderate/Severe Special Education, 25% Mathematics Education, 26% Science Education. Among the participants, 23% had received Master degrees.

Focused Professional Development

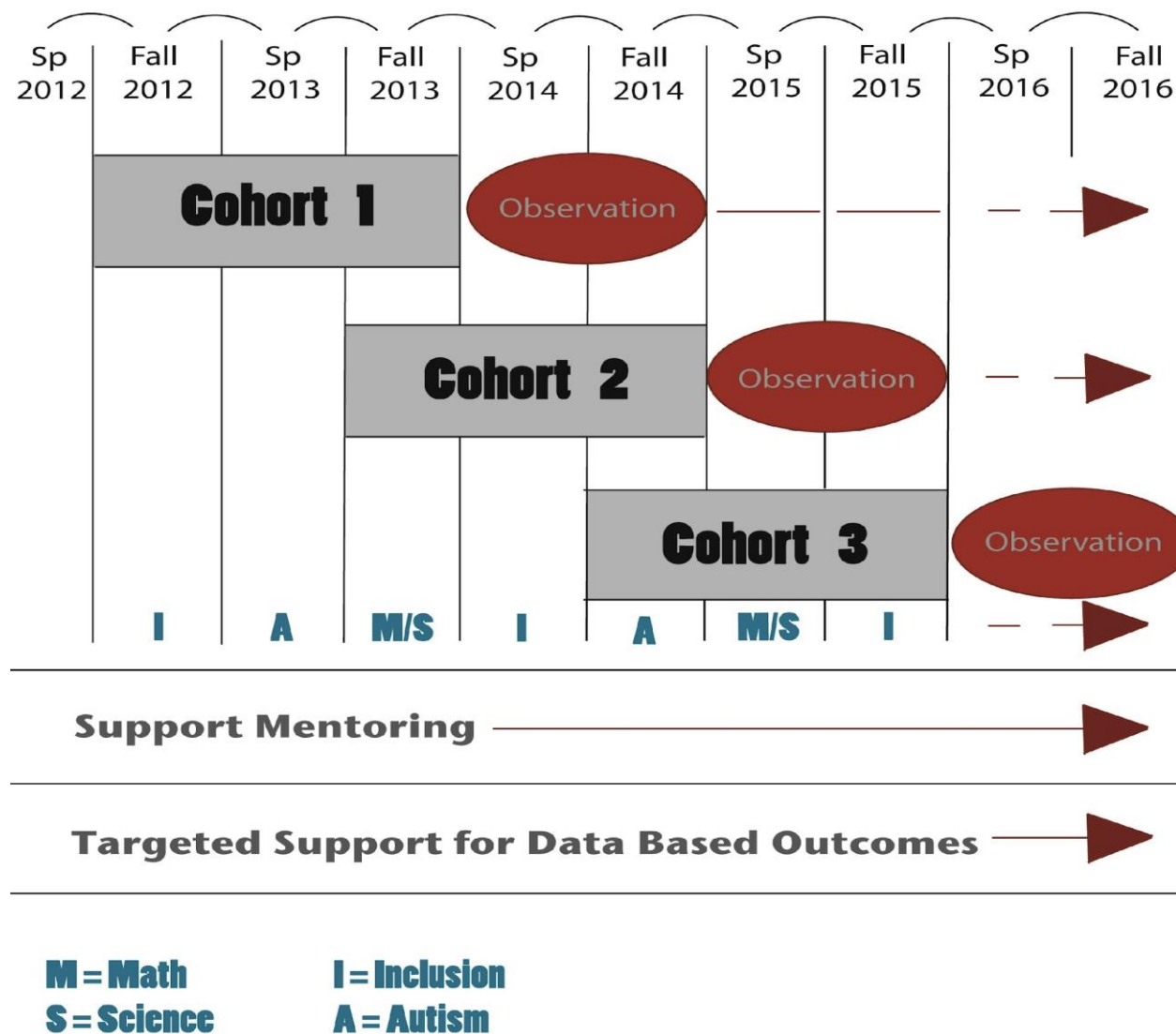


Figure 6. Sequence of Professional Learning Opportunities for AIMS scholars (Karge & Reitman, 2016).

Sampling Procedures

The sample was a purposeful non-probability convenience sample as the participants were all members of a federal Transition to Teaching grant at a local public university during

2007 to 2015. The United States Department of Education Transition to Teaching program was designed to provide funds for university programs to recruit and retain highly qualified educators to participate in a program that provides extensive support (United States Department of Education, 2015). Grantees developed and implemented comprehensive approaches to assist with understanding of high need schools where the teachers train, work, and are supported within their teaching classrooms. The logic for utilizing the non probability convenience sampling method is confirmed by Blair, Czaja and Blair (2014) as well as Etikan, Musa, and Alkassim (2016); it has a lot of limitations due to the subjective nature of this sample. From the group of 60 participants, 10 were selected to be interviewed.

Ten participants were selected for interviews. Gay, Mills and Airasian (2006) suggest a strong sample for the qualitative research section represents 5 to 10 % of the population. The 10 provide adequate representation. Five females and 5 males were interviewed. The group was representative of the grant program with high school, middle school, elementary school, preschool and special education all represented. Table 3 indicates the class, subject and grade level taught by the 10 participants who were interviewed.

Instrumentation

Quantitative data was collected using the Hawthorne Teacher Evaluation Scale, AKA Teacher Evaluation Scale (McCarney & Wright, 1986), TPE/CSTP Classroom Performance Evaluation Scale (Reitman, Karge & Weatherill, 2014) and a researcher designed questionnaire. In depth participant interviews and classroom observations of participants provided the qualitative data.

Hawthorne Teacher Evaluation Scale

The Hawthorne Teacher Evaluation Scale (TES) is “based on the most commonly recognized descriptions of teacher behavior” (McCarney & Wright, 1986, p. 8). The instrument is intended for high quality teacher education evaluation conducted in the classroom setting. The evaluator goes out into the schools, observes teachers and provides data on a predetermined Likert Scale. The scores range from 1 to 5, with 1 being the lowest level, indicating the teacher does not demonstrate the behavior or skills.

Table 3

Class, Subject, and Grade Levels Taught

	What class, subject, and grade level do you teach?
Participant 1	High school, case manager for 28 students, 10/11 th grade English in a specialized setting. I also teach a resource/study skills class.
Participant 2	SELPA Director, previously taught preschool
Participant 3	8th Grade Mathematics, Mathematics, 8th grade and Exploratory (Technology), Elective, 6th Grade
Participant 4	I teach Math, ELA and Writing in a 3rd grade class. My students are exposed to an inclusive setting where they are included with both Gen. Ed./Special Education.
Participant 5	Preschool Special Education.
Participant 6	I teach Sign Language 1 to 9-12 graders. The population at the school is about 123 total students in middle school and high school. I have 7 students in my class.
Participant 7	I teach elementary school.
Participant 8	Algebra 1 and Algebra 2, Mathematics, grades 9 – 12. I also coach Cross Country and Track and Field.
Participant 9	I teach 7 th and 8 th graders. The courses I teach are Math 7, Math 8, and Math 8 support

Participant 10

Curriculum Specialist, Special Education (K-12)

The second level of the Likert is a 2, meaning the teacher is developing the behavior or skill with the third focused on demonstration of the behavior or skill on an inconsistent basis. The 2 higher Likert scores represent teachers who demonstrate the behavior or skill most of the time, and finally a 5, meaning the behavior or skill is demonstrated on a consistent basis. There are 3 overall competency areas including management of student behavior (numbers 1-10), professionally related topics (numbers 11-21) and instructional components (numbers 22-35). The numbers in the parenthesis align with each area on the survey. For the complete survey see McCarney and Wright (1986); the portion of the survey used for this research appears in Appendix A. An example of the management of student behavior requires the evaluator to observe whether the teacher maintains a positive classroom environment, reinforces/rewards appropriate for social and academic behavior, uses strategies to prevent behavior problems, and responds to student needs. An example of professionally related items included maintenance of a professional behavior, following school systems and policies, and reporting student performance effectively to family or guardians. The third area provides the evaluator with a glimpse into the instruction with evaluation of maintaining student attention, design of assessment, demonstration of academic planning and clear delivery of directions, explanations, and instructional content in a manner understood by students.

Classroom Performance Evaluation Scale

Danielson (1996) first introduced the classroom observation record as a component of teacher evaluation. The classroom observation record included creating an environment of respect, establishing a culture for learning, managing classroom procedures and student behavior, organizing physical space, communicating clearly and accurately, using questions and discussion

techniques, engaging students in learning, providing feedback to students and demonstrating flexibility and responsiveness. The second instrument was based on the California Standard for the Teaching Profession/Teacher Performance Expectations. The Classroom Performance Evaluation Scale (Reitman, Karge, & Weatherill, 2014) is a classroom observation rating scale. The full scale is located in Appendix B. The CSTP (California standards for the teaching profession) is a set of standards mandated by the State of California covering 6 areas of teaching competency:

1. Engaging & Supporting All Students in Learning
2. Creating & Maintaining Effective Environments for Student Learning
3. Understanding & Organizing Subject Matter for Student Learning
4. Planning Instruction & Designing Learning Experiences for All Students
5. Assessing Student Learning
6. Developing as a Professional Educator

Each CSTP has 2 or more TPE's (teacher performance expectations) delineating the details of what must be done to prove teacher competency. These are standard California evaluation tools. This instrument measures teacher performance across 6 domains using a Likert scale (1-5). In the rating a 1 stands for non-observed, a 2 means the teacher demonstrated the item but needs improvement, a 3 rating is a good, 4 is excellent and 5 is exemplary. The content of the survey aligns with the CSTP and the TPE's.

Validity

Validation of Hawthorne Teacher Evaluation Scale

The original Teacher Evaluation Scale was developed with administrators and teachers from 20 states. The instrument was normed on 2,212 teachers from 21 districts with

representation from 9 states. The normative sample was inclusive of both general and special educators teaching in all grade levels from primary to high school in every level of concentration. The beta sample of 2,212 teachers included private as well as public schools verifying internal-consistency. The Teacher Evaluation Scale authors report “test-retest and inter-rater reliability.....in addition to item analysis, factor analysis” (McCarney & Wright, 1986, p. 8) and strong support for content and construct validity. The researcher was trained and calibrated by *AIMS* program faculty familiar with the instrument. This provided a form of face validity.

Validation of Classroom Performance Evaluation Scale

Validity is the most important characteristic a test or measuring instrument can possess. Validity is the degree to which a test “measures what it is supposed to measure and, consequently permits the appropriate interpretation of scores” (Gay, Mills, & Airasian, 2006, p. 134). The scale was piloted by 10 different districts in Ventura County, California. Induction evaluators, trained by the state of California and the California Commission on Teacher Credentialing, all aligned in their findings and agreed the assessment measured what it was intended to measure – verifying inter-rater reliability and face validity.

To strengthen the validity of this study, the researcher used triangulation--using more than one instrument on the same group/subject. The researcher also purposefully selected 10 teachers who have been in the profession for at least 5 years to interview and do a follow-up classroom observation (The researcher used to observe them when they were in the grant). Reliability was insured through the observation of the same classroom multiple times. This allowed a basis of comparison between different times of observation.

Reliability

Inter-rater reliability is part of the larger world of generalizability theory. The purpose is to remove as much error from the scoring process as possible (Karge, 2016). There is a high threat to inter-rater reliability anytime someone does a classroom observation. The consensus in the literature recommends an 80% inter-rater reliability threshold (Krippendorff, 2004a; Krippendorff, 2004b; Lombard, Snyder-Duch, & Bracken, 2002). Without this, validation cannot stand up to scrutiny and peer-review standards. There is a high threat of severity, leniency, and drift (Childs, Ram, & Xu, 2009; Hoyt & Kerns, 1999) and a high threat of the Halo Effect (Borman, 1975; Lance & Fisicaro, 1990; Saal, Downey, & Lahey, 1980), as well as a high threat of diminished construct and content validity due to insufficient training and diminished inter-rater reliability (Childs, Ram & Xu, 2009; Gay, Mills, & Airasian, 2006; Keyton, King, Mabachi, Manning, Leonard, & Schill, 2004; Neuendorf, 2002). This is why initially when the researcher began classroom observation/evaluations for the 2 federal grants she worked for, she had to go through a rigorous training session to ensure calibration of observations. Prior to data collection for this dissertation, the researcher was recalibrated to ensure at least 80% inter-rater reliability.

Test-retest reliability was appropriate for the indicator of the Classroom Evaluation Scale survey instrument reliability (Litwin, 1995). The same set of respondents completed the survey at 2 different points in time. This measured the stability of the responses. Correlation coefficients were then calculated to compare the 2 sets of responses. The r value was .87 indicating a strong correlation.

Program Assessment

The AIMS program assessment, located in Appendix D, is modeled after an On Track Program assessment designed by Wieland Company. This was on purpose to ensure reliability

and validity. The assessment asked the participants to reflect back on their experience in the program. Questions were asked related to demographics, program support, and strategies and techniques taught while in the program. Participants were asked to rate each question on a 5 point Likert scale from not effective to very effective.

Interviews

The researcher interviewed 10 teachers from the *AIMS* grant. The participants were asked to reflect on support from staff, seminars, and strategies that have worked and programmed them as well as their students, both academically and socially. The teachers provided data in regards to their students' outcomes. Additionally they shared information about their classroom(s).

The qualitative interviews included questions inquiring about past support, strategies and techniques as well as feelings about the profession. The complete interview set of questions is located in Appendix D. Some sample questions included: What professional experience does the teacher recall as being the most beneficial and effective to their teaching practice? And does Response to Intervention (RTI) guide and help you to meet your students' needs? Districts may now refer to this as Multi-tier intervention system (MTIS). Descriptive, systematic and reflective statements were captured and a transcription of the dialogue secured.

Validity of the Interview Process.

Investigator triangulation was used to ensure descriptive validity of the interviews. The evaluation and interpretation of any research must include the essential consideration of validity. The integrity of the interview depends on strong validity. The researcher piloted the interviews to assist in creating validity and to determine the length of time. Within the qualitative data, the

interpretive validity was insured by returning to participants for member checking (Creswell, 2013).

Pilot

To ensure validity of the interview process, a pilot interview was conducted. The person who was interviewed was a student in a first grant and a mentor in the *AIMS* grant. He agreed to share his experiences as a teacher and then the researcher was able to ask him if the questions accurately covered the content. Prior to the pilot, the interview questions were examined by 2 evaluation experts to determine if the questions actually gathered information about the process. At the end of the pilot interview, the participant also verified the questions were effective and clear to understand the personal growth the teachers experienced from the program, and looking back and reflecting on effectiveness of strategies and support.

Data Collection

Quantitative data was collected using the Hawthorne, the Classroom Performance Evaluation Scale and the Program Assessment. All possible participants were asked to take the survey. The researcher was a member of the faculty team for this grant project. The researcher sent an email to all 60 persons enrolled in the grant, requesting their participation in the survey. The data was recorded through Survey Monkey. Demographic data was solicited from the participants to facilitate disaggregation of results for response items. Complete confidentiality was maintained.

Qualitative data was collected via participant interviews. The 10 persons interviewed received support as new teachers in the variety of strategies (listed in the Hawthorne instrument). The intention was to determine if they were still using the strategies and techniques as well as to

verify whether they are still teaching after 5-10 years or maybe moved into administrative positions. This research lends itself to a Grounded Theory approach.

Grounded Theory

Grounded theory is achieved by examining the data in the field in a manner as to discover something (Creswell, 2013). The concept is that the researcher goes into the study unknowingly, meaning they don't know what they will discover. Through coding of various pieces of information and coordinating data into categories, the researcher learns about their topic. Through the interviews the researcher in this study learned about the variety of supports used by the participants to remain in teaching. The researcher listened to the participants' stories and gleaned information and details from their experiences.

Data Analysis

An Explanatory sequential design, using quantitative and then qualitative data was used for analysis (Figure 7). Equal weight was given to both methods; termed a QUAN-qual design (Creswell, 2013). The Quantitative piece included data analysis of surveys distributed to all participants. Simultaneously the researcher interviewed a small percentage of the participants ($n = 10$).

Quantitative data, the Teacher Evaluation Scale, the Classroom Performance Evaluation Scale, and the Program Assessment were analyzed using histogram and bar charts to display the percentile of participation for each question. Descriptive statistics were used to analyze teachers' beliefs about support and strategies implemented.

Qualitative data, the interviews were comments that participants made. The interviews were coded and analyzed. At first, open coding was used, which was focusing on the text to define concepts and categories (Biddix, 2009). The researcher confirmed that the concepts and

categories accurately represented interview responses and explored how the concepts and categories were related. These were reviewed and processed for themes and patterns that were exhibited as data was collected. Responses were initially coded with emerging themes and patterns and subsequent data both strengthened and changed the initial codes. As new and slightly different information emerged from the data analysis, the codes were reworked to include new observations.

Raw data was then reduced and transformed as meaningful interpretations were identified. The researcher determined what information from the data was significant in terms of the research questions. The researcher recorded meaningful, usable, and relevant data and identified themes that emerged from the data. Through content analysis, the researcher then identified themes that naturally emerged from the data as coding, identifying patterns, and interpreting meaning was conducted. The themes that were identified helped to answer the research questions.

