Investing in Teacher Support Leads to Teacher Retention

Six Supports Administrators Should Consider for New Teachers

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Introduction

In California during the 1990s and early 2000s, policy makers created a system of support for first-year teachers. They focused on increasing teacher effectiveness, reducing attrition, and improving 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 1992–1993 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-year 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 Commission on Teacher Credentialing, 2014).

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 program was the formation of the group of experienced teachers 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 of teaching. These support providers are 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 move toward mastery of a profession.

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 could make the decision to use funds to maintain the program or cut it.

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 been newly hired teachers being left on their own to initiate and execute reflective interventions for purposes of their professional improvement.

California legislation (SB 1422) still requires the new teacher to have two-year period of induction prior to obtaining his or her clear credential; however, there is no funding to back this legislation (Moir, 2015). Research has demonstrated that 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 to help teachers to remain in the teaching profession?*

Purpose of the Study

The purpose of this grounded research study was to discover the significant supports that help teachers remain in teaching. The researchers surveyed 60 teachers and interviewed 10 teachers who received significant support in the first years of their teaching experience.

The researchers were interested in knowing if the level of assistance and support enhanced the teachers' 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 of service remain pivotal in their later years of teaching?

Research Questions

The following primary research questions were explored with teachers working in the teaching profession for more than 10 years.

- Why does the teacher believe the support given to him or her in early years of service helped him or her remain in the teaching profession?
- What professional experience do teachers recall as being the most beneficial and effective to their teaching practice?

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Significance of the Study

This study adds 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 (lesson planning, cultural diversity, differentiation) during the first five 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 two years of teaching (Strong, 2009).

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.

Teacher Shortage

Since the mid-1970s, researchers have warned about the impending shortage of teachers qualified and willing to teach in the nation's K–12 public school system (Murname, Singer, Willet, Kemple, & Olsen, 1991; Murname & Steele, 2007). Teacher shortages, increasing numbers of English language learners, low-performing urban schools, and the rising enrollment of students with disabilities and other special needs are just some of the factors that make 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, while recent graduates with general teaching credentials in elementary education find employment opportunities scarce.

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 report 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.

Benjamin (2016) reported 98% of the school districts in the United States have shortages of science teachers. According to Eggers and Calegari (2011), 46% of teachers nationwide quit before their fifth year. Eggers and Calegari suggest this is directly associated with lack of appropriate preparation. Teacher turnover is costly to the United States; it is estimated that more than $7 billion is spent on teacher turnover annually (Aaronson, 1999; Eggers & Calegari, 2011).

The education field struggles to maintain high-quality teachers in high-poverty areas; according to O'Connell, 10% leave each year (Futernick, 2007). He suggested that if California is serious about ending the student achievement gap, there needs to be a way to ensure all students have highly competent, skilled, and knowledgeable teachers.

Teacher shortages in special education, math, and science are widespread and chronic and have increased in severity since the mid-1980s in the U.S. (Karge, Glaeser, Sylva, Levine, & Lyons, 2006; Sindelar, Brownell, & Billingsley, 2010; Tyler & Brunner, 2014). Human capital experts advocate for teacher recruitment and retention strategies to enhance the offset of teacher shortages (Beteille, Kalogrides, & Loch, 2009).

Teacher Retention

In a review of data from the Every Student Succeeds Act (ESSA), Sherratt (2017) expounded upon the top concepts related to teacher retention. Of the studies related to teacher retention, the majority utilized intact groups of teachers and determined teachers needed to feel supported to remain in the classroom (e.g., Kaden, Patterson, Healey, & Adams, 2016; Karge & McCabe, 2014).

Karge and McCabe (2014) surveyed 124 California State University (CSU) alternative route (intern) program participants from two different CSU programs. Ten critical program features from other studies were identified: 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 teacher certification programs resulted in enhanced retention rates of the graduating interns as well as improvement in quality of teaching. 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 (Billingsley & Cross, 1991; Brownell & Smith, 1992; Karge et al., 1995).

Gore (2008) explored the factors that influenced the retention of highly qualified special education teachers. Young special education teachers leave the field at rates nearly twice that of mature teachers; these data were also reported by Karge and McCabe (2014) and Hanushek, Kain, and Rivkin (2004). Young teachers between the ages of 25 and 30 years are eager to move into the profession yet quickly get disillusioned and leave the field between ages 35 and 40.