Following the identification of themes, the data was displayed textually and by a table. This display helped the researcher to identify systematic patterns and interrelationships across themes and content. At this point, the researcher had to interpret the meaning of the findings, determine how the findings helped answer the research questions, and draw implications from the findings (Creswell, 2013). The researcher continually kept these questions front and foremost: What conditions caused or influenced concepts and categories? What was the social/political context? What are the associated effects or consequences? (Biddix, 2009). Findings had to be verified by revisiting the data multiple times to confirm the conclusions drawn.

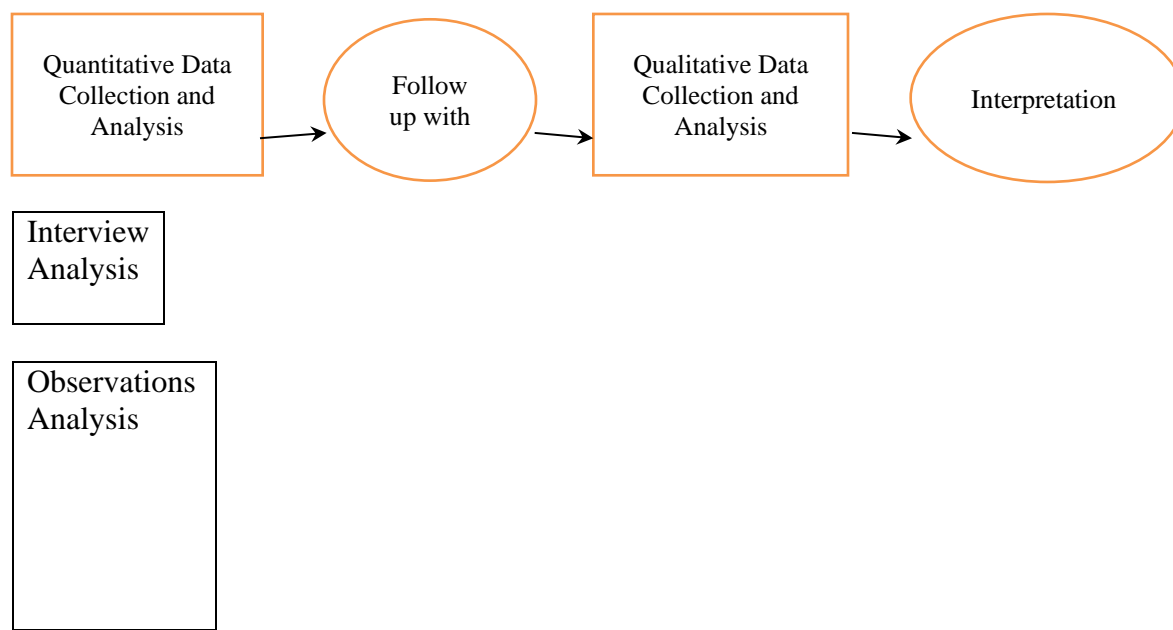
Explanatory Sequential; QUAN-qual (primarily quantitative)

Figure 7: Explanatory Sequential; QUAN-qual

The researcher was cognizant of the importance of allowing the emergent design of the study to combine both the quantitative and qualitative data. Two other researchers were asked to review the data analysis and interpretation. Figure 8 gives the reader a visual of the research questions and the data collected to answer each of the questions.

Ethical Considerations

As a result of participation in this study, there were no known sociological, physical, or psychological, risks involved. The researcher followed ethical standards of data collection to guard against any ethical breaches. Each participant was told their participation was voluntary and that they may stop at any time. This and other transparency issues were documented on the

informed consent document provided to each participant prior to data collection. Personal information was not required on the participant surveys to guarantee anonymity. Data from the interviews was coded with a participant number to conceal personal identity. A locked filing cabinet was used to maintain and protect data. The materials will be destroyed as per the Instructional Review Board requirements. All predispositions, biases, and attitudes of the researcher were set aside. Every effort was made to safeguard ethical practice.

Research Question	Data collected to answer the questions.
Why does the teacher believe the support given to them in early years, helped them remain in the teaching profession?	Survey – Questions Interviews - Questions 1-8
What professional experience do teachers recall as being the most beneficial and effective to their teaching practice?	Survey – Questions Interviews – Question 14-19
How do teachers practice research-based instructional strategies and techniques?	Survey - Questions Interviews – Questions 9-13 Observation
Secondary research questions will include	
What has been your experience with co-teaching?	Survey - Questions Interviews – Questions 10-11 Observations
How is the focus on Response to Intervention/Multi-tier Intervention important to classroom management?	Survey – Questions Interviews – Questions 12-13

Figure 8. Research Questions and Instruments for Data Collection

A university where the participants attended classes employed the researcher, and she was the professor and/or university supervisor of teacher education for several of the participants. In many ways this was a benefit, as an outside researcher may not have understood the program the participants completed. The informed consent forms and NIH certificate are located in Appendix E.

Summary

In summary, this chapter detailed the methodology used to conduct the study. Careful attention to participant selection and sampling, instrumentation, and data collection were described. Data analysis systems were explained and defined. Ethical considerations were shared. Chapter 4 will provide the reader with the results of the study.

CHAPTER 4: RESULTS

This study focused on reflecting with teachers who were highly supported in their first years of teaching with strategies and supports from a federal transition to teaching grant. This chapter gives the results from the classroom observation, participant surveys with both Likert and open-ended questions, as well as findings of the interviews.

Observation Results

The Hawthorne Teacher Evaluation Scale, Teacher Rating Form (McCarney & Wright, 1986) was used to determine how the participants were doing in relation to behavior, professionalism, and instruction. Figure 9 reflects the scores of the participants. The researcher went out into the classrooms in 37 school districts in Southern California and one in Georgia (participant had moved out of state) and observed the participants. The Hawthorne Teacher Evaluation Scale was designed to make observation efficient by allowing the researcher to mark a Likert scale to assess teacher abilities. Likert ratings ranged from 1 (*Does not demonstrate the behavior or skill*) to 5 (*Demonstrates the behavior or skill at all times [consistently]*). The desired result was for participants to achieve as close to a 5 on the 5-point scale. As stated in Chapter 3, the reliability and validity of this scale has determined scores close to a 5 represent a high-quality educator. As indicated, no one received a score below a 4. However, differentiation between 4 and 5 existed.

The description in the next few paragraphs reflects the description of figure 9. The first column on the histogram (blue) represents the combined scores of ten areas related to behavior. These areas include components such as maintaining a positive classroom environment, reinforcing and rewarding appropriate social and academic behavior, preventing behavior

problems by intervening early, and organizing the classroom efficiently to meet educational needs. The average evaluation scores of behavior yielded a 4.8 on a 5.0 scale.

The second column on the histogram (red) represents the combined scores of 11 areas of professionalism. Candidates were evaluated on their ability to maintain professional behavior, take part in professionally related extracurricular activities, solve professionally related problems independently, accept evaluation and redirection, and make necessary changes or adjustments to teaching. The participants average evaluation score for the professionalism was near perfection, 4.99.

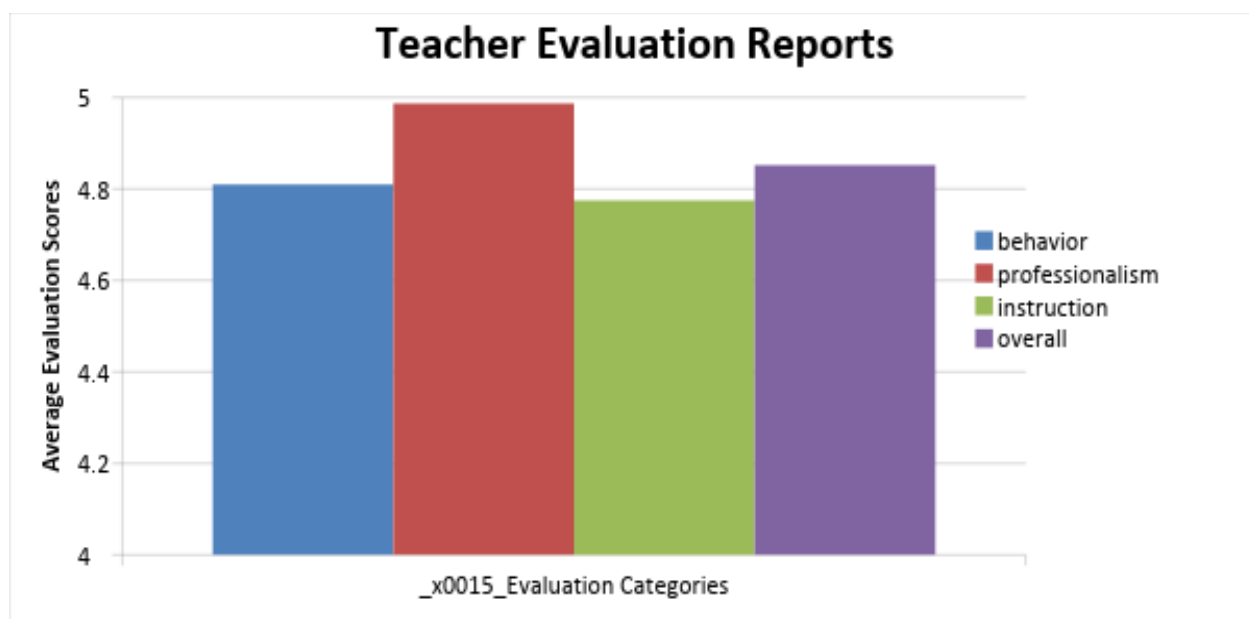


Figure 9. Teacher Education Observation Data (Likert ratings: 1 (Does not demonstrate the behavior or skill); 2 (Is developing the behavior or skill); 3 (Demonstrates the behavior or skill inconsistently); 4 (Demonstrates the behavior or skill most of the time); or 5 (Demonstrates the behavior or skill is consistent at all times)).

The third column (green) provides the combined scores of instruction. Fourteen areas were evaluated yielding independent scores for individualization of instruction, maintenance of

student attention, using a variety of assessment techniques, and using assessment information to provide students with feedback which was corrective and informative. The average evaluation score for the instruction component ranked at a 4.79.

The overall average score, when behavior, professionalism and instruction were combined, was a 4.85 on the 5.0 scale. All of these represent exemplary teachers who demonstrate strong classroom management and organizational skills leading to high quality student behavior. The professionalism of these participants ranked high above the scaled scores of other studies and groups. Finally instruction scores reflect strong research based practices are occurring in the classroom.

Classroom Performance Evaluation Scale

The Classroom Performance Evaluation scale is located in Appendix. The participants have strength in use of time (4.78) during instruction (Figure 10). The lowest areas from the classroom evaluations were found in establishing the learning set category and the planning instruction areas (both received a score of 4.52) as well as designing learning experiences for all teacher strategies (4.54). Communication (4.68) and climate (4.59) fell in the middle range.

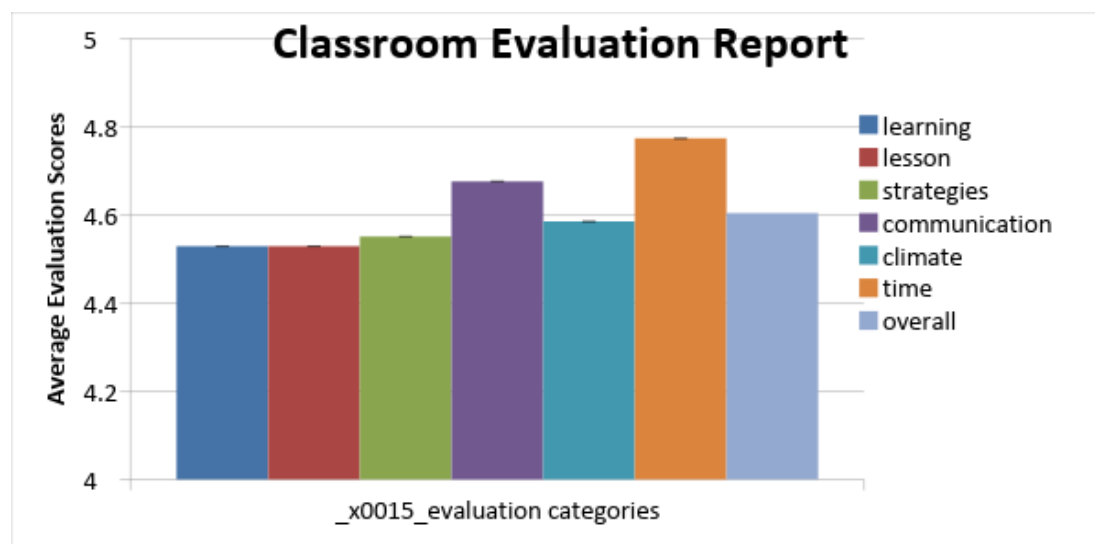


Figure 10. Teacher Performance Evaluation Scaled Scores

Figure 11 represents data from category one of the Classroom Performance Evaluation. The areas shared in Figure 11 included establishing a learning set, planning instruction and designing learning experiences.

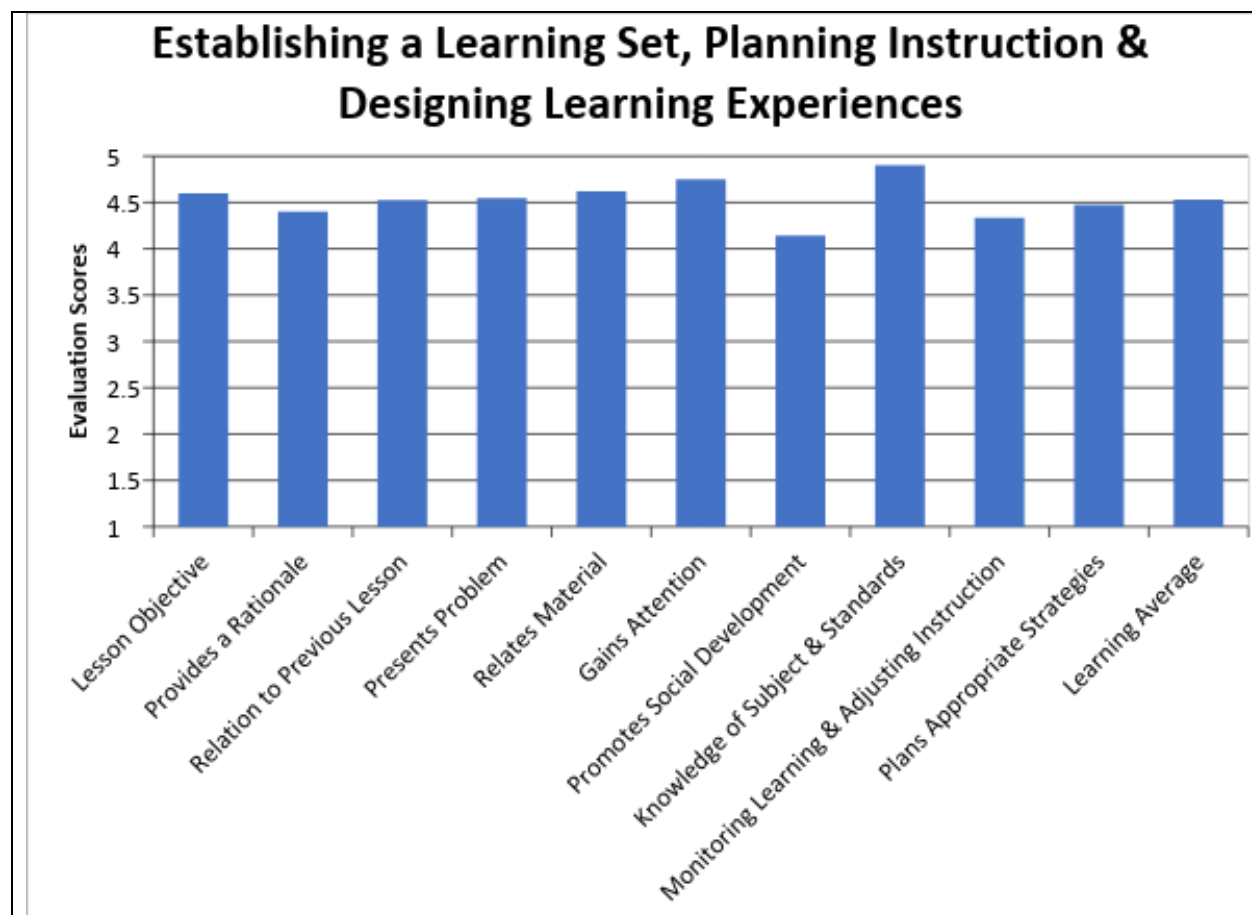


Figure 11. Category 1: Establishing A Learning Set, Planning Instruction and Designing Learning Experiences for All Students

Primarily these areas included focus on lesson planning from stating the objective orally and/or posting on the board, to gaining the student attention, relating the lesson to previous lessons and demonstrating knowledge of subject matter academic content standards. The content included planning appropriate strategies while designing a lesson to meet the needs of all ability level students including English Learners and students with special needs.

The highest score received was gaining students' attention and knowledge of subject and standards with a score of 4.9. The lowest was promoting social development (4.1).

Figure 12 extends the lesson planning and development to include evaluation of implementation stages including student engagement, teacher modeling and guided feedback from TES Category 2: Lesson Design and Development. The researcher was observing to see if the participant used proper lesson design and implementation strategies including the gradual release of responsibility focused on the I do it, we do it, we do it together and you do it alone process (Smith, Frey, Pumpian & Fisher, 2017).

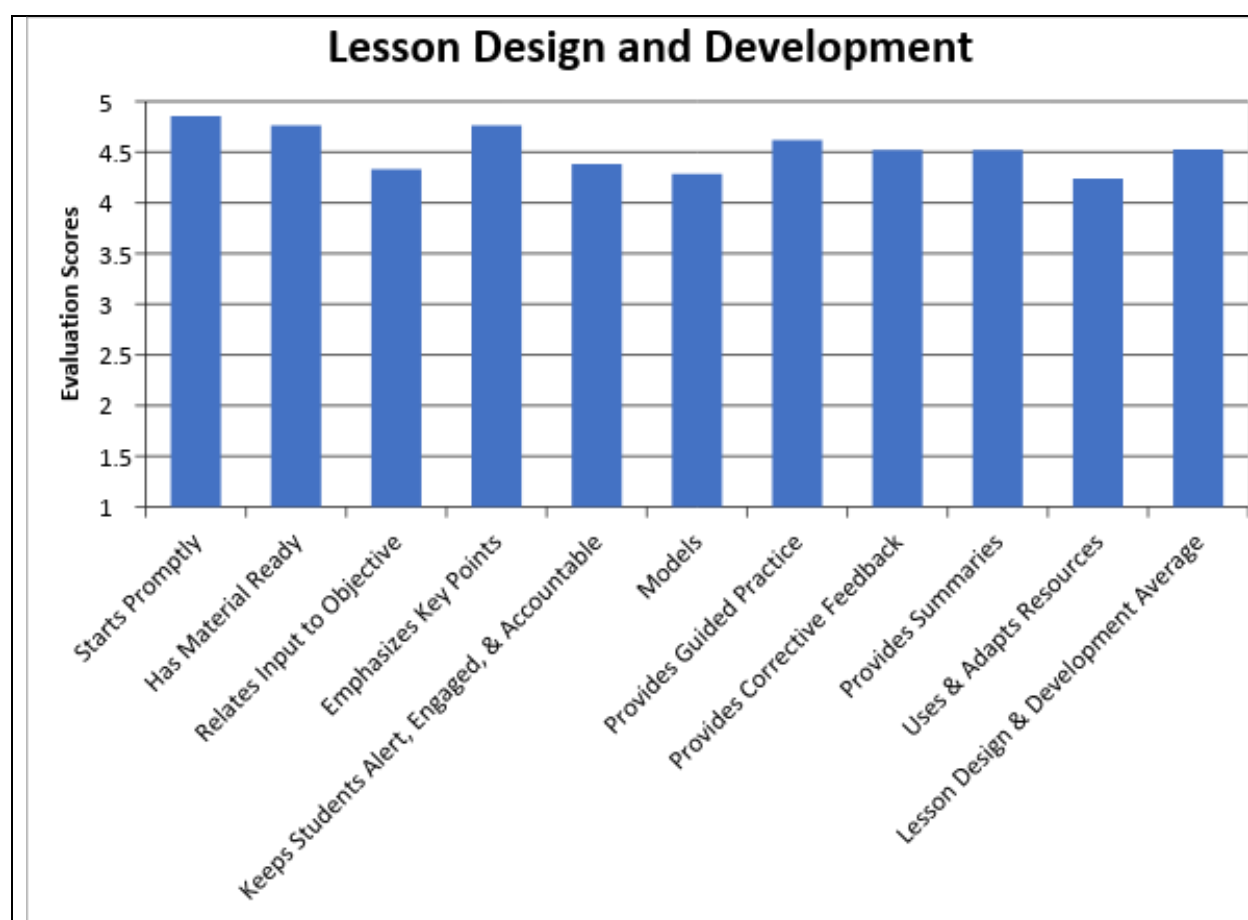


Figure 12. Category 2: Lesson Design and Development

Starting promptly (4.8), has materials ready (4.7) and emphasizing key points (4.8) were the highest scores; modeling (4.2) and using and adapting resources (4.2) were the lower scores.

Figure 13 demonstrates the areas of use of a variety of instructional strategies, resources, technologies and accommodations. All of the categories in this section, using a variety of appropriate strategies (4.2), accommodating all learners (4.3) and comprehensive input (4.4) among others, were above a 4.0 on the scale. As a group, the participants use strategies to promote reflection and critical thinking (4.8) and they press students for elaboration (4.9).

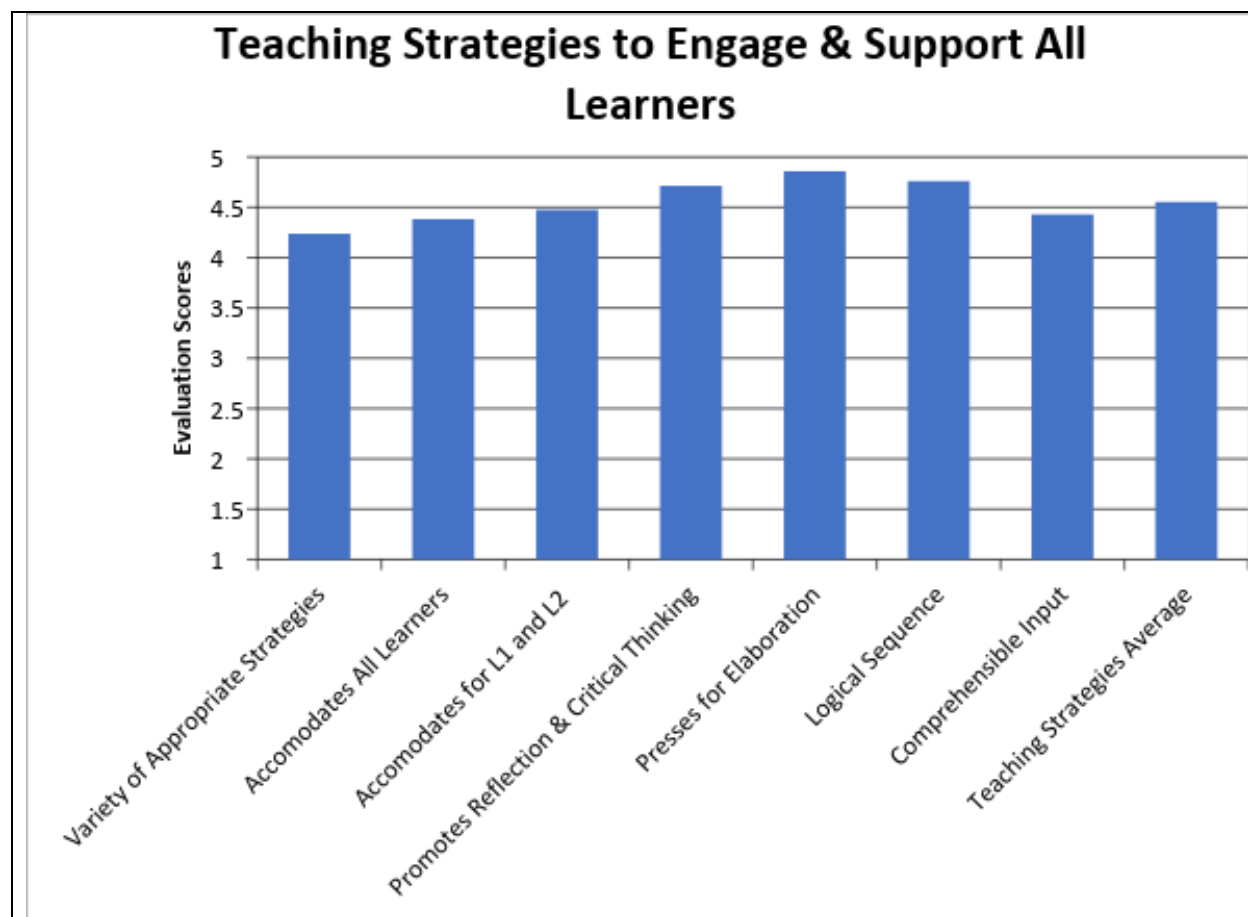


Figure 13: Category 3: Teaching Strategies to Engage & Support All Learners

Figure 14 assesses the importance of and interaction with their students, Category 4: Teacher communication and interaction. Giving clear and concise directions (4.6) and use of

appropriate and relevant vocabulary and content (4.8) are critical to high quality teacher communication and interaction. In order to do this, the participants had to understand and be able to communicate the content clearly and precisely to their students. The lowest area was non-verbal communication (4.6).

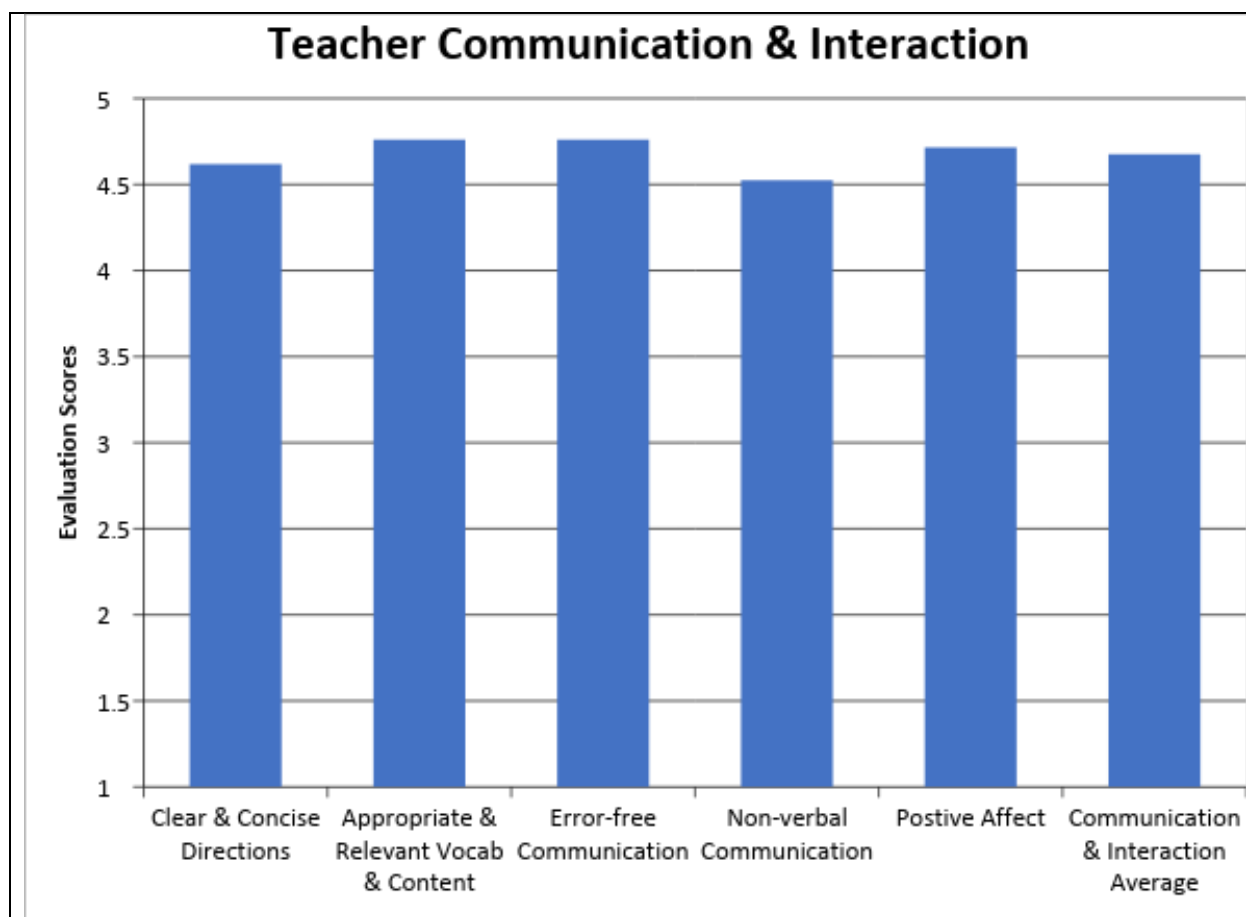


Figure 14. Category 4: Teacher Communication and Interaction

The climate of the classroom and learning environment are the areas assessed in Category 4 (Figure 15). The results indicate scores well above the 4.0 level, with communicates high expectations for all as a 5.0. Other areas included positive norms and procedures (4.9), encourages slow and reluctant learners (4.8), establishing a safe learning environment (4.8), encouraging productive collaboration, (4.8), and productive and affirming learning environments and climate (4.8).

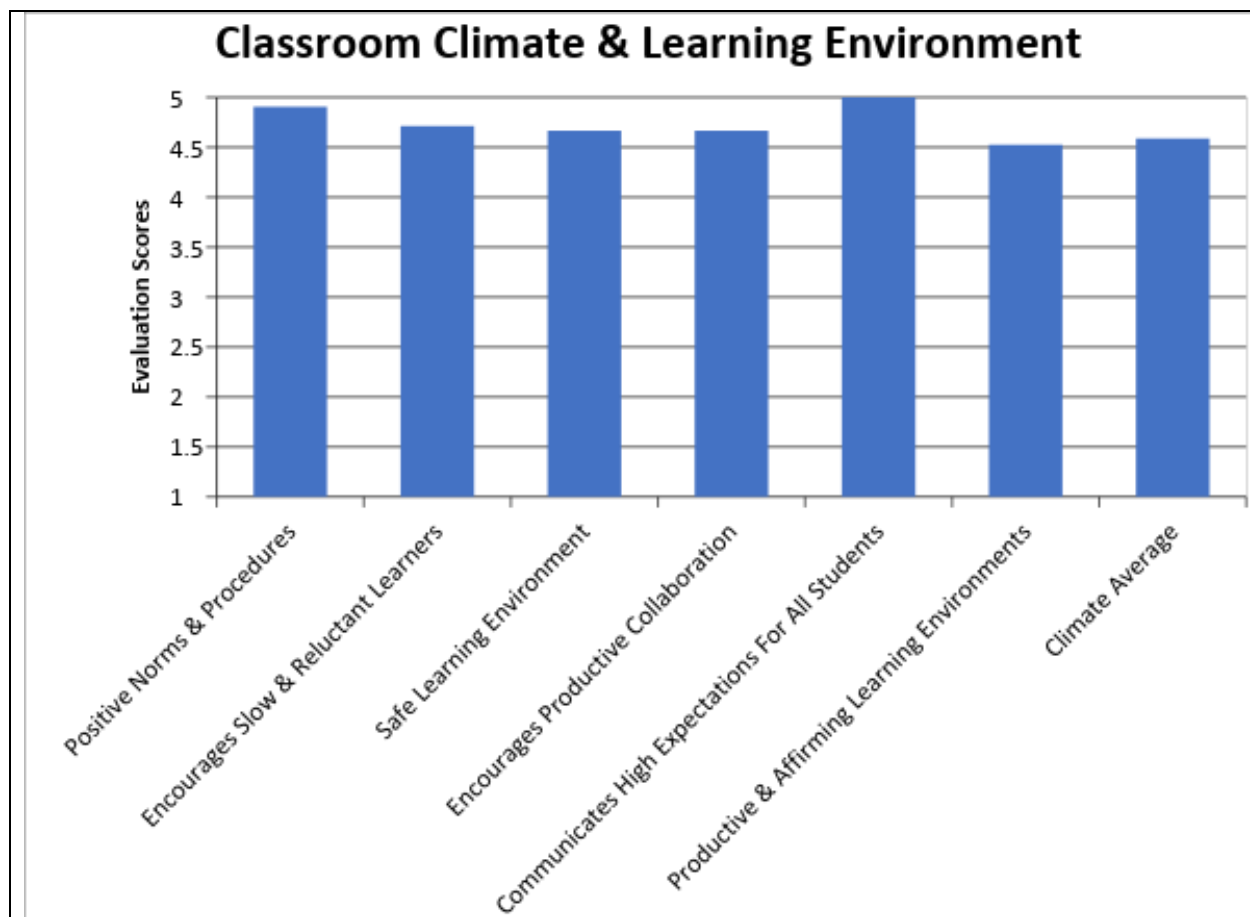


Figure 15. Category 5: Classroom Climate and Effective Learning Environment

Category 6 reflected the use of instructional time was a key area of concern in the early years of the program; tied to the issues around classroom management and discipline. Figure 16 demonstrates the participants had excellent transitions between subject areas (5.0) and used classroom routines (4.9) appropriately. *AIMS* support staff took time to share engagement strategies and ways to assist learners in remaining on task by maintaining an optimal pace, using structured systematic routines, and quick transitions. This data is recorded in Figure 16.