Regardless of type of certification, teachers need to feel supported by their administrator (Karge & Lasky, 2009; Lasky & Karge, 2009). Karge et al. (1995) reported one of the primary reasons teachers leave the profession is 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).

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 the teacher. The teacher concentrates only on getting through each day.

The focus is on teacher survival, keeping the class under control, and fear of failure. Teachers gradually 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 students and the student outcomes related to the

teacher's instruction. Pataniczek and Isaacson (1981) indicated that this stage is when 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) three-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 five stages: anticipation, survival, disillusionment, rejuvenation, reflection. The anticipation phase begins during student teaching and includes the anxiety and excitement the teacher feels over having his or her own class. A sensation of tremendous commitment and a need to make a difference is a common feeling of teachers at 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, and so on. Basically, the rookie teacher feels the full weight of being under the administration's 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 predict 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) five-step process is the reflection stage, where the beginning teacher reflects on his or her rookie teaching epoch and engages in a series of evaluation insights. Moir's (1999) five stages expanded Fuller's (1969) and Fuller and Brown's (1975) initial work.

Moir's (1999) anticipation and survival stages are related to Fuller and Brown's (1975) 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 (1975): 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) reported on beginning teachers' responses to the five stages of first-year teaching. Their five stages are identical to Moir's (1999) five-step process. These stages were also recognized by Thompson (2007) in *The First-Year Teacher's Survival Guide*.

The stages of concern (self, task, and impact) were also utilized by the Southwest Education Development (SEDL) Consortium in education program assessment (George, Hall, & Stiegelbauer, 2013; Hall & Hord, 2014; Hord, Rutherford, & Huling-Austin, 1987). The assessment uses Fuller and Brown's original 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).

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 and dedication and served as a trusted friend and counselor to Telemachus.

The mentor–mentee relationship was one of honoring senior experience and knowledge and learning through the hands-on support. In education, mentors assist and support beginning teachers (Bowers & Eberhart, 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, denoting an initial stage or phase of the teacher's career and the support provided systematically during the beginning of the teaching career (Strong, 2009).

The 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 lead to student improvement (Connecticut State Department of Education, 2007).

By 2000, most new teachers had some kind of induction program available to offer them support (Britton & Paine, 2005; Wayne, Youngs, & Fleischman, 2005). Wayne et al. (2005) argued that much of the onus falls on the principal and school administrators and that induction varies across schools.

Martin, Buelow, and Hoffman (2016) described support that impacts beginning middle-level educators. They noted that less than 1% of teachers actually receive what is considered a comprehensive induction, in which 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 most beneficial was administrator supported and included mentoring with trusted colleagues, common planning times, and analysis of student work.

Latino students will soon be the majority in public schools in California (Madrid, 2011). As the students population becomes more heterogeneous, the need for racial and ethnic diversity among teachers increases (Reiter & Davis, 2011). Seventy-three percent of the teachers in our study are minority (non-White), and many of them are teaching in the low-poverty areas where they themselves went to school.

Methodology

Participants

Sixty teachers were surveyed, among whom 20 were men and 40 were women. Participants' ages ranging between 28 and 49 years. All participants were currently teaching. These teachers were part of an induction program that included monthly cohort meetings and individualized classroom support. The program provided a small stipend for the participants to attend these meetings, in which professional learning was intentionally provided in the areas of special education, mathematics, and science.

The seminars were tailored to the needs of participants teaching in high-need, high-poverty districts. Deeper learning, thinking skills, and problem solving were emphasized during all professional learning sessions. Participants were part of a professional learning community in which they networked with other novice teachers. Participants were also fortunate to have a mentor visit their classroom and provide individualized support at the school site.

These factors are unique to most mentor programs, where the mentors are university

faculty rather than faculty from the teachers' school or school district. This allows for non-biased mentors (who were not employed by the 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. The program met Wayne et al.'s (2005) definition of a comprehensive induction program. The program participants received five years of support.

Participant ethnicity was Hispanic or Latino (39.1%), White (27%), Asian (20.7%), and Black or African American, Native Hawaiian or Other Pacific Islander, and American Indian or Alaska Native (12.7%). 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. 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 four-year university.

In regard to poverty, the rate had risen from 8.8% to 13.5% for Orange County in the years preceding the study. Children are acutely affected by poverty, with one-third of children in the county living below 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 this writing rented at $1,238 per month on average (Roosevelt, 2015).