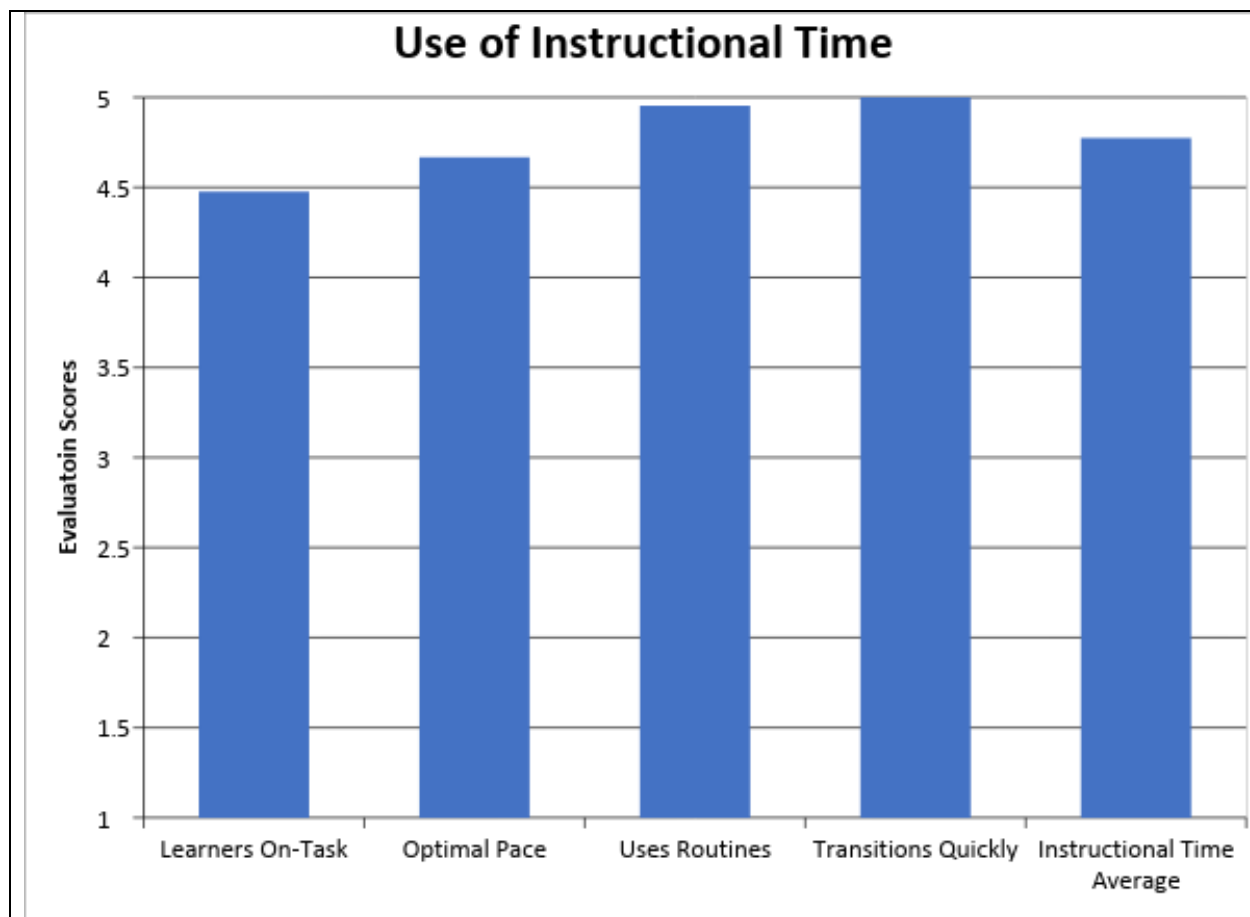


Figure 16. Category 6: Use of Instructional Time

Interview Results

Each of the 10 participants was asked the same questions. The first question asked: Do you believe the support that was given to you in the AIMS program helped you remain in the teaching profession? It is clear that the participants felt the support added to their success as an educator. Participants were asked to reflect back on their years teaching and to share what professional experience they recalled as being most beneficial in their teaching practice. Table 4 shows the various reflective statements. Many of the participants commented on the supportive AIMS faculty and the opportunities afforded to them while in the grant program.

Table 4

Overall Support from AIMS program

Support Question: <i>Do you believe the support that was given to you in the AIMS program helped you remain in the teaching profession?</i>	
<hr/>	
Participant 1	Very much so. I remember being a teacher and getting started. The support and advice received through the teacher advisor, mentor, and <i>AIMS</i> program was outstanding. I felt the open dialogue with a variety of individuals from different backgrounds was great as well.
Participant 2	Yes, definitely instrumental in my success as an educator.
Participant 3	Yes, I had support from other teachers, administration at my school and from my center for innovation coach (induction program).
Participant 4	Completely, the ongoing trainings and support from the grant and the other trainings helped me continue to reach my goal of becoming a teacher. My desire to positively impact the lives of the students have helped me to continue in this profession.
Participant 5	I do not feel that I received adequate support from my school site in my first year of teaching to motivate me to remain in the profession. I felt like quitting in December of my first year. I persevered, and am currently in my 3rd year at that school.
Participant 6	Yes, I felt very supported during my teaching and yes the grant support helped me throughout my teaching profession.
Participant 7	Yes in a lot of ways, the cross collaboration between science teachers and special education teachers gave the most impression since I would hear from different perspectives and problem solve towards the common goal.....helped the teacher adapt to the teaching world faster and smoother.
Participant 8	Yes, I believe it (the grant support) helped me.
Participant 9	Yes
Participant 10	Absolutely, the continuous support of our professors coupled with professional development opportunities helped fuel my passion and provide me with the knowledge to remain in the profession.

The participants were asked about the most beneficial professional practice. The responses in Table 5 range from discussions of their mentor, to using research-based methodologies to specific *AIMS* trainings.

Table 5

Most Beneficial Professional Practice

Support Question: <i>What professional experience do you recall as being most beneficial in your practice?</i>	
Participant 1	I recall when I first was a teacher at an elementary school and the mentor came to observe me and talk to me afterwards. I felt her philosophy to teaching was an approach in which she believed that all (students) can learn in the right setting.
Participant 2	Professional Development related to best practices and research based methodologies.
Participant 3	The most beneficial was having a mentor to do various assessing of my teaching. From co-teaching to observations in my classroom, I received useful feedback.
Participant 4	The most beneficial experience to me were the <i>AIMS</i> trainings, one of them was the one related to Autism. I remembered this training in particular because at that time I was still learning about Autism and everything that was related to this disorder. Being exposed back then to what was new in education was fascinating. I also, valued all the input that I was given from other students while we attended the trainings.
Participant 5	Attending <i>AIMS</i> professional development events has been beneficial in restoring my energy and engagement in my practice. The opportunity to hear from keynote speakers, network with fellow educators in the field, and participate in meaningful workshops have all helped to improve my practice.
Participant 6	The most beneficial professional experience I had was the ongoing support from my administration, staff, and Special Education Team. We would have meetings and figure out the best way to help students be successful in the classroom.

Participant 7	I believe the sharing time across different levels of teaching experience teachers and demonstration of some science teaching activities made the most impression to me during the <i>AIMS</i> project.
Participant 8	Observing veteran teachers, the practice of teaching my own class, and collaborating with other teaching fellows.
Participant 9	Unit planning with other subject areas was really helpful and doing the cross curricular courses were great! I also really enjoyed being able to train in differentiation strategies that I could take back to the classroom.
Participant 10	The most beneficial professional experience was the rapport we developed with our <i>AIMS</i> faculty. We spent a good amount of time reviewing our projects and getting feedback from them.

Table 6 includes participant comments to the question, “Who do you recall as being most helpful to you in your early career?” The names of *AIMS* faculty and staff were taken out. However, it is obvious there was tremendous support from these persons since they are continually mentioned. The most helpful thing that participants found was someone to walk alongside them and support them. Every answer included a relationship with a mentor or colleague.

Every participant was assigned a mentor as a component of the *AIMS* program. Some of the participants were fortunate enough to receive a support provider or mentor from their place of employment. In Table 7 the participants were asked if they thought mentoring is crucial to the development of new teachers? The responses provided insight to mentor selection and the type of support needed. Of the 8 who responded, overwhelmingly the answer was yes. Two participants chose not to answer this question.

Table 6

Most Helpful During Early Career

Support Question: <i>Who do you recall as being most helpful to you in your early career?</i>	
Participant 1	Just always finding individuals and asking them questions. Whether they were coworkers, people I knew, or experienced professionals; I always tried to see where they were coming from.
Participant 2	Networking with other <i>AIMS</i> candidates and support of <i>AIMS</i> staff.
Participant 3	The most helpful was an on-site coach for teaching. She was both a seasoned teacher as well as a former administration.
Participant 4	One of the most influential person in my career was <i>AIMS</i> faculty. it seemed like an unreachable goal but having the opportunity of enrolling the program gave me a chance. Indeed, with the guidance and ongoing professional development made possible...
Participant 5	A co-worker and <i>AIMS</i> mentor who is approaching retirement was very helpful in sharing resources, encouragement, and strategies with me in my first year. I could count on all my Ed Specialist co-workers for their moral support whenever I approached them with concerns about my instructional practices or student progress. I am very lucky to be surrounded by such caring professionals.
Participant 6	School Psychologist and other educators
Participant 7	I believe listening to experienced teachers and their story sharing was the most helpful to my early teaching career. Knowing that there were supports from <i>AIMS</i> was mentally supportive as well.
Participant 8	Experiencing my own classroom. Going through the day-to-day routine. Learning from mistakes and observing other teachers.
Participant 9	My BTSA support provider/department chair was extremely helpful. I went to him anytime I had a question or problem.
Participant 10	An <i>AIMS</i> faculty was the most influential professor in my career. Not only was she my professor but also a mentor whose opinion I valued and respected highly. Early on, she showed....genuinely cared about my success and invested time to provide me with thoughtful feedback.

Table 7

Mentoring

Support Question: *Do you think mentoring is crucial to the development of new teachers?*

Participant 1	I think if the mentoring is authentic and is more of a dialogue versus a concrete set of instructions to follow.....flexibility with mentoring.
Participant 2	Yes.
Participant 3	Yes. I think it is necessary and should be required. Without the support, (the sink or swim model), I wouldn't have the sanity nor the will to teach without it.
Participant 4	Completely, I feel that making the time to work intensively with new teachers, not only helps average teachers become good, but good teachers also have the opportunity of becoming great. Teachers in general need to be in touch with someone that can guide and offer support when needed.
Participant 5	YES! The level of available mentoring support is critical. I feel that mentors should be available on a weekly basis, in the classroom with new teachers, helping them navigate the overwhelming experience that is running your own classroom. I had no classroom experience, outside of 10 weeks of student teaching, starting my first year. This dramatically influenced my sense of security and comfort with managing my own class.
Participant 6	Yes
Participant 7	Yes. I believe finding a mentor is more important than having a mentor. The first one is to find your role model; it lasts longer...gives me motivation to keep moving forward.
Participant 8	Yes
Participant 9	Definitely, I think it helpful to have someone who has been in your shoes before that can provide you with helpful advice, especially the first year of teaching.
Participant 10	Mentoring is crucial to the development of new teachers. A mentor provides the ongoing support new teachers need.

Participants were asked to discuss the strengths they brought to the teaching profession. Most responded to their abilities to support the students they work with and develop student to teacher relationships. Some listed personal characteristics and many noted the use of various strategies and techniques. Many did not talk about their challenges. These are recorded in Table 8.

Table 8

Participant Strengths

Support Question: <i>Discuss the strengths you bring to teaching and what you expect to be most challenging?</i>	
Participant 1	I like to think that every student can learn and should have opportunities when placed in the right situation. Also, over the years I have enjoyed the creative and philosophical aspects of teaching the mild/moderate high school English classes.
Participant 2	Strengths would include knowledge and experience in implementation of research-based methodologies.
Participant 3	I find that creating the student to teacher relationship has been more of a strength for me. I also bring most of the technology quirks for my team since I am familiar with a lot of teaching tools available.
Participant 4	The following are strengths that I bring to the teaching profession: organization skills, collaboration, and planning. I am consider myself to be good at organizing, building relationships with my colleagues but I feel that the most challenging part of collaboration is finding colleagues that share the same vision as you. I strongly believe that collaboration is the foundation for increased student achievement.
Participant 5	I am patient, hard-working, solution-oriented, collaborative, optimistic, thoughtful, reflective. Some challenges I experience include observation skills (ability to recall details about student performance or daily/weekly experiences), multi-tasking, supervision of instructional assistants, lack of teaching experience, and organization skills.

Participant 6	Subject knowledge, Class cohesiveness, Multitasking, flexibility, being open minded, team player, compassionate, empathetic, ability to process through a task analysis with students, creativity, and the Ability to collaborate with adults. Most challenging (2000-2014) to educate parents and convince them that the interventions in special education work and are very successful for children with special needs.
Participant 7	My strength in teaching is utilizing project-based learning activities because personally I feel most beneficial in my personal growth with these types of activates, so I paid more attention in doing these researches and wish my students could benefit from them as well. The most challenging part is still the classroom management.
Participant 8	I know the content well. I care about education. I am always trying to get better. Challenges: Burning out.
Participant 9	My strengths I bring to teaching is that I can come down to the level of my students. I build a good relationship with my students, and try to have fun with them whenever I can. I do my best to explain math as simple as possible, by building conceptual understanding, which helps they really understand the material they are learning.
Participant 10	I believe that one of my strengths is being able to empathize with new teachers because of the experiences I had in <i>AIMS</i> program. I feel that my experiences have helped me become a better mentor for teachers. The most challenging part of the teaching profession now (Curriculum Specialist) is funding enough professional development opportunities for the varied new teacher needs.

When asked what kind of additional support they had from family and friends, many participants mentioned their deep connections with other *AIMS* teachers and the support they provide each other. Some of the participants commented on emotional or financial support from family members. Several did not comment or provide any details about family support.

Table 9

Support from Family and Friends

Support Question: <i>What kind of additional support do you have from family or friends?</i>	
Participant 1	I am fortunate to be around good people.
Participant 2	Supportive family that is aware of the varying hours required for career.
Participant 3	The <i>AIMS</i> friends that are also educators, a few years after our cohort.
Participant 4	My family members are very supportive of education and I get positive feedback from them when I share my experiences or ask for guidance. I have a group of friends that were <i>AIMS</i> teachers as well and we have ongoing communication. We share ideas and information related to professional development etc.
Participant 5	I have less support from family than from friends. <i>AIMS</i> friends provide much needed emotional support to help me cope with challenges I share about work.
Participant 7	My family helped me financially as my income couldn't pay my tuition.
Participant 8	Emotional support, collaborating (from <i>AIMS</i> colleagues who are also friends), and ideas.
Participant 9	I'm a single mom and my parents help me. They also are very supportive when I want to attend a conference by watching my kids when I'm gone.
Participant 10	My family values education and the profession I'm in. I actually met some of my closest friends when I went through <i>AIMS</i> program. My friends and I share the same dedication and passion for the profession.

The use of research-based strategies was learned and practice by all. See Table 10 for details.

Table 10

Use of Research Based Strategies

<i>Strategies: How do you practice research-based instructional strategies and techniques?</i>	
Participant 1	I think it has been pretty well ingrained to me during my teaching experience. If I feel the need to, I may glance at a textbook, may do a Google search about different strategies. I don't know what I would do without Thinking Maps.
Participant 2	Through experiences in <i>AIMS</i> program and hands-on learning.
Participant 3	I embedded <i>AIMS</i> ideas into my lesson planning. I try to use various strategies and techniques from many different sources.
Participant 4	As a teacher, this is something that I do on a daily basis. For example during the day in my lesson I might include the following: objectives, cooperative learning, note taking, thinking maps, inquiry, scaffolding, direct instruction and developing high expectations for all students.
Participant 5	I use the positive behavior support strategies I learned in <i>AIMS</i> with students on a daily basis which helps with shaping pro-social behavior in students and with pre-academic skill acquisition.
Participant 6	Lesson plans, setting objectives, reinforcing effort/providing recognition, homework with no parent involvement with clear purpose, subject focused games, agenda of the daily plan for students, front loading vocabulary, Review/closure.
Participant 7	I collaborate with my <i>AIMS</i> colleagues and attend workshops and conferences to learn those research-based instructional strategies and techniques.
Participant 8	I try to incorporate as much/many of the strategies I learned in <i>AIMS</i> on a daily basis. For example, I always have students working/collaborating in groups. I try to be a facilitator as much as possible; students do more of the talking/teaching/investigating;
Participant 9	I try to attend conferences whenever possible as I like to be a lifelong learner. I scaffold the material for my students and try to use manipulatives whenever possible. I use sentence starters at times and use the "I do, we do, you do" method. I also try to utilize station teaching whenever possible.

Participant 10 I am currently out of the classroom and in a supportive role at the district office. I support and train special education teachers in applying research/evidence based practices. This involves implementing programs with fidelity, using reliable sources (i.e. those from *AIMS*) to find programs/strategies, and continuously review research.

Seven of the 10 participants use co-teaching strategies. One participant now shares the knowledge learned with other teachers. Participant 6 did not have a response for this question. Participant 3 and 8 just stated “yes” and Participant 2 responded “extremely.” These were not recorded in Table 11.