For this reason, all of the teachers in this study taught in high-poverty, high-need schools. Eighty-five percent of the participants were natives of the high-poverty communities where they taught at the time of this study.

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, and 26% Science Education. Among the participants, 23% had received master's degrees. Participants taught in a variety of settings, including 30 different school districts.

Ten participants were selected for interviews. Gay, Mills, and Airasian (2006) suggest using a strong sample, in which the qualitative research section represents 5%–10 % of the study population. The 10 we interviewed provide this adequate representation. Five women and five men were interviewed. The group was representative of the program, with high school, middle school, elementary school, preschool, and special education all represented. Table 1 indicates the class, subject, and grade level taught by the 10 participants who were interviewed.

Program Assessment Survey

The program assessment survey was designed by an educational consulting company. This was intentional to ensure reliability and validity. The assessment asked the participants to reflect back on their experience in the program. Questions 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 ranging from 1 (*not effective*) to 5 (*very effective*).

Interviews

During the 10 interviews, the participants were asked to reflect on support from staff, seminars, and strategies that have worked for them as well as their students, both academically and socially. The teachers provided data in regard to their students' outcomes. Additionally, they shared information about their classrooms.

The qualitative interviews included questions inquiring about past support, strategies, and techniques as well as feelings about the profession. A sample question was, *What professional experience does the teacher recall as being the most beneficial and effective to his or her teaching practice?* 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, interpretive validity was ensured by returning results to participants for member checking (Creswell, 2013).

Table 1
Class, Subject, and Grade Levels Taught

	Support question: What class, subject, and grade level do you teach?
Participant 1	High school, case manager for 28 students, 10/11th-grade English in a specialized setting. I also teach a resource/study skills class.
Participant 2	SELPA director, previously taught preschool.
Participant 3	Eighth-grade mathematics, mathematics, eighth-grade and exploratory (technology), elective, sixth grade.
Participant 4	I teach math, ELA, and writing in a third-grade class. My students are exposed to an inclusive setting where they are included with both general education/special education.
Participant 5	Preschool special education.
Participant 6	I teach Sign Language 1 to 9th–12th 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 seventh and eighth graders. The courses I teach are Math 7, Math 8, and Math 8 support.
Participant 10	Curriculum specialist, special education (K–12).

Note: SELPA = special education local planning area.

Pilot. To ensure validity of the interview process, a pilot interview was conducted. The person who was interviewed was one of the first students in the program. 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 two evaluation experts to determine if the questions actually gathered information about the process. At the end of the pilot interview, the participant also verified that the questions were effective and clear in order to understand the personal growth the teacher experienced from the program and that they helped him look back and reflect on the effectiveness of strategies and support.

Data Collection

Grounded theory is achieved by examining the data in the field in such a manner that information is discovered (Creswell, 2013). The idea is that the researcher goes into the study unknowingly, meaning the researcher does not know what he or she will discover. Through coding of various pieces of information and coordinating data into categories, the researcher learns about his or her topic.

Through the interviews, the researchers in this study learned about the variety of supports used by the participants to remain in teaching. The researchers listened to the participants' stories and gleaned information and details from their experiences.

Data Analysis

The interviews were coded and analyzed. At first, open coding was used, which was focused on the information gathered 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 the data were 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 were then reduced and transformed as meaningful interpretations were identified. Through content analysis, the researcher then identified themes that naturally emerged from the data. The themes that were identified helped to answer the research questions.

Following the identification of themes, the data were displayed textually and in a table. This display helped the researchers identify systematic patterns and interrelationships across themes and content. At this point, the researchers 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). Findings had to be verified by revisiting the data multiple times to confirm the conclusions drawn.

Interview Results

Each of the 10 participants was asked the same questions. The first question asked was, *Do you believe the support that was given to you in the 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 2 shows the various reflective statements. Many of the participants commented on the supportive program faculty and the opportunities afforded to them while in the program.

Six themes emerged to demonstrate support strategies: (a) individual relationships, (b) pedagogical knowledge, (c) teacher perception of perceived competence, (d) mentoring, (e) professional learning, and (f) reflection.

The participants were asked about the most beneficial professional practice. The responses in Table 3 range from discussions of their mentors to using research-based methodologies specific to mathematics, science, and special education trainings.

Survey Data

Using triangulation, it became apparent that the survey questions could be divided under the six themes. Table 4 lists responses from four of the on-line survey questions related to individual relationships. The 24/7 hot-line was the vision of the researchers many years ago at the

Table 2
Overall Support From Program

	Support question: Do you believe the support that was given to you in the program helped you remain in the teaching profession?
Participant 1	Very much so. I remember being a teacher and getting started. The support and advice received through the teacher advisor, mentor, and the 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 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 6	Yes, I felt very supported during my teaching and yes the 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 toward the common goal . . . helped the teacher adapt to the teaching world faster and smoother.
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.

Note: Not every participant answered.

beginning of the program. The concept was that participants could call at any time and get support within 24 hours. One participant (1.35%) responded that it was not effective, two (2.70%) indicated that it was somewhat effective, nine (12.16%) referenced the hot-line as effective, and 36 (48.65%) noted the hot-line feature was very effective.

On-site visits and e-mails referred to coaching visits made by program faculty as well as support e-mails sent to participants from program faculty. Forty-two (57.78%) participants shared that the on-site visits were very effective, and 56 participants indicated the e-mails were very effective (75.68%).

At every monthly seminar, participants spent 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 opportunity at the end of most program sessions.

Table 5 presents data related to pedagogical knowledge. Participants had the opportunity to attend Saturday seminar sessions on engagement strategies, accommodations, and mathematics/science strategies. The sessions often included job-alike time, where participants were grouped with teachers working in the same grade level or content area. These were taught by the 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.

Table 6 presents the survey questions that related to professional learning opportunities. These included two sessions on co-teaching. Both were advanced sessions, with the first focused around the idea of how to work collaboratively with the co-teacher and 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 the significant poverty in the areas where they teach, the program invited participants to be a member of a seminar book club. The book in question, *A Framework for Understanding Poverty* (Payne, 2005), discusses how people in poverty face challenges that many people who live in the middle to upper classes have no knowledge about. The book is controversial in the field but yielded some excellent heart-to-heart discussions between the researchers and colleagues.

In the book Payne purports that generational and situational poverty are different. Generational poverty is a term used when the person has lived at least two 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 defines situational poverty as poverty resulting from 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 the book were read and discussed in book report format. Thirty-nine participants (52.70%) indicated the book club was very

Table 3
Most Beneficial Professional Practice

	Support question: What professional experience do you recall as being most beneficial in your practice?
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 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 program 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 program.
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 program faculty. We spent a good amount of time reviewing our projects and getting feedback from them.

effective, and 16 (21.62%) stated it was effective.

Table 6 also reports scores for the inclusion seminars, autism seminars, and autism conference. Each week, the program participants read on-line 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 teachers' perspectives. These practices were viewed favorably. Concerning the inclusion seminars, 41 (55.41%) participants rated the seminars as very effective, and 14 (18.92%) rated them as effective. The autism seminars saw 43 (58.11%) marking them as very effective and 13 (17.57%) as effective. A strong 53 (71.62%) reported the autism conference was very effective, with an additional five (6.76%) viewing it as effective. These scores are very high and show that the participants felt supported by these opportunities, illustrating the value of these seminars.

At the end of the survey, there were opportunities for open-ended questions, which followed the themes of perception of competence, mentoring, and reflection. The theme perception of competence examines the participants' self-perception of teaching, skills, and knowledge acquired from the program. Participants gave examples of their perceived competence in classroom management, inclusion practices, writing individualized education plans (IEPs), teaching math, engaging 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. A sample of perceived competence included Participant 1's comment that

Table 4
Individual Relationships

	Not effective	*Somewhat effective*	*Effective*	*Very effective*	*Did not participate*	*Unaware of this support*
24/7 hotline	1.35%	2.70%	12.16%	48.65%	18.92%	8.11%
On-site visits	2.70%	1.35%	16.22%	57.76%	13.51%	1.35%
E-mails	1.35%	1.35%	13.51%	75.68%	0%	0%
Job alike	2.7%	1.35%	21.62%	25.68%	35.14%	5.41%

Note: $n = 60$

Table 5
Pedagogical Knowledge

	Not effective	*Somewhat effective*	*Effective*	*Very effective*	*Did not participate*	*Unaware of this support*
Engagement strategies	0%	0%	10.00%	72.27%	4.05%	2.70%
Accommodations	1.35%	4.05%	13.51%	51.35%	18.92%	2.70%
Math/science seminars	4.05%	1.35%	14.86%	62.16%	1.35%	8.11%