Table 11

Co-Teaching Strategies

Strategies Question: *Did you find co-teaching strategies learned in AIMS helpful?*

Participant 1	I don't do co-teaching, but giving student ownership in a positive manner is key.
Participant 4	Yes, I currently co-teach and I love it. I believe that the students benefit from having 2 teachers. Knowing that strategies helped me to know when to and how to utilize each other's strengths.
Participant 5	Yes, alternative teaching and station teaching have been helpful in my work.
Participant 7	The idea was great yet the school system that I am currently at couldn't support this happening.
Participant 9	Extremely helpful. I co-teach 2 periods with our Title 1 coordinator. In the class we do our best to utilize co-teaching strategies and differentiate based on students' needs.
Participant 10	Although co-teaching can be challenging as a teacher, it is one of the most life changing experiences. I now train on co-teaching as a special education service delivery option. I'm a strong proponent of collaborate teaching.

Several participants shared the advantage of co-teaching with the collaborative sharing of colleagues. Others commented that through co-teaching they were able to provide specific and meaningful support to promote student learning and achievement. Another commented on the ability to differentiate instruction. During the *AIMS* program the participants had the opportunity to try co-teaching with their mentors. They also learned about data collection and the various models of co-teaching (Karge, 2016).

Table 12

Process of Co-teaching

Strategies and Techniques Question: <i>How did the process of co-teaching strengthen the quality of your teaching?</i>	
Participant 1	Unfortunately, never tried in a professional setting. Definitely think the structure needs to be in place to be successful.
Participant 2	Improved the effective utilization of instructional assistants.
Participant 3	It was like a bridge to help me build my repertoire for teaching strategies.
Participant 4	I think that in general when students have access to 2 teacher they have a better rate of achievement. Co-Teaching allows for differentiated instruction to be in place and we can meet the needs of a larger group frequently within the classroom.
Participant 5	Co-teaching strengthened the capacity of myself and my co-teacher to provide specific and meaningful support to promote student learning and achievement.
Participant 6	N/A
Participant 7	I have practiced co-teaching only during my student teaching years. I was pretty much shadowing my mentor teacher and we practiced couple of co-teaching strategies. I found it interesting since the time went by fast and rewarding since we were able to be on the same page during the instruction and was able to reflect in

an effective way after the instruction. It's good to know there is co-teaching on top of the pedagogy.

Participant 8	I picked up strategies from master teachers that I now use. I saw the benefit of co-teaching on student learning and will use co-teaching in the future.
Participant 9	Co-teaching helped me learn how to work with other teachers in a classroom. I know how to utilize my aids for their intended purpose. Co-teaching with our title 1 coordinator has been so easy due to my training while going through the credential program at CSUF. We differentiate our instructions and have our students work in smaller groups. One of the classes that I co-teach is an intervention class. I have been using the strategies I learned throughout the program to help my students be successful.
Participant 10	Co-teaching allowed me to learn from my partner, become more familiar with Core curriculum, develop collaborative relationships with experienced teachers, and learn to support all learners (including GATE students).

As indicated, some districts are moving forward with implementation of co-teaching.

This question also connects back to the Program Assessment where several questions were asked about co-teaching. Because the *AIMS* scholar program was a program designed to train and support both general education and special education, the co-teaching piece was pivotal.

Similar to what is seen in many places in the country, response to intervention is not implemented in all of the schools at this time. Many are moving in this direction, which is why *AIMS* introduced the teachers in the program to the theory and rationale for supporting all students. Participant 6 did not choose to answer. The other responses are located in Table 13.

Table 13

Response to Intervention

<i>Strategies Question: Does Response to Intervention (RTI) guide and help you to meet your students' needs? Your district might now refer to this as Multi-tier intervention system (MTIS)</i>	
<hr/>	
Participant 1	At the high school level honestly, my focus is on always having the students have a positive mindset and being on the right track to graduate.
Participant 2	RTI and now MTSS has been present in all districts I have worked in and is more recently becoming universal in meeting the needs of all learners.
Participant 3	Not that I noticed. Your district might now refer to this as Multi-tier intervention system (MTIS).
Participant 4	Yes, knowing the different tiers and how use each intervention to help students who are struggling with either a skill or academic are has helped me to meet their needs.
Participant 5	Yes, it does
Participant 7	I am not that familiar with MTIS now. But the CSTP guideline that I did during my induction program did help me oversee my teaching performance, and it helped me reflect and improve for future practices.
Participant 8	Yes
Participant 9	Our school site does have an MTIS in place. If a student is struggling they are referred to go through the SST process (student study team plan) where the staff works closely with the student and family. We try to place these students in interventions like math lab, reading lab, guided studies, and/or study skills. If these interventions don't work we escalate these students to the next tier. I have found the student has to want to improve. If a student is not showing a desire to improve the interventions typically do not support my needs.

When asked what professional experiences the participants recalled as being the most beneficial and effective to their teaching practice (Table 14) student achievement and collaborative relationships rose to the top. The *AIMS* program provided support many of these teachers view as contributors to their person success in teaching and the impact they are making on their students. Participants 6 and 8 did not respond.

Table 14

Beneficial Professional Experiences

Strategies Question: <i>What professional experience do you recall as being the most beneficial and effective to their teaching practice?</i>	
Participant 1	When I first started in the <i>AIMS</i> program. The professors were so kind and positive that I felt that entering this profession would be enjoyable.
Participant 2	On-the-job training through <i>AIMS</i> supervisors.
Participant 3	Going to conferences and having other perspectives from other teachers from other districts.
Participant 4	The most beneficial experience I have had in my career is when I see student achievement gains. I feel that that feeling gives me a sense of accomplishment.
Participant 5	Attending early childhood professional development events have been beneficial in restoring my energy and engagement in my practice. The opportunity to hear from keynote speakers, network with fellow educators in the field, and participate in meaningful workshops have all helped to improve my practice.
Participant 7	The first teaching year with a great mentor was the most beneficial time for me since I was able to shadow my mentor and learned a lot of technique I knew it also applied to me for my future practices because I was lucky enough to choose my master teacher who happens to be as similar personality as me before I got assigned to him. Also, attending multiple conferences through the recommendation of <i>AIMS</i> also helped me grow as a better teacher.
Participant 9	I enjoy working with other teachers and collaborating on instructional strategies and methods to teach material to my

students. Allowing teachers to work collaboratively across disciplines is also helpful. This year we took the time to meet with our science department and we found a few units that overlap. We will be restructuring our units next year so that we teach the units simultaneously.

Participant 10

Having reliable mentors.

When asked the question, what aspect of the teacher professional relationships do you find the most appealing, all participants took time to reflect and share. The comments in table 15 clearly lead to student achievement and the feelings these participants have about making a difference in the lives of the students they work with. This group of participants was from very different districts and settings and yet the common tie here in their reflection is the ability to make a difference and support students learning and achievement.

Question 16 asked participants to describe a good day at their job. These comments were very similar to the themes beginning to emerge throughout the paper. Answers included how the students enjoyed the idea of making a difference, increasing students' academic awareness and the strong student relationships the teachers were experiencing with their students. The concept behind asking about a day at the job was twofold. The researcher was seeking to discover if the participant would respond with samples of items or strategies that were included in the *AIMS* scholar program initially or refer to research showing an extension to the work. Secondly, with the concept of mindfulness and reflection being so important and crucial to today's teachers the hope was that a good day would describe one who is reflective and who uses the prior knowledge and experience to enhance their teaching journey.

Table 15

Reflection

Feelings About the Profession Question: *What aspect of the teaching profession do you find most appealing?*

Participant 1	When students want to learn for learning's sake. I am around such ethical, hard working sped teachers as well so it makes me want to do good as well.
Participant 2	Through teaching and now administration I am still very reinforced by individual outcomes for students and families.
Participant 3	The "planting of seeds" and knowing that the students will grow later into amazing men and women. The relationships you build with the students and creating an environment of learning.
Participant 4	The best part of my job is the ongoing learning and often I learn from my students! I think I learn something new daily; teaching keeps my mind always asking questions and seeking information.
Participant 5	Working with young children. Experiencing the simple wonders of life through their eyes. Working with like-minded individuals.
Participant 6	Interacting with students one-on-one, small class sizes, helping others, collaborating with other teachers.
Participant 7	I teach adult students now. And the principal supported us to teach freely. As a result, I could design my own curriculum and pacing guide if it aligns with the standards. I love to be creative, and the school I am teaching now gives me the freedom to do so, and that's the main reason why I love my current job.
Participant 8	I am passionate about learning and education; the students who show growth, passion for math, and desire for learning.
Participant 9	Seeing the "ah ha" moment that students get when they understand the concept and why we do what we are doing. I also feel as though I am truly influencing these kids lives in a positive way. I am not only teaching them math but many life lessons as well.
Participant 10	I love having the opportunity to give back to the teacher profession by working with new teachers and provide coaching and training on a daily basis.

Table 16

A Good Day

Feelings About the Profession Question: <i>Tell me about a good day in your job.</i>	
Participant 1	Students being interested in a lesson I planned, I remembered to say all the things I wanted to say, that feeling that you know the students learned something that they can take away with them, and when applicable having an IEP where we are all on the same page and positive direction is set for student.
Participant 2	I am still very rewarded by the ability to talk with a parent and describe the services and supports we can put in place for a student. I recently had a student move in to the country from El Salvador where he had no formal education. He is excelling and finding community with his peers.
Participant 3	A good day is when the light goes on. When the students understand the things you are teaching and have a sense of initiation to struggle with mathematics for understanding.
Participant 4	I love when students learn, especially when I see them smiling. For me, a good day at work is when I teach a lesson and I see that the students got it. It can be teaching a concept or an activity but getting the feedback from them and knowing that they got it makes me feel very successful.
Participant 5	When a student approaches me to share a comment or invites me/ requests that I participate in an activity with them.
Participant 6	Students are attentive, learn the material and show interest in sign language. They are respectful to each other and other adults around.
Participant 7	I enjoy the moment when students finally get something. It could take them hours, or a day or two. But the moment when light bulb hits and they told me that they get it, it is the best moment of my teaching experience.
Participant 8	A good day is when students do well in their learning and they are motivated
Participant 9	When I see success in my support class. Seeing the students teach one another the material and seeing the joy in their eyes when they

score well on assessments. My support class consists of students that failed math last year. Seeing these students joy when they understand the material and when the score well on assessments truly makes my day!

Participant 10 A good day at the job is getting positive input/feedback from teachers after a training.

Participants were asked to discuss teaching experiences or experiences with children at this stage in their career. This was asked to determine if the participants were indeed making the impact needed for the impact stage (Fuller, 1969; Brown & Fuller, 1975; Moir, 1999).

Participant 5 did not respond. The other responses clearly include vocabulary one would expect from experienced teachers' self-perception of their work (See Table 17).

Table 17

Teaching Experiences

Teaching Experiences Question: <i>Discuss your teaching experiences or experiences with students or children so far?</i>	
Participant 1	It's been really good. For the most part, I have been around good students, parents, co-workers. Of course there are challenges with any job.
Participant 2	I have been a Teacher, Program Specialist, Site Principal, SELPA Director
Participant 3	I still am learning everyday about the profession.
Participant 4	My teaching experience is great so far, I can say that I am making a difference. I have a student with a significant disability in my class. This individual is included in Gen. Ed classes and seeing the progress and all the successes that this student has had makes me feel proud of myself. I think with inclusion in place students are building more a sense of community in the school setting.
Participant 6	I have had a very successful career working in Special Education for 14 years. I taught 2-4th grade students. I worked with students who were deaf, had Down syndrome, autism, and specific learning

disability. Often times children would arrive in my classroom angry, cussing, throwing chairs, refusing to work. Through the *AIMS* strategies of task analysis and behavioral contract I was able to teach the child how to learn and be an appropriate active participant in the classroom. By the time those angry, cussing, dangerous students left my classroom they were able to sit in their seats, finish assignments given to them and have a successful learning experience.

Participant 7	I create my own teaching material alongside with the learner's community with my students. I enjoy helping adult students majority coming out from immigration or high school dropouts pursuing their GED or HiSET, also I enjoy helping them achieve their college and career goals.
Participant 8	Mostly positive. This year has been tougher with the 9 th -grade students.
Participant 9	I have had a great experience teaching so far. The intrinsic rewards are so great. Some students have also written me thank you notes that have made my day. Knowing that I have made a difference in their lives and have made them change their opinion of math is all I need.

The qualitative interview data was coded and analyzed for themes. The analysis procedure was described in Chapter 3. Six themes emerged to demonstrate support strategies. The themes included (1) Individual Relationships, (2) Pedagogical Knowledge, (3) Teacher Perception of Their Perceived Competence, (4) Mentoring, (5) Professional Learning and (6) Reflection.

Survey Data

Using triangulation, it became apparent that the survey questions could be divided under the 6 themes. Table 18 has responses from 4 of the online survey questions related to individual relationships. The 24/7 hotline was the vision of the researcher many years ago at the beginning of the grant. The concept was that participants could call at any time and would get support

within 24 hours. One participant (1.35%) responded it was not effective, 2 (2.70%) indicated somewhat effective, 9 (12.16%) referenced the hotline as effective, and 36 (48.65%) noting the hotline feature was very effective. On-site visits and emails referred to coaching visits made by *AIMS* faculty or support emails sent to participants from *AIMS* faculty. Forty-two (57.78%) participants shared that the on-site visits were very effective and 56 participants indicated the emails were very effective (75.68%). At every monthly seminar participants spent time in time in job alike groups (persons who taught mathematics were all together, persons who taught special education were all together and persons who taught science were all together). This experience appeared to be effective for many. Sixteen (21.62%) reported it was effective, with 19 (25.68%) stating it was very effective and 26 (35.15%) indicating they did not participate. This was an optional time at the end of most *AIMS* sessions. These data are represented in Table 18.

Table 19 represents data related to pedagogical knowledge. Participants had the opportunity to attend Saturday seminar sessions on engagement strategies, accommodations and math/science seminars. The sessions often included job alike time where *AIMS* participants were grouped with teachers working in the same grade level or content area. These were taught by the *AIMS* faculty and/or mentor and were often co-taught. Over 50% of the respondents reported these experiences to be very effective with 52 (72.27%) stating engagement strategies were very effective, 38 (51.35%) sharing their appreciation for the accommodations seminars, and 46 (62.16%) gaining pedagogical knowledge through attendance at the math/science seminars. These data are reported in Table 19.

Table 18

Individual Relationships

	<i>Not Effective</i>	<i>Somewhat Effective</i>	<i>Effective</i>	<i>Very Effective</i>	<i>Did Not Participate</i>	<i>Unaware of this support</i>
<i>24/7 Hotline</i>	1.35%	2.70%	12.16%	48.65%	18.92%	8.11%
<i>On-site Visits</i>	2.70%	1.35%	16.22%	57.76%	13.51%	1.35%
<i>Emails</i>	1.35%	1.35%	13.51%	75.68%	0%	0%
<i>Job-Alike</i>	2.7%	1.35%	21.62%	25.68%	35.14%	5.41%

n=60

Table 19

Pedagogical Knowledge

	<i>Not Effective</i>	<i>Somewhat Effective</i>	<i>Effective</i>	<i>Very Effective</i>	<i>Did Not Participate</i>	<i>Unaware of this support</i>
<i>Engagement Strategies</i>	0%	0%	10.00%	72.27%	4.05%	2.70%
<i>Accommodations</i>	1.35%	4.05%	13.51%	51.35%	18.92%	2.70%
<i>Math/Science Seminars</i>	4.05%	1.35%	14.86%	62.16%	1.35%	8.11%

n=60

Table 20 represents the survey questions that related to professional learning opportunities. These included 2 sessions on co-teaching. Both were advanced sessions with the first focused around the idea of how to work collaboratively with the co-teacher, 50 ways to keep your co-teacher. The second was a panel of experts with many years of experience co-teaching in different settings. In both cases those who attended scored the professional learning sessions high. Forty five percent (n= 34) of the participants reported the 50 ways session was very

effective with 15 persons (20.27%) indicating the sessions were effective. Similarly, 36% (n=27) reported very effective feedback on the panel with 13 (36.49%) stating it was effective.

To support participants in learning more about the areas they work in and the significant poverty, the AIMS program invited participants to be a member of a seminar book club. A *Framework for Understanding Poverty* (Payne, 2005) discusses how people in poverty face challenges that many people who live in the middle to upper class have no idea about. The book is controversial in the field but yielded some excellent heart to heart discussions between the researcher and colleagues. Payne purports generational and situational poverty are different. Generational poverty is a term used when the person has lived at least 2 generations in the area. When families live in generational poverty they are challenged by not having the tools to move their families out of poverty (Jensen, 2009). Payne (2005) defines situational poverty is defined by a particular event such as a death, divorce or immigration. Situational poverty is temporary, as it is caused by a temporary event such as a health problem (Jensen, 2009). Chapters in this book were read and discussed in book report format. Thirty-nine participants (52.70%) indicated the book club was very effective and 16 (21.62%) stated it was effective.

Also in Table 20 are reported scores for the inclusion seminars, autism seminars and the autism conference. Each week the *AIMS* Scholars read online modules, viewed videotapes and participated in focused discussions about Autism. The faculty, staff and mentors attended the professional development sessions alongside their participants and provided ongoing support. An annual conference provided a unique opportunity to discuss perspectives on inclusion from both the general and special education teacher's perspective. These practices were viewed favorably. In the inclusion seminars 41 (55.41%) participants rated the seminars as very effective and 14 (18.92%) rated them as effective. The Autism seminars drew 43 (58.11%) to

mark very effective and 13 (17.57%) as effective. A strong 53 (71.62%) reported the Autism conference was very effective with an additional 5 (6.76%) viewing it as effective. These scores are very high and show the participants felt supported by these opportunities, illustrating the value of these seminars

Table 20

<i>Professional Learning Opportunities</i>						
	<i>Not Effective</i>	<i>Somewhat Effective</i>	<i>Effective</i>	<i>Very Effective</i>	<i>Did Not Participate</i>	<i>Unaware of this support</i>
	1	2	9	36	14	6
<i>50 ways to keep your co-teacher</i>	1.35%	1.35%	20.27%	45.95%	16.22%	6.76%
<i>Co-teaching panels</i>	1.35%	4.05%	17.57%	36.49%	25.68%	6.76%
<i>Poverty Book Club</i>	1.35%	4.05%	21.62%	52.70%	6.76%	5.41%
<i>Inclusion Seminars</i>	1.35%	2.70%	18.92%	55.41%	8.11%	5.41%
<i>Autism Seminars</i>	0%	2.7%	17.57%	58.11%	6.76%	5.41%
<i>Autism Conference</i>	1.35%	1.35%	6.76%	71.62%	10.81%	0%
<i>n=60</i>						

At the end of the survey there were opportunities for open-ended questions. These opened ended responses fell into the themes of perception of competence, mentoring and reflection. The theme perception of competence demonstrates the participants self-perception of teaching, skills and knowledge acquired from the *AIMS* program. Participants gave examples of their perceived competence in class management, inclusion practices, writing IEPs, teaching math, engagement of students, co-teaching strategies and lesson differentiation. Furthermore the participants commented on their abilities to apply common core thinking with project based

learning as well as their abilities to understand mental and emotional states of students. The samples of perceived competence are located in Table 21.

Table 21

Sample of Open-ended Responses Related to Perception of Competence

Participant 1	The <i>AIMS</i> program has really helped with the class management, inclusion practices, setting up group work and writing IEPs. The program has helped me teach math to use with my students.
Participant 2	The Saturday workshops have helped me better understand how to engage students in these topics.
Participant 3	Creating inclusive environments through different co-teaching strategies, effective classroom management to include all grouping strategies, and differentiation in lessons.
Participant 4	Working with students with special needs....understanding behind the theory of special needs....traditional credential programs do not cover these topics that every teacher needs.
Participant 5	The program has allowed me to initiate a full inclusion program....it provided guidance and advice on how to collaborate with general education teachers.
Participant 6	Curriculum guidance, best practices, finding modifications...the time during Saturday meetings with groups from my field of study gave me competence and a feeling I could do it.
Participant 7	How to differentiate instruction, accommodations and modifications, IEP writing, including goals, making math more visual and giving real world problems for the students.
Participant 8	<i>AIMS</i> helped me to focus on ways to co-teach with general educators. The program helped me to make science and math more concrete and interactive.
Participant 9	I am able to apply common core thinking with project based learning by integrating applied math/science.
Participant 10	I learned to better understand mental and emotional states of students....to incorporate more project-based learning.

There were many examples of how the program mentoring demonstrated support to the participants. The mentors provided a plethora of support in areas such as lesson planning, classroom visits, phone calls to quickly address concerns, resources and planning time. Mentors were skilled in IEP's and co-teaching and shared this knowledge with the participants. The sample statements are included in Table 22.

Table 22

Samples of Open-ended responses related to Mentoring

Participant 1	The support with preparing for job interviews, finding a job, and the year support while working has been so helpful!
Participant 2	Advice has been plentiful and instrumental in assisting me in my career.
Participant 3	AIMS gave me more than I ever could have imagined. I don't know how you could have supported me more!
Participant 4	The classroom visits/reflection...phone calls to quickly address concerns, co-teaching training with real co-teaching terms.
Participant 5	I learned how to collaborate with the other teachers...special education strategies, IEP training, interview practices, writing...
Participant 6	The phone call the night before my new job...I did not feel alone...the constant communication.
Participant 7	I received weekly content specific additional support per my requests. Mentors gave us some strategies and techniques to support students with special needs.
Participant 8	The staff and mentors have provided me with resources and planning time to better support students...helped apply and plan lessons in science and math as well as support in the classroom.
Participant 9	The openness of the mentors....the mentor/program support

The theme reflection was designated to imply teacher reflection of practice. The survey's provided a window into the analysis of what the AIMS program had given these participants to strengthen and support their professional growth. Participants reflected on resources, conference opportunities that led to specific learning's (i.e. Autism), the importance of peer support, and the depth of knowledge these participants perceived themselves to receive from the AIMS program. Samples of these reflections are located in Table 23.

Table 23

Samples of Open-ended responses related to Reflection

Participant 1	I was able to get resources, advice to help with honor's students with Tourette's. As a Math teacher I did not know much about Tourette's (prior to <i>AIMS</i>).
Participant 2	We were able to go to conferences and learn from others.... especially differentiation strategies.
Participant 3	The continuous learning, supportive staff, opportunities to attend many conferences/trainings.
Participant 4	I learned that English teachers can branch out to include science and math.
Participant 5	I learned to have a greater understanding of how to manage caseload and meet goals...how to focus math lessons more on conceptual understanding....some approaches to cooperating with teachers and co-teaching.
Participant 6	The peer support and moral support was invaluable! (It) helps to talk about experience with others going through the same experience.
Participant 7	The <i>AIMS</i> program helped me talk and share with others strategies for inclusion and behavior. The meetings and conferences were the best; especially the autism conference.
Participant 8	The modeled instruction, relevant conferences, professional development opportunities that applied to my subject area

This chapter provided the results from all data. The description, discussion, and interpretation of these results are described in Chapter 5.

CHAPTER 5: DISCUSSION AND CONCLUSIONS

The beginning teacher will have greater teaching successes if unified support is established (Karge, Lasky, McCabe & Robb, 1995). The *AIMS* Scholar program was designed to promote innovation and retention of well trained, highly qualified teachers working in hard-to-staff schools. This chapter will provide the discussion of findings, including sections on each theme, answers to the research questions, and recommendations for further research.

Discussion of Findings

The support provided to all of the teachers of record who received jobs while in the *AIMS* program clearly helped them remain in teaching. All 60 participants in this study have been teaching since they finished the *AIMS* Scholar program. A 100% success rate for teachers working in the field from 5-16 years is tremendous. There is no evidence to indicate *AIMS* was the only support available to them; however, from the participant interviews and open ended questions, there is evidence to suggest many attribute their success to the additional support given to them from the *AIMS* program.

Six themes emerged to demonstrate support strategies. The themes included (1) Individual Relationships, (2) Pedagogical Knowledge, (3) Teacher Perception of Their Perceived Competence, (4) Mentoring, (5) Professional Learning, and (6) Reflection. Each of the findings related to the theme provided evidence for the support strategy. These support strategies lead to student outcomes. Figure 17 provides a graphic of an umbrella. The researcher designed the concept of the umbrella with the intention that if a teacher is able to use all of these support strategies (the theme areas from this dissertation) they will experience success and potentially remain in teaching for many years to come.

Support Strategies Lead to Student Outcomes

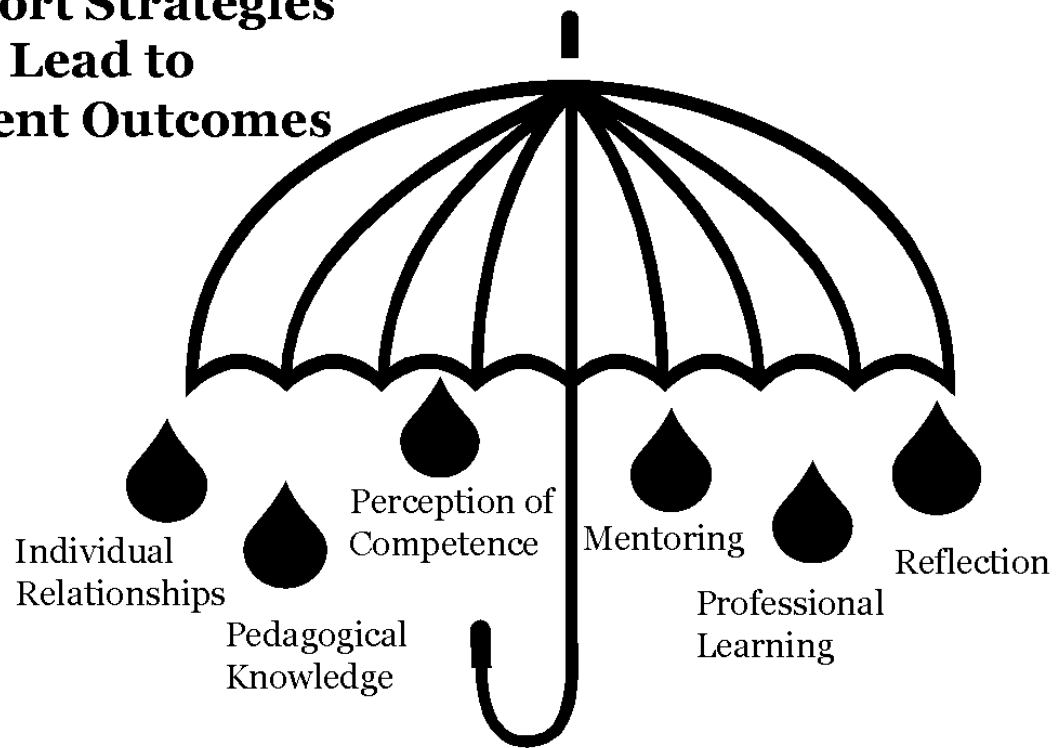


Figure 17. Support Strategies Lead to Student Outcomes (Reitman, 2018)

Individual Relationships

The kinds of support that the participants frequently reported receiving were individual support provided by the *AIMS* program staff, institutional district support, and family members who reached out to help them. Participants particularly mentioned the personal assistance they received in setting up their classrooms, in-class observations and support, frequent email messages and the 24/7 hotline. The 24/7 hotline was a 24 hours phone line participants were able to call at any time to get support. Support ranged from a challenge with a student, a parent communication issue, a relationship with a colleague, to lesson planning and writing IEPs. Sometimes just a listening ear was needed. Several *AIMS* staff members were mentioned by

name as being particularly helpful, and the participants exuded appreciation for this kind of help. Participant 10 shared, “The most beneficial professional experience was the rapport we developed with the *AIMS* faculty... and getting feedback from them.” Another participant wrote, “An *AIMS* faculty was the most influential professor in my career. Not only was she my professor but also a mentor whose opinion I valued and respected highly. Early on, she showed that she genuinely cared about my success and invested time to provide me with thoughtful feedback.”

Another kind of individual relationships that formed was the peer to peer relationships as in the group of participants there were mathematics, science and special education teachers. Participant 7 stated, “because *AIMS* was a mixed group of different experienced teachers, it helped the teacher adapt to the teaching world faster and smoother.”

Pedagogical Knowledge

The *AIMS* program provided pedagogical training in instruction and curriculum beyond what the participants received in their university courses or district professional development sessions. Many of the lessons revolved around mathematics and scientific explorations. Time was spent studying strategies that allow these lessons to address a very wide ability range. Participants witnessed strategies modeled and had the opportunity to practice strategies as well as study the theories of learning that support these strategies. The mentors attended the professional development sessions alongside their participants and provided ongoing support in this area.

When asked, *How do you practice research-based instructional strategies and techniques?* the results in Table 10 clearly demonstrate that the participants learned about research-based strategies and techniques, and are implementing these in their classrooms.

Participant 4 indicated, “As a teacher, this is something that I do on a daily basis. For example, during the day in my lesson I might include the following: objectives, cooperative learning, note taking, thinking maps, scaffolding, inquiry, direct instruction and developing high expectations for all students.” The teacher’s role in the inquiry classroom becomes less involved with direct instruction and more involved with modeling, guiding, facilitating, and continually assessing student work and growth. The teacher must make careful adjustments to the levels of instruction of the information gathered by that assessment. The teacher’s role is more complex including greater responsibility for creating and maintaining conditions in which students can build understanding. In this capacity the teacher is responsible for developing student ideas and maintaining the beginning environment (Bybee, 1989). Besides the process skills that the student must hone in the inquiry classroom, there are also skills a teacher must develop in order to support student learning of scientific ideas. Participant ten shared, “I support and train teachers in applying research/evidence-based practices. This involves implementing programs with fidelity, using reliable sources (i.e., those from AIMS) to find programs/strategies, and continuously review research”. These are concepts taught in the *AIMS* program. This statement demonstrates retention of concept and more importantly implementation into the profession on knowledge learned.

Table 19 reported that 82.27% of the participants agreed that the strategies were effective (10.00%) or very effective (72.27%). The strategies that were included were classroom supports suggested by Jonson (2002) for example, management and discipline, time management, classroom instruction, utilizing technology in the classroom, student engagement, building student motivation, and creating relationships with parents and colleagues. Stress reduction,

interpersonal and coping skills and techniques were pivotal, as participants indicated they had the tools necessary to be an effective educator and to remain in the profession.

Teacher Perceptions of Their Professional Competence

The researcher's perception was that all 10 of the participants interviewed were at the *impact* stage in their teaching as defined by Fuller (1969) and Fuller and Brown (1975). This meant these teachers were able to make meaningful social and educational impact on the system. For example, Participant 4 stated, "My teaching experience is great so far, I can say that I am making a difference. I have a student with a significant disability in my class. This individual is included in Gen. Ed classes and seeing the progress and all the successes that this student has had makes me feel proud of myself. I think with inclusion in place students are building more a sense of community in the school setting." Another example of a participant making an impact is in Participant 10's comment, "I believe that one of my strengths is being able to empathize with new teachers because of the experiences I had in *AIMS* program. I feel that my experiences have helped me become a better mentor for teachers. The most challenging part of the teaching profession now (Curriculum Specialist) is funding enough professional development opportunities for the varied new teacher needs."

Mentoring

Strong (2009) reported that the most significant support feature for teacher induction is sustained rigorous individualized support from an assigned mentor. This study revealed that sustained rigorous support was critical; however, the support did not have to come from one assigned mentor. In the case of the participants in this study, the support came from a federally funded partnership between a university and several school districts that provided several features of support in the early years teaching. These features of support enhanced each

participant's individual teaching and, according to their self-reflection and self-perceptions, were critical to their longevity in the field of teaching. It is believed that the benefits of mentoring written by Kortman and Honecker (2002) have been seen first-hand by the participants in the study. Kortman and Honecker (2002) recommend that the mentor work with the teacher to build the best practices in teaching and propel teacher effectiveness. They suggest the mentor help the mentee to create collaborative community. The mentor serves in the role of a guide on the side to fellow educators, creating a process of continual self-reflection and inspiring lifelong learning. The mentor-mentee relationship helped to create a positive effect on student success and to develop a renewed professional perspective for the mentor. This in turn validated the mentor's knowledge and skills and moved mentor to new role of teacher-educator. Table 7 has comments on mentoring. One participant stated, "Completely, I feel that making the time to work intensively with new teachers, not only helps average teachers become good, but good teachers also have the opportunity of becoming great. Teachers in general need to be in touch with someone that can guide and offer support when needed." This statement shows the depth of knowledge about mentoring represented by this participant.

Several participants indicated that they are currently serving as mentors. For example, one participant provided, "I believe that one of my strengths is being able to empathize with new teachers because of the experiences I had in *AIMS* program. I feel that my experiences have helped me become a better mentor for teachers." The participant continued, "The most challenging part of the teaching profession now (Curriculum Specialist) is funding enough professional development opportunities for the varied new teacher needs." These participants were taking what they learned and give back to the profession.

The *AIMS* mentors were trained to be positive, be accessible, and to spend time together with the mentee developing a relationship. The mentors learned how to build on the teacher educator relationships by being open and supportive and validating the challenge of teaching. The documentation was something the participants commented on and those who are now mentoring use these same practices.

Professional Learning

Teaching is a part of a wider community. Professional organizations offer journals, conferences, and materials that can enhance the new teacher's experiences the first year (Pelletier, 2006). The program these participants were enrolled in introduced them to all of these and demonstrated how to be a lifelong learner by surrounding the participant with passionate, caring professionals who modeled lifelong learning.

The most frequently mentioned kind of support the participants reported receiving from was the support received through professional development. These professional learning trainings included Saturday seminars, conferences and teaching materials that were provided in conjunction with the professional development. The participants consistently commented on the support in the areas of math, science, autism and collaboration. These are the 4 key areas (collaboration – inclusion) that the *AIMS* program was based on. It is a strong indicator when the participants identify all 4 unsolicited.

Autism is a disorder that has received increased attention in the public forum. In 2002, the Center for Disease Control and Prevention (CDC) estimated that autism affected about 1 in 150 children in the U.S. By 2012, the CDC's estimate had increased to 1 in 88 children in the U.S., which affects all racial, ethnic, and socioeconomic groups. In recent years there has been a consistent increase in the number of students with autism in general and special education

classes. When compared with the increase in California's special education population, the increase in the percentage of children with Autism is disproportionately high. This is one of the reasons the *AIMS* program focused on autism as one of the core professional learning areas (others were inclusion, math and science instruction).