Note: $n = 60$

Table 6
Professional Learning Opportunities

	Not effective	*Somewhat effective*	*Effective*	*Very effective*	*Did not participate*	*Unaware of this support*
	1	2	9	36	14	6
50 ways to keep your co-teacher	1.35%	1.35%	20.27%	45.95%	16.22%	6.76%
Co-teaching panels	1.35%	4.05%	17.57%	36.49%	25.68%	6.76%
Poverty book club	1.35%	4.05%	21.62%	52.70%	6.76%	5.41%
Inclusion seminars	1.35%	2.70%	18.92%	55.41%	8.11%	5.41%
Autism seminars	0%	2.7%	17.57%	58.11%	6.76%	5.41%
Autism conference	1.35%	1.35%	6.76%	71.62%	10.81%	0%

Note: $n = 60$

> the 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.

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 IEPs and co-teaching and shared this knowledge with the participants. The sample statements are included in Table 7. Participants reflected on resources, conference opportunities that led to specific learnings (i.e., autism), the importance of peer support, and the depth of knowledge these participants perceived themselves to receive from the program.

For example, Participant 1 stated,

> The 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 8 stated, "The modeled instruction, relevant conferences, professional development opportunities that applied to my subject area was the most helpful."

Discussion of Findings

The beginning teacher will have greater teaching successes if unified support is established (Karge, Lasky, McCabe, & Robb, 1995). The support provided to all of the teachers of record who received jobs while in the program clearly helped them remain in teaching. All 60 participants in this study have been teaching since they finished the program. A 100% success rate for teachers working in the field from five to 16 years is tremendous. There is no evidence to indicate that the program 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 they received from the program.

Six themes emerged to demonstrate support strategies: (a) individual relationships, (b) pedagogical knowledge, (c) teacher perception of their perceived competence, (d) mentoring, (e) professional learning, and (f) reflection. Each of the findings related to the theme provided evidence for the support strategy.

Individual Relationships

The kinds of support that the participants frequently reported receiving were individual support provided by the program staff, institutional district support, and support from 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 e-mail messages, and the 24/7 hot-line. The 24/7 hot-line was a 24-hour phone line participants were able to call at any time to get support.

Support ranged from dealing with a challenge with a student, an issue with parent communication, and a relationship with a colleague, to lesson planning and writing IEPs. Sometimes just a listening ear was needed. Several 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 faculty… and getting feedback from them." Another participant wrote,

> A program faculty was the most influential professor in my career. Not only was she my professor but she was 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.

The most helpful thing that participants found was someone to walk alongside them and support them. Every answer mentioned a relationship with a mentor or colleague.

Another kind of individual relationship that formed was the peer-to-peer relationship, since in the group of participants there were mathematics, science, and special education teachers. Participant 7 stated, "Because the program was a mixed group of different experienced teachers, it helped the teacher adapt to the teaching world faster and smoother."

Pedagogical Knowledge

The 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.

Table 7
Samples of Open-Ended Responses Related to Mentoring

	Sample response
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	The program 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.

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 clearly demonstrated 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 even 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 to support student learning of scientific ideas. Participant 10 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 the program) to find programs/strategies, and continuously reviewing research.

These are all concepts taught in the program. This statement demonstrates retention of such concept and, more importantly, implementation into the profession of the knowledge learned.

The data demonstrated that the participants agreed that the strategies were effective (10.00%) or very effective (72.27%). The strategies mentioned were classroom supports suggested by Jonson (2002), including 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 and interpersonal and coping skills and techniques were pivotal, as participants indicated that they had the tools necessary to be effective educators 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 impacts 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 General Education 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 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 only from one assigned mentor.

In the case of the participants in this study, the support came from a partnership between a university and several school districts that provided several features of support in the early years of teaching. These features of support enhanced each participant's individual teaching and, according to their self-reflection and self-perceptions, were critical to the teachers' longevity in the field of teaching.

It is believed that the benefits of mentoring written about by Kortman and Honaker (2002) have been seen firsthand by the participants in our study. Kortman and Honaker recommend that the mentor work with the teacher to build best practices in teaching and propel teacher effectiveness. They suggested that the mentor help the mentee to create a 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 the mentor into a new role as teacher-educator. 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 gained by this participant.