Knowledge of Autism allowed the general education teachers to be more open to supporting children with Autism in their math and science classes. This *General/Special Collaborative: Autism, Inclusion and Evidence Based Practices Conference* was created to establish a format for teachers, administrators, families, and other professionals to gather and share knowledge and ideas to perpetuate life-long learning (Karge & Reitman, 2016). Originally the conference was supported by a grant from the U.S. Fed-NIH Public Health Conference Series to disseminate evidence based best practices for individuals on the Autism Spectrum. The conference continued as a self-supporting (several organizations team together to put on the conference) opportunity. Each year nationally recognized speakers provided key information to *AIMS* participants. The opportunity to hear these experts and implement their ideas was a benefit. The keynote speakers were videotaped and the links were available for review. Veteran staff developers found this to be a useful way to enhance scholarly application in the classroom (DuFour & Fullan, 2013).

Sample sessions included an overview of best-practice standards in the screening, assessment, and diagnosis of Autism Spectrum disorder, including a discussion of recent changes to established diagnostic criteria. A keynote speaker reminded the audience that the term “Evidence-Based Practices” (EBP) encompasses only those practices that have withstood rigorous testing, analysis, and review. Practices categorized as EBP have shown strong evidence of positive outcomes for students with disabilities (Karge & Reitman, 2016).

Another highly regarded topic that was explored during the *AIMS* professional learning sessions was poverty. As indicated in Table 20, 74.32% of the participants indicated the professional learning using the book on poverty was effective or very effective. Poverty impairs concentration and attention, reduces creativity, memory and cognition, and diminishes social judgment and social skills (Jensen, 2009). The participants learned that often the student channels the stress of poverty into disruptive behavior (e.g. impulsivity) at school. Furthermore, there is a greater incidence of issues related to health, including absences, tardiness and occurrences of illness during class.

The Payne (2005) readings assisted the teacher participants with skills needed in their classrooms to build appropriate discipline, support systems, relationships and instruction to improve achievement. Participants felt the Saturday seminars assisted with development of an understanding of how to work with students of poverty and how to establish high expectations for all students. They acknowledge the ideas from *AIMS* were used to help their students come to realize and understand that the teacher is a viable source of support and tools for their individual needs. Caring and trusting relationships built between teacher and student were critical, especially to those living in poverty (Budge & Parrett, 2018). These relationships developed increased student effort and built resilience and improved academic achievement.

Reflection

Reflection is going back from experiences a teacher has had and being able to step away and look at the evidence to enhance future practices. Every good teacher is able to reflect on his or her personal growth over time. Much of the data and information gathered related to teacher-student relationships, student achievement, and student outcomes. Reflection should ultimately be the goal of every teacher. Reflection provides an opportunity to apply situational meaning

and document learning (Jonson, 2002). Participant 4 stated, “The best part of my job is the ongoing learning and often I even learn from my students! I think I learn something new every day, and teaching keeps my mind always asking questions and seeking information.” Another responded that planting the seeds of knowledge in his students and building relationships with them were particularly important. Participants were asked to think back over their *AIMS* program experiences as a component of this study; but more importantly to reflect on what they learned from the program resources, conference opportunities, job alike meetings, professional development, and various program components. Reflecting back over tools used provided the participants with a means for making a commitment to modifications and enhanced collaborative experiences (Jonson, 2002). The participants reflected and facilitated the growth of each other.

Answers to Research Questions

Why do the teachers believe that the support given to them in early years helped them remain in the teaching profession? The participants were confident teachers and willing to share their stories and answer questions. They eagerly acknowledged they were in a special grant program and knew they received high quality training compared to many other educators. One respondent mentioned that the support and advice received through the teacher advisor, master teacher, and *AIMS* program were outstanding. Another mentioned that her desire to positively impact the lives of the students has helped her to continue in this profession. These responses show some of the reasons the teachers remained in the teaching profession as long as they have.

The participants in this study received support early in their careers. This support went above and beyond what is typically seen in induction programs. The participants were all assigned a mentor. Additionally, they also participated in a grant program where they received extra opportunities for professional learning, additional research-based strategies, math and

science ideas and a focus on inclusive practices. They experienced co-teaching first hand and were introduced to Response to Intervention in their early years of teaching. They had access to a cohort of professionals to reflect and grow with. An outside grant person, a person who was giving them feedback to enhance their teaching, observed these participants in their classrooms. The researcher of this study believes this is quality support and provided the participants with what Wayne et al. (2005) and Martin et al. (2016) termed comprehensive induction program support. This support is similar to what Karge and McCabe (2014) provided, and comparable this study, the retention rate of this group of participants was off the chart! Reports revealed 100% retention for all 60 teachers. Throughout the process of data collection and during the final interviews participants continually circled back to the feeling of collaboration and honor for being part of a program that supported their teaching in such an impactful way. The key to the “why” in this question goes back to the conceptualization of the initial program and the changes that enhanced the program; meaning the faculty and staff listened to areas of concern and the following month came back with training and research-based evidence to support these areas and enhance their teaching.

What professional experience does the teacher recall as being the most beneficial and effective to the teaching practice? This group of participants mentioned programs such as the AIMS grant as being especially important in their early development. One participant related that her relationship with her teacher advisor was very important in that she imparted to her a very useful philosophy of teaching. Several mentioned having a mentor as crucial to their development as educators. Also noted as being important were specific training sessions in areas such as child development and Autism. Institutional support from the school district and from principals was also important.

Conceptually many of the participants indicated they used what they learned and took the support provided as an avenue to better their personal career paths. In the participant group there were teacher leaders, including special education local planning area (SELPA) directors, curriculum coordinators, coaches, mentors, and support providers for new teacher induction. The professional experiences the teachers obtained are clearly different from their peers, as they had strong support and mentoring along their career paths. Ostovar-Nameghi and Sheikhabmadi (2016) discuss teacher isolation and the importance of having someone to voice a concern, talk through a challenge or just be there to listen. The *AIMS* program provided this opportunity for the participating teachers.

How does the teacher practice research-based instructional strategies and techniques?

The participants provided many examples of their self-reflection and self-perception of the use of research-based instructional strategies. The research confirmed this usage during the classroom observations. One participant mentioned that on a daily basis she incorporated the following into her daily lessons, including but not limited to objectives, cooperative learning, note taking, Thinking Maps (a set of graphic organizer techniques used in the classroom), scaffolding, direct instruction and developing high expectations for all students. These are all concepts taught while a member of the *AIMS* program. Another mentioned using guided language guided speech acquisition practice (GLGSP), a research-based strategy to support communication development. Several respondents mentioned attending workshops and seminars and being in the mindset of a lifelong learner.

What has been your experience with co-teaching? One participant noted that the students benefit from having 2 teachers. Another mentioned that co-teaching is one of the most life changing experiences. A third utilizes co-teaching strategies and differentiates their instruction

based on students' needs. For one, co-teaching was "like a bridge to help me build my repertoire for teaching strategies." One respondent was certain that her students positively benefited from having 2 teachers instead of one.

How does the focus on Response to Intervention/Multi Tier Intervention guide the teacher's differentiations for student needs? One teacher remarked that RTI and now MTSS (a multi-tiered system of support with a broader scope) have been present in all districts she has worked in and are more recently becoming universal in meeting the needs of all learners. Another said knowing the different tiers and how to use each intervention to help students who are struggling with either a skill or academic area has enabled him to meet student needs. One participant's school district is working to improve their MTSS framework to support all learners and identify evidence-based programs and strategies that will support learners.

When responding about whether RTI was important in day-to-day classroom management, the responses were mixed, with one participant in particular noting that "our District is working to improve our MTSS framework to support all learners and identify evidence-based programs and strategies that will support learners." Others did not feel RTI was an important part of their day-to-day planning. This may have been due to the district lack of RTI implementation and training.

Recommendations for Further Research

Personal factors such as burnout, perceived stress, and life/family changes should also be investigated as they are no doubt important in attrition rates among educational professionals. Several respondents in this study mentioned the importance of family support in their career success.

An area of future research could also include the need to determine if there are different factors affecting new teacher versus veteran teacher retention and change. Thus, there is a need to determine the salient variables related to teacher retention and change in the various stages of new teacher transition into the professional world of education.

Continued research into what promotes constructive professional relationships among beginning teachers and administrators would be a helpful addition to the field. Many times teacher evaluation is a stressful experience and educators are afraid to admit to administrations that they may need to learn a new teaching strategy or behavior technique. This research would also be applicable beyond the world of education in having business and group-dynamic applications.

Principals need to be trained on the same strategies as their teachers are. These administrators need to understand students with disabilities and the need to learn research based strategies and techniques to support these students (Karge & Lasky, 2009; Lasky & Karge, 2009). Once an administrator has knowledge of these techniques they can look for them during teacher observations and classroom walk through.

Another topic in need for future research is to explore how to better provide effective professional development and professional learning experiences to meet the expressed needs of teachers. Some of these needs might include specific professional learning opportunities for lesson planning, unit planning, classroom environment and management, organization and tricks for completing paperwork.

Future research might also seek to answer the question of how thoughtful and well-defined induction programs impact job satisfaction and a sense of self efficacy for beginning teachers. Additionally, it would be beneficial to investigate how high-quality mentoring, local

and district, could decrease stress and enhance retention of not only beginning teachers, but also those changing positions or locations during their career.

Future research could also include analysis of current supports at the school where they are employed, from their family and friends and/or from an assigned or appointed mentor. When continuous assessment is used as a foundation for evaluation of effective strategies, the result is teacher retention (McKee, Lucas, Francis, & McCain, 2007).

Expert mentors need to walk side-by-side with beginning teachers and support them at every step. As a resource, mentors should be able to help teachers acquire and master their teaching position. For example, the mentors should support the teachers with content related reflection (Kortman & Honaker 2002). Kortman and Honaker (2002) suggest using a journal for reflection between mentor and mentee. This could be emailed or written and left in a strategic place in the mentee's classroom.

It is critical for university teacher preparation programs that work in partnership with the university to bridge the gap between university preparation and the first years of teaching. The *AIMS* Scholar program was designed to enhance the journey of new teachers toward the impact level of development (Impact as defined by Fuller & Brown, 1975; Moir, 1999). The impact level is critical to student academic and social achievement, thus helping support beginning teachers to survive and thrive. It would be fascinating to continue to follow the participants in this study throughout their teaching careers.

This study was primarily based on teacher perceptions of teacher professional competence and their own performance in the classroom. There is a need to determine the relationship between teacher professional competence as measured by student achievement, student self-esteem, and parent perceptions of teacher competence as they relate to attrition.

Conclusion

The purpose of this mixed methods research study was to discover what the significant support strategies were that helped teachers remain in teaching. Sixty teachers provided insight and depth to their teaching journey. This dissertation concludes that there are 6 themes emerging from the data that must be present for teachers to remain in the profession. These themes include individual relationships, pedagogical knowledge, teacher perceptions of professional competence, mentoring, professional learning, and reflection. The suggestion gleaned from this dissertation research is that these support strategies should be introduced early in a teacher's career to ensure they remain in the teaching field. The responses of the participants confirm that this early support was key to their remaining in the profession. Support must be provided beginning on the first day of teaching and continued until the teacher is able to demonstrate they reached the impact level in all 6 areas. Additionally, when a grade level change is made or a teacher moves to another school, the process of support should begin again.

The conclusions of this study confirm Chapman's 1984 findings that retention is related to factors beyond the influence of teacher preparation programs or school site administrators. The *AIMS* program provided these participants with the support described in the 6 themes; it can be inferred that these themes, when implemented with fidelity, will result in retention of teachers.

Summary

This study was primarily based on teacher perceptions of teacher professional competence and their performance in the classroom. The *AIMS* Scholar program was designed to enhance the journey of new teachers toward the impact level (Fuller & Brown, 1975; Moir, 1999) of development. The participant impact level was important to ensure that teachers

remained in the profession and that students succeed academically and socially, thus helping support novice teachers to survive and thrive. Years after participation in the program, the researcher went back and contacted the teachers. All had been teaching 5-16 years and attributed the support provided in the program key to their success and retention in the teaching profession.

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APPENDIX A

The Hawthorne Evaluation Scale

TO ADMINISTRATOR: Rate the teacher on every item using the quantifiers (1-5) provided. Base ratings on your observations or professional knowledge of the teacher's behavior or skill.

DOES NOT DEMONSTRATE THE BEHAVIOR OR SKILL	IS DEVELOPING THE BEHAVIOR OR SKILL	DEMONSTRATES THE BEHAVIOR OR SKILL INCONSISTENTLY	DEMONSTRATES THE BEHAVIOR OR SKILL MOST OF THE TIME	DEMONSTRATES THE BEHAVIOR OR SKILL AT ALL TIMES (CONSISTENTLY)
1	2	3	4	5

MANAGEMENT OF STUDENT BEHAVIOR

<input type="checkbox"/> 1. Maintains a positive classroom environment (e.g., praises, interacts spontaneously with students, maintains positive rapport, etc.)	<input type="checkbox"/> 6. Maintains control of student behavior in the classroom (e.g., classroom is orderly, students are actively involved in learning, etc.)
<input type="checkbox"/> 2. Maintains classroom in accordance with the school system's code of conduct (e.g., conveys rules in written or verbal form, enforces rules, etc.)	<input type="checkbox"/> 7. Provides general supervision throughout the school (e.g., hallways, cafeteria, buses, playground, etc.)
<input type="checkbox"/> 3. Reinforces/rewards appropriate social and academic behavior in the classroom (e.g., congratulates and acknowledges student progress, success, etc.)	<input type="checkbox"/> 8. Demonstrates a positive professional attitude toward students (e.g., treats students with respect, remains objective and positive when dealing with student problems, grading, etc.)
<input type="checkbox"/> 4. Prevents behavior problems by intervening early (e.g., maintains mobility in the classroom, interacts with students, redirects student attention to tasks, etc.)	<input type="checkbox"/> 9. Organizes classroom efficiently to meet educational needs of students (e.g., floor plan, materials, equipment, etc.)
<input type="checkbox"/> 5. Responds to student needs in the classroom (e.g., communicates with students to maintain academic productivity, attends to raised hands, etc.)	<input type="checkbox"/> 10. Has reasonable expectations for student behavior (e.g., accepts normal developmental behavior patterns, overlooks inconsequential behaviors, etc.)

PROFESSIONALLY RELATED

<input type="checkbox"/> 11. Takes part in professionally-related extracurricular activities (e.g., PTA, faculty meetings, parent conferences, inservice meetings, IEP meetings, etc.)	<input type="checkbox"/> 17. Is able to solve professionally-related problems independently (e.g., student-related, peer-related, equipment/supply-related, physical plant, other personnel, etc.)
<input type="checkbox"/> 12. Maintains professional behavior (e.g., professional interaction with students, confidentiality, professional ethics, etc.)	<input type="checkbox"/> 18. Accepts evaluation and redirection and makes necessary changes or adjustments
<input type="checkbox"/> 13. Performs necessary clerical responsibilities (e.g., attendance records, lesson plans, report cards, IEP writing activities, lunch money, etc.)	<input type="checkbox"/> 19. Accepts change in a positive professional manner (e.g., implements new programs and policies, is willing to accept decisions made by others, etc.)
<input type="checkbox"/> 14. Is in attendance and prompt	<input type="checkbox"/> 20. Remains current in the educational field through course work, inservice activities, professional literature, conferences, workshops, etc.
<input type="checkbox"/> 15. Reports student performance effectively to family or guardians (e.g., report cards, written reports, parent conferences, etc.)	<input type="checkbox"/> 21. Follows school system's policies and procedures
<input type="checkbox"/> 16. Maintains positive professional interactions with other educational personnel (e.g., cooperates, shares information, works as a team member, etc.)	

DOES NOT DEMONSTRATE THE BEHAVIOR OR SKILL	IS DEVELOPING THE BEHAVIOR OR SKILL	DEMONSTRATES THE BEHAVIOR OR SKILL INCONSISTENTLY	DEMONSTRATES THE BEHAVIOR OR SKILL MOST OF THE TIME	DEMONSTRATES THE BEHAVIOR OR SKILL AT ALL TIMES (CONSISTENTLY)
1	2	3	4	5

INSTRUCTIONAL

- | | |
|--|---|
| <input type="checkbox"/> 22. Individualizes instruction for students with varying abilities (e.g., students with learning or behavior problems or those who are gifted and talented).
<input type="checkbox"/> 23. Maintains student attention (e.g., involves students in instructional activities by calling on them, encourages participation, uses motivational techniques, etc.).
<input type="checkbox"/> 24. Uses a variety of assessment techniques when evaluating learning or skill development (e.g., written, verbal, performance-based, criterion-referenced, etc.).
<input type="checkbox"/> 25. Designs assessment techniques to measure student knowledge or skills related directly to curriculum goals and objectives.
<input type="checkbox"/> 26. Calls attention to the needs of students with learning or behavior problems (e.g., communicates with parents and administrators, seeks help, makes referrals, acts as a resource for parents, etc.).
<input type="checkbox"/> 27. Provides additional time beyond the regular schedule for students in need of assistance.
<input type="checkbox"/> 28. Demonstrates appropriate academic planning (e.g., develops plans in advance of scheduled activities, plans activities that reflect goals and objectives, carries out and follows the planned instructional routine, etc.). | <input type="checkbox"/> 29. Is able to deliver directions, explanations, and instructional content in a manner understood by students.
<input type="checkbox"/> 30. Demonstrates knowledge of subject area(s) through instructional practices.
<input type="checkbox"/> 31. Prepares in advance for substitute teacher (e.g., lesson plans, student assignments, classroom activities, etc.).
<input type="checkbox"/> 32. Makes use of school-related resources (e.g., other teachers, counselors, administrators, consultants, etc.).
<input type="checkbox"/> 33. Uses assessment information to provide students with feedback which is corrective and informative.
<input type="checkbox"/> 34. Facilitates student learning by supplementing regular curriculum materials with a variety of instructional materials and activities (e.g., media, field trips, demonstrations, related materials, etc.).
<input type="checkbox"/> 35. Is objective and consistent in student evaluation (e.g., quizzes, tests, reporting grades, etc.). |
|--|---|

Rating Summary

Subscales	Ratings				Raw Scores	Standard Scores
Management of Student Behavior	1. _____ 5. _____	2. _____ 6. _____ 9. _____	3. _____ 7. _____ 10. _____	4. _____ 8. _____	<input type="checkbox"/>	<input type="checkbox"/>
Professionally Related	11. _____ 15. _____ 19. _____	12. _____ 16. _____ 20. _____	13. _____ 17. _____ 21. _____	14. _____ 18. _____	<input type="checkbox"/>	<input type="checkbox"/>
Instructional	22. _____ 26. _____ 30. _____	23. _____ 27. _____ 31. _____ 34. _____	24. _____ 28. _____ 32. _____ 35. _____	25. _____ 29. _____ 33. _____	<input type="checkbox"/>	<input type="checkbox"/>
Sum of Subscale Standard Scores _____						
Quotient _____						
Percentile _____						

APPENDIX B

Classroom Performance Evaluation Scale

District _____ School _____

Visit # _____ Date _____ Grade _____

Level _____ Subject/Topic of Lesson _____

_____ Time _____

Check one: Whole Class ____ Small Group ____ One on One ____ Co-Teaching ____

TPE	CSTP	Rating
ESTABLISHING A LEARNING SET	PLANNING INSTRUCTION & DESIGNING LEARNING EXPERIENCES FOR ALL STUDENTS	1 non-observed 2 demonstrate needs improvement 3 good 4 excellent 5 exemplary
(5-a) presents lesson objectives orally and with writing/posting on board.	(4.2) establishing and articulating goals for student learning	1 2 3 4 5
(4-b) provides rationale for lesson	(4.3) developing and sequencing long-term and short-term instructional plans to support student learning.	1 2 3 4 5
(9-c) relates lesson to previous lesson		1 2 3 4 5
(9-d) presents problem to be solved		1 2 3 4 5
(8-e) relates material to student interests providing examples relating to real-life experiences	(1.2) connecting learning to students' prior knowledge, backgrounds, life experiences, and interests	1 2 3 4 5
	(2.1) promoting social development and responsibility within a caring community where each student is treated fairly and respectfully.	1 2 3 4 5

(1-b) subject-specific pedagogical skills for single subject teaching assignments	(3.1) demonstrating knowledge of subject matter academic content standards	1	2	3	4	5
	(1.6) monitoring student learning and adjusting instruction while teaching	1	2	3	4	5
	(4.4) planning instruction that incorporates appropriate strategies to meet the learning needs of all students.	1	2	3	4	5
LESSON DESIGN AND LESSON DEVELOPMENT	UNDERSTANDING & ORGANIZING SUBJECT MATTER FOR STUDENT LEARNING	1 non-observed 2 demonstrate needs improvement 3 good 4 excellent 5 exemplary				
(10-a) starts class promptly		1	2	3	4	5
(10-b) has material ready (books, handouts, powerpoint, etc.)	(3.3) organizing curriculum to facilitate student understanding of the subject matter	1	2	3	4	5
(2-c) relates teacher input to lesson objective		1	2	3	4	5
(4-d) emphasizes key points (vocabulary words, game rules, etc.)		1	2	3	4	5
(5-e) keeps students alert and accountable	1. using knowledge of students to engage them in learning	1	2	3	4	5
(4-f) models task or activity		1	2	3	4	5
(4-g) provides guided practice before independent practice		1	2	3	4	5

(4-h) provides corrective feedback and/or redirecting students, adapting/modifying instruction as well as examples	(3.2) applying knowledge of student development and proficiencies to ensure student understanding of subject matter	1	2	3	4	5
(4-i) provides internal and concluding summaries		1	2	3	4	5
	(3.5) using and adapting resources, technologies, and standards-aligned instructional materials, including adopted materials, to make subject matter accessible to all students	1	2	3	4	5
<hr/>						
TEACHING STRATEGIES	ENGAGING & SUPPORTING ALL STUDENTS IN LEARNING	1 non-observed 2 demonstrate needs improvement 3 good 4 excellent 5 exemplary				
(1-a) ensures that strategies are appropriate for objectives	(1.4) using a variety of instructional strategies, resources and technologies to meet students' diverse learning needs.	1	2	3	4	5
(4-b) accommodates different learning styles	(4.5) adapting instructional plans and curricular materials to meet the assessed learning needs of all students.	1	2	3	4	5
(7-c) makes instructional adaptations for 1 st & 2 nd language groups	(4.1) using knowledge of students' academic readiness, language proficiency, cultural background, and individual development to plan instruction.	1	2	3	4	5
(5-d) allows students time to respond/asking questions at different levels	(1.5) promoting critical thinking through inquiry, problem solving, and reflection	1	2	3	4	5

(6-e) probes for clarification/elaboration	(3.4) utilizing instructional strategies/appropriate to the subject matter	1	2	3	4	5
(4,6t) presents material in a logical sequence (concrete to abstract, simple to complex)		1	2	3	4	5
(7-g) provides comprehensible input for all levels of EL/implementation & reinforcement of IEP goals and skills	(3.6) addressing the needs of EL & students with special needs to provide equitable access to the content	1	2	3	4	5
<hr/>						
TEACHER-STUDENT COMMUNICATION & INTERACTION	ENGAGING & SUPPORTING ALL STUDENTS IN LEARNING	1 non-observed	2 demonstrate needs	3 good	4 excellent	5 exemplary
(10-a) provides clear & concise direction		1	2	3	4	5
(7-b) uses vocabulary appropriate for learners including EL	(1.3) connecting subject matter to meaningful, real-life contexts.	1	2	3	4	5
(12-c) communicate orally and in writing without errors (provide examples)		1	2	3	4	5
(11-d) supports verbal messages with non-verbal communication		1	2	3	4	5
(11-e) demonstrates enthusiasm: gestures, facial expressions, smiles		1	2	3	4	5

CLASSROOM CLIMATE & LEARNING ENVIRONMENT	CREATING AND MAINTAINING EFFECTIVE ENVIRONMENTS FOR STUDENT LEARNING	1 non-observed demonstrate needs improvement 3 good 4 excellent 5 exemplary
(10-a) establishes positive business-like climate	(2.6) employing classroom routines procedures norms and supports for positive behavior to ensure a climate in which all students can learn	1 2 3 4 5
(5-b) encourages slow & reluctant learners		1 2 3 4 5
(11-c) build positive self- concept	(2.3) establishing and maintain learning environments that are physically, intellectually and emotionally safe	1 2 3 4 5
(11-d) encourages cooperation provides positive feedback and /or redirects students, reminding students about rules, behavior expectations and classroom routines/conduct	(2.5) developing, communicating, and maintaining high standards for individual and group behavior	1 2 3 4 5
(5-e) communicates high expectations regardless of gender, culture, socioeconomic status and/or ability level.	(2.4) creating a rigorous learning environment with high expectations and appropriate support for all students	1 2 3 4 5
	(2.2) creating physical or virtual learning environments that promote student learning reflect diversity and encourage constructive & productive interactions among students	1 2 3 4 5

USE OF CLASSROOM TIME	CREATING AND MAINTAINING EFFECTIVE ENVIRONMENTS FOR STUDENT LEARNING	1 non-observed demonstrate needs improvement excellent	2 3 good 4 5 exemplary
(5-a) involves high percent of learners on task		1	2 3 4 5
(5,6-b) involves lesson at brisk pace with about 75% student success	(2.7) using instructional time to optimize learning	1	2 3 4 5
(10-c) uses routines for recurring events		1	2 3 4 5
(10-d) accomplishes transitions quickly & efficiently (list various strategies/techniques used)		1	2 3 4 5

APPENDIX C

Program Assessment

Demographics

Grade/Subject/Job Title:

School of Employment:

District of Employment:

How many years have you been teaching?

Credential Type (Circle all that applies)

Early Childhood Mild/Moderate Moderate/Severe Math Science

Program Support

1. Did you find the professional development on accommodations to be?

Not Effective	Somewhat Effective	Effective	Very Effective	Did Not Participate/Unaware of this support
1	2	3	4	0

2. The Saturday seminars on inclusion were:

Not Effective	Somewhat Effective	Effective	Very Effective	Did Not Participate/Unaware of this support
1	2	3	4	0

3. Did you find the 24/7 hotline:

Not Effective	Somewhat Effective	Effective	Very Effective	Did Not Participate/Unaware of this support
1	2	3	4	0

4. On-Site visits by program staff were:

Not Effective 1	Somewhat Effective 2	Effectiv e 3	Very Effective 4	Did Not Participate/Unaware of this support 0
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5. Emails from Project Staff were:

Not Effective 1	Somewhat Effective 2	Effectiv e 3	Very Effective 4	Did Not Participate/Unaware of this support 0
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6. Did you find the engagement strategies sessions to be

Not Effective 1	Somewhat Effective 2	Effectiv e 3	Very Effective 4	Did Not Participate/Unaware of this support 0
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7. How effective were the co-teaching panels?

Not Effective 1	Somewhat Effective 2	Effectiv e 3	Very Effective 4	Did Not Participate/Unaware of this support 0
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8. 50 ways to keep you co teaching session was:

Not Effective 1	Somewhat Effective 2	Effectiv e 3	Very Effective 4	Did Not Participate/Unaware of this support 0
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9. During the Saturday session, the Job-Alike small groups were:

Not Effective 1	Somewhat Effective 2	Effectiv e 3	Very Effective 4	Did Not Participate/Unaware of this support 0
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10. Do you believe the support that was given to you helped you remain in the teaching profession?

Not Effective 1	Somewhat Effective 2	Effectiv e 3	Very Effective 4	Did Not Participate/Unaware of this support 0
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Strategies and Techniques

11. Learning about the research-based instructional strategies and techniques were:

Not Effective 1	Somewhat Effective 2	Effectiv e 3	Very Effective 4	Did Not Participate/Unaware of this support 0
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12. Was learning about autism during seminars helpful?

Not Effective 1	Somewhat Effective 2	Effectiv e 3	Very Effective 4	Did Not Participate/Unaware of this support 0
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13. How did the autism conference strengthen the quality of your teaching?

Not Effective 1	Somewhat Effective 2	Effectiv e 3	Very Effective 4	Did Not Participate/Unaware of this support 0
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14. Did the discussion of the Ruby Payne book during seminar strengthen your ability to work with high need students?

Not Effective 1	Somewhat Effective 2	Effectiv e 3	Very Effective 4	Did Not Participate/Unaware of this support 0
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15. How effective were the math and science seminars?

Not Effective 1	Somewhat Effective 2	Effectiv e 3	Very Effective 4	Did Not Participate/Unaware of this support 0
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This survey was submitted to the Institutional Review Board (IRB) for approval

APPENDIX D

Qualitative Interview Questions

Hello, I am Galit Reitman. I am a doctoral student who, during research for my dissertation, will be reflecting with teachers who were highly supported in their first years of teaching. I am exploring what strategies helped them remain in the profession. I would appreciate your input. Your responses will be used anonymously.

Support

1. Do you believe the support that was given to you helped you remain in the teaching profession?
2. What professional experience do you recall as being most beneficial in your practice?
3. Who do you recall as being most helpful to you in your early career?
4. Do you feel you received enough support in the early stages of your career?
5. Do you think mentoring is crucial to the development of new teachers?
6. Discuss the strengths you bring to teaching and what you expect to be most challenging?
7. Do any of these strengths come from prior work experience?
8. What kind of additional support do you have from family or friends?

Strategies and Techniques

9. How do you practice research-based instructional strategies and techniques?
10. Did you find the co-teaching strategies learned in *AIMS* helpful?
11. How did the process of co-teaching strengthen the quality of your teaching?
12. Does Response to Intervention (RTI) guide and help you to meet your students' needs?

Your district might now refer to this as Multi-tier intervention system (MTIS).

13. Is RTI (MTIS) important in your day-to-day classroom management?

14. What professional experience does the teacher recall as being the most beneficial and effective to their teaching practice?

Feelings About the Profession

15. What are the best parts about your job? (i.e. What aspect of the teaching profession do you find most appealing?)
16. What are the worst parts about your job?
17. Describe a day in your job that was difficult.
18. Tell me about a good day in your job.
19. Where do you see yourself in 5 years from now? Ten years?

Demographics

20. What class, subject, and grade level do you teach?
21. School/institution where you currently work.
22. When did you start in the teaching profession?
23. Discuss your teaching experiences or experiences with students or children so far?
24. **Male** _____ **Female** _____ **Ethnicity** _____
25. Anything else about you that you would like to share with us?

Code Name: _____ Date: _____

Interviewer: Galit Reitman

APPENDIX E

Informed Consent



Dear Past AIMS and/or ON Track Participant,

It is difficult to believe it has been 5 years (or more) since you entered the Transition to Teaching program and began teaching. Currently I am working on my Doctorate at Concordia University Irvine. I need your assistance! During research for my dissertation I will be reflecting with teachers who were highly supported in their first years of teaching. I would appreciate your input. Your responses will be used anonymously. Your answers will be kept confidential and the researcher will not be able to designate any participant to a specific set of answers. You do not have to participate in this study and you can stop participating in the study at any time. It is not expected that the survey will cause distress or discomfort; however, if at any time you feel uncomfortable, please feel free to stop responding to the survey and turn it in via the envelope. Your participation will help provide data for a research study that is studying teacher retention and what strategies helped them remain in the profession.

Once again, I would like to remind you that your responses to this study are confidential. In the future, follow-up interviews will be conducted and your participation would be appreciated. On the last page INFORMED CONSENT FORM you will find a signature line. If you are willing to participate in an interview at a later date, please put an sign on the appropriate line. Keep the page separate from your responses. If you have any questions, please feel free to contact the researcher at galit.reitman@eagles.cui.edu or my faculty advisor, Dr. Belinda Karge, Belinda.Karge@cui.edu .

Thank you

Galit Reitman

INFORMED CONSENT

The study in which you are being asked to participate is designed to investigate a teacher's perspective regarding preschool student's school readiness and parent involvement. This study is being conducted by Galit Reitman, under the supervision of Dr. Belinda Karge, Professor in the School of Education, Concordia University, Irvine. This study has been approved by the Institutional Review Board, Concordia University Irvine, in Irvine, CA.

PURPOSE: The purpose of this study is to examine the factors that lead teachers to remain in the profession and what support they considered helpful/beneficial

DESCRIPTION: You are being asked to fill in a survey that asks some questions about your experience with the Transition to Teaching program. You may also be asked to participate in a follow-up interview.

PARTICIPATION: Your participation is completely voluntary and you may opt out of participation at any time.

CONFIDENTIALITY OR ANONYMITY: Your identity will remain anonymous. Neither the district's name nor school name will be reported. The findings, reported in my doctoral dissertation, will simply say that data was collected from past teachers from the Transition to Teaching program. All data, recordings, and findings will be stored either in a locked file, or in the researcher's private computer that is protected by security software and passwords. All records will be destroyed by May 1, 2019.

DURATION: The researcher plans to conduct a survey and follow up interviews. The entire data collection phase should last from October, 2017 - October 31, 2018. The survey should take about 15 minutes to complete, but follow-up interviews will take no longer than 30 minutes.

RISKS: If at any time you feel uncomfortable, please let the researcher know and discontinue participation if appropriate.

BENEFITS: This project will help elucidate the factors that teachers consider important in their choice to remain in the teaching profession, as well as the significance of support they received.

AUDIO: Consent form will be given to participant

CONTACT: For questions about the research or the survey process, please feel free to contact Galit Reitman anytime at (714) 209-6041 or at galit.reitman@eagles.cui.edu

RESULTS: The results of this study will be published in the researcher's doctoral dissertation at Concordia University Irvine.

CONFIRMATION STATEMENT:

I agree to participate in the research study described by completing the Likert scale

SIGNATURE:

_____	_____	_____
Print Name	Signature	Date

_____ **Yes, I am willing to participate in an interview at a later date.**

_____ **No, I would rather not participate.**

APPENDIX F

NIH Certificate of Completion