The program mentors were trained to be positive, to be accessible, and to spend time 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. This documentation was something the participants commented on, and those who are now mentoring use these same practices.

Professional Learning

Teaching is part of the wider educational community. Professional organizations offer journals, conferences, and materials that can enhance the new teacher's experiences in the first year (Pelletier, 2006). The program these participants were enrolled in introduced them to all of these and demonstrated how to become 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 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 four key areas (collaboration–inclusion) that the program was based on. It was a strong and welcome indicator when the participants identified all four unsolicited.

Knowledge of autism allowed the general education teachers to be more open to supporting children with autism in their mathematics and science classes. The 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 lifelong 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 has continued as a self-supporting (several organizations team together to put on the conference) opportunity. Each year, nationally recognized speakers provide key information to the program participants. Veteran staff developers find this to be a useful way to enhance scholarly application in the classroom (DuFour & Fullan, 2013).

Another highly regarded topic that was explored during the professional learning sessions was poverty. As indicated in Table 6, 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 in schools and classrooms (Jensen, 2009). The participants learned that often the student channels the stress of poverty into disruptive behavior (e.g., impulsivity) at school. Furthermore, poverty causes 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.

Participants also acknowledged that the ideas from the program were useful and helped 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 for those living in poverty (Budge & Parrett, 2018). These relationships increased student effort, built resilience, and improved academic achievement.

Reflection

Reflection involves going back to 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 participant responded that planting the seeds of knowledge in his students and building relationships with them were particularly important. Participants were asked 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).

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 clearly revealed relevance 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 were from different districts, and yet the common bond in their reflections was the ability to make a difference and support students' learning and achievement.

Additional Answers to Research Questions

Why does the teacher believe the support given to him or her in early years helped him or her remain in the teaching profession?

The participants were confident teachers and willing to share their stories and answer questions. They eagerly acknowledged that they were in a special 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 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 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 firsthand and were introduced to response to intervention processes in their early years of teaching. They had access to a cohort of professionals to reflect and grow with. In addition, an outside person, a person who was giving them feedback to enhance their teaching, observed these participants in their classrooms.

The researchers in this study believe the program describes delivered quality support and provided the participants with what Wayne et al. (2005) and Martin et al. (2016) have termed comprehensive induction program support. This support is similar to what Karge and McCabe (2014) provided, and comparable to the support given to the teachers in this study.

The resulting retention rate of this group of participants was off the charts. 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 feelings of collaboration and honor in 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 that 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? One participant related that her relationship with her teacher advisor was very important because she imparted to her a very useful philosophy of teaching. Several mentioned having a mentor as being 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 described as important.

Conceptually, many of the participants indicated that 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 is clearly different from and superior to that of their peers who did not have the benefit of this program. The program participants had strong support and mentoring along their career paths. Ostovar-Nameghi and Sheikhabmadi (2016) discussed teacher isolation and the importance of having someone with whom to voice a concern, talk through a challenge, or just be there to listen. The program provided this opportunity for the participating teachers.

Conclusions

This study was primarily based on teacher perceptions of teacher professional competence and their own performance in the classroom. The purpose of this study was to identify the significant support strategies that helped teachers remain in teaching. Sixty teachers provided insight and depth into their teaching journey.

Six themes emerged from the data that must be present to encourage teachers to remain in the profession. These themes include individual relationships, pedagogical knowledge, teacher perceptions of professional competence, mentoring, professional learning, and reflection. 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 that he or she has reached the impact level in all six areas. Additionally, when a grade level change is made or a teacher moves to another school, the process of support should begin again.

Eighty-five percent of the participants were from high-poverty communities, and 73% of the teachers in this study were minority. It is important that programs of comprehensive teacher support be provided to all teachers. This study targeted a minority teaching population, as research has confirmed that students appreciate role models who come from similar backgrounds and look similar to the student population (Jensen, 2009; Payne, 2005)

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 program provided these participants with the support described in the six themes; thus it can be inferred that these themes, when implemented with fidelity, will result in improved retention of teachers.

The message for administrators is that to ensure teachers remain in the field, we need to put time and effort into planned professional learning, based on solid research and individualized support, for teachers during the first five years of their careers.

Note

For a copy of the interview questions or survey, email BelindaKarge@cui.edu. This study was conducted in partial fulfillment of the Doctorate of Education degree at Concordia University Irvine.

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